

2010

# A Case Study: The High/Scope PreSchool Curriculum and Kindergarten Readiness in the Pittsgrove Township School District

Loren D. Thomas  
*Seton Hall University*

Follow this and additional works at: <https://scholarship.shu.edu/dissertations>

 Part of the [Curriculum and Instruction Commons](#), and the [Pre-Elementary, Early Childhood, Kindergarten Teacher Education Commons](#)

---

## Recommended Citation

Thomas, Loren D., "A Case Study: The High/Scope PreSchool Curriculum and Kindergarten Readiness in the Pittsgrove Township School District" (2010). *Seton Hall University Dissertations and Theses (ETDs)*. 51.  
<https://scholarship.shu.edu/dissertations/51>

A Case Study: The High/Scope Preschool Curriculum and Kindergarten Readiness  
in the Pittsgrove Township School District

By

Loren D. Thomas

Dissertation Committee

Mary Ruzicka, Ph.D., Mentor  
James Caulfield, Ed.D.  
Patrick Michel, Ed.D.  
Judith Koru, Ed.D.

Submitted in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education  
Seton Hall University

2010

## ABSTRACT

### A Case Study: The High/Scope Preschool Curriculum and Kindergarten Readiness in the Pittsgrove Township School District

The New Jersey Department of Education has been stressing the value of early childhood education for the past 12 years. Research has clearly demonstrated the value of high-quality preschool programs for preparing children for school and even later life. Particularly in light of the Core Curriculum Content Standards and elementary curriculum, which is growing ever more rigorous, it is imperative that children receive the best possible start to their school experience.

The Pittsgrove Township School District began its preschool program under the New Jersey Early Launch to Literacy (ELLI) program and operated that program for four years. The district adopted one of the recommended curricula, High/Scope, which is based on the developmentally appropriate approach to early childhood curriculum and instruction. This study surveyed the Pittsgrove kindergarten teachers to determine whether they perceived that the students who had participated in the preschool program were more ready for kindergarten than their classmates who had not participated.

The study found that the teachers did not see a significant difference in kindergarten readiness on the part of students who had participated in the ELLI program. However, the teachers did not themselves espouse views of kindergarten readiness that comported with the developmentally appropriate perspective. Rather, the major concern expressed by the teachers was the rigor of the kindergarten curriculum. They defined readiness in terms of students' knowledge of discrete facts and use of quantifiable skills that would be required in kindergarten and beyond.

## Table of Contents

Chapter 1: Introduction .....	1
Background of the Study .....	2
The History of Preschool Education in New Jersey .....	2
Pittsgrove Township School District’s Preschool Program.....	5
The Curriculum.....	5
Theoretical Framework of the Study .....	6
Problem Statement.....	7
Need for Study .....	7
Purpose of the Study .....	10
Research Question .....	11
Definition of Operational Terms.....	11
Definition of Conceptual Terms .....	12
Limitations of the Study.....	13
Delimitations of the Study .....	13
CHAPTER 2: LITERATURE REVIEW .....	14
State Programs .....	14
Kindergarten Readiness .....	19
Developmentally Appropriate Practice.....	23
Constructivist Preschool Curricula .....	25
The Tools of the Mind Approach.....	25
The Reggio Emilia Approach .....	26
The High/Scope Approach.....	27
CHAPTER 3: METHODOLOGY .....	32
Subjects .....	32
The Receiving Kindergarten Teachers.....	32
The Pittsgrove Township School District.....	33
Methodology .....	36
Instrumentation .....	37
Data Collection .....	37
Data Analysis.....	38
Coding .....	38
CHAPTER 4: FINDINGS .....	39
Intra-Respondent Analysis.....	41
Respondent 1.....	41
Respondent 2.....	43
Respondent 3.....	45
Respondent 4.....	46
Respondent 5.....	47
Inter-respondent Analysis.....	49
Conclusion .....	50

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS.....	52
Conclusions.....	52
Recommendations for School Districts .....	56
Policy Recommendations.....	57
Recommendations for Further Study .....	59
REFERENCES .....	62
APPENDIX A: LETTER OF PERMISSION .....	70
APPENDIX B: SOLICITATION LETTER .....	71
APPENDIX C: TEACHER SURVEY.....	72
APPENDIX D: ANNOTATED SURVEY .....	73
APPENDIX E: CODING.....	74

## List of Tables

Table 1: Summary of Kindergarten Teachers Who Received ELLI Students into Classes.....	32
Table 2: Survey Answers, Respondent 1 .....	42
Table 3: Survey Answers, Respondent 2 .....	44
Table 4: Survey Answers, Respondent 3 .....	45
Table 5: Survey Answers, Respondent 4 .....	46
Table 6: Survey Answers, Respondent 5 .....	48

## Chapter 1: Introduction

Learning begins at birth. As children grow, they learn. In New Jersey, as well as in many other states, formal schooling begins with kindergarten at age 5. What each child learns between birth and the beginning of kindergarten constitutes that child's "preparation" for school, or preparation for kindergarten. Children come from widely different backgrounds and social economic settings. What children learn and how they learn from their parents differs widely. All of the children's prior experience has a significant impact on both what they know and their readiness to learn. Thus children come to kindergarten more or less "ready" for school because of a number of societal and familial factors. The goal of preschool education is to ameliorate the difficulties presented by such wide variation in the preparation of children for school.

A wide body of research over several decades demonstrated a link between children's earliest preparations for school and their later success. Because of that link, Michigan, Georgia, New Jersey, West Virginia, and Oklahoma began statewide preschool programs during the latter part of the 1990s (Lamy, Barnett, & Jung, 2005, 2005a; Raden, 1999). A large number of other, less aggressive programs bring state or federal funding to bear on preschool programs. As of 2007, 40 states have invested in preschool and in many of those states there are significant partnerships with businesses (Goffin & Washington, 2007). As of 2007, Florida, Oklahoma, Georgia, Illinois, New York, and West Virginia had legislation guaranteeing preschool for all (Kirp, 2007); nevertheless, in spite of the increased interest, investment, and commitment of many states, only Georgia and Oklahoma offered universal preschool (Groark, Mehalffie, McCall, & Greenberg, 2007). In addition, by three of the five

original states to begin statewide preschool programs were moving toward providing schooling for all four-year-olds (Groark, Mehalffie, McCall, & Greenberg, 2007). While some of those programs have been studied in great detail, significant gaps remain in the available research. There have been large-scale evaluations of the five statewide programs (Barnett, Lamy, & Jung, 2005). However, none of those evaluations specifically investigated the effect of preschool education on Kindergarten readiness.

The subject of kindergarten readiness in general has been the subject of many major studies and dissertations (Bassok, Stipek, Inkelas, & Kuo, 2005; Bush, 1997; Emerson, 2005; Haught, 2005; Kurdek & Sinclair, 2001; Perry, 1999). But there is no literature on the subject of the impact of preschool on kindergarten readiness. This study focused on the nexus of preschool and kindergarten readiness in the program of one New Jersey school district, the Pittsgrove Township School District.

This study described the impact of that school district's preschool program. Specifically, this study described the impact that preschool program had on the kindergarten readiness of that district's children as they entered kindergarten over the past three years, as perceived by the kindergarten teachers who received these students into their classes.

## Background of the Study

### *The History of Preschool Education in New Jersey*

Government-funded preschool education is a relatively recent phenomenon as part of the American public education system. It began with Head Start, one of the first early government-funded education programs designed to help prepare children for Kindergarten.



Just over 40 years ago the Ypsilanti, Michigan, School District partnered with High/Scope to provide a quality preschool program to at-risk and minority children. Since then, there has been a long history of public funding and public involvement in early childhood and preschool education that has taken many forms. The Pittsgrove Township School District is one such publicly funded program. It uses the High/Scope curriculum and methodology that was developed over 40 years ago and has been the subject of extensive research.

Motivated by the large body of literature that supports the importance of early childhood education, or preschool programs, New Jersey, Michigan, Oklahoma, South Carolina and West Virginia now have statewide programs (Lamy, Barnett, & Jung, 2005, 2005a; Raden, 1999). Many have argued for a national system of early childhood education (Kagan, 2008). In late 2009, President Obama endorsed legislation passed by the House of Representatives that would provide federal grants to fund networks of preschools throughout the United States (Dillon, 2009).

In 2009, New Jersey had two such statewide programs. The first program was specifically targeted toward the poorest school districts, often referred to as the Abbott districts, after the *Abbott v. Burke* New Jersey State Supreme Court decision that mandated aid to such districts (Librera & Frede, 2003). That court case was part of a major effort to increase the quality and effectiveness of public education in low-income districts. In 1993, as a result of the ruling, New Jersey began to fund preschool programs in the so-called Abbott districts. The second program, the Early Launch to Literacy Initiative (ELLI), was funded in part by the State of New Jersey through a grant process, and launched in 2004. Those programs, generally referred to as ELLI programs (Librera, MacInnes, & Frede, 2003), targeted disadvantaged districts not poor enough to qualify as Abbott districts but still in

need, with a high percentage of the population living at or below the poverty level, and generally located close to the poorest districts. For both the Abbott and ELLI preschool programs the state of New Jersey mandated the use of one of 5 curricula, that were considered developmentally appropriate and constructivist. High/Scope was one of those approved curricula (Librera & Frede, 2003; Librera, Frede, & Priestley, 2004; Librera, MacInnes, & Frede, 2003).

Despite the existence of these two programs, New Jersey did not provide universal preschool education as of 2007. Beginning in the 2007–2008 school year, however, the state did begin funding full-day kindergarten. Previously kindergarten had been funded by the state only for one-half day. Districts that decided to provide full-day kindergarten added the extra hours at the local taxpayers' expense as part of the district budget. In light of the fact that full-day kindergarten was such a recent development, the absence of a state initiative for universal publicly funded preschool education in New Jersey is not surprising.

In the fall of 2008, the state announced a major preschool expansion initiative that called for expansion to universal preschool in five years (Veronica, 2008). The new code (N.J.A.C. 6A:13A) was permitted by the New Jersey School Funding Reform Act, P.L. 2007, c.260. It called for programs that were high quality, universal, and that followed “a research-based comprehensive preschool curriculum” (“Elements of High Quality Preschool Programs,” 2008). As of 2009, there was still no truly universal state preschool program, only a mandate by the state to create one within five years. Interestingly, New Jersey school districts would be required to implement a developmentally appropriate program and curriculum. High/Scope, the curriculum used in the program used in this study was one of the allowable curricula.

### *Pittsgrove Township School District's Preschool Program*

In the fall of 2004, the Pittsgrove Township School District began a preschool under the auspices of the Early Launch Literacy Initiative (ELLI) grant program, which grew out of the New Jersey Abbott program intended to address the inequities in preparation with which children began their formal schooling (Librera, MacInnes, & Frede, 2003). Research has demonstrated the positive value of preschool programs (Barnett & Yarosz, 2004; Stipek, Daniels, Galluzzo, & Milburn, 1998). After reviewing the literature, the Pittsgrove district responded to a New Jersey Department of Education Request for Proposal (RFP) and wrote a competitive grant proposal for money to begin an ELLI preschool program. It received the funding and in the fall of 2004 began the program. The goal was to provide a strong preschool program that used a research-based curriculum and approach to pedagogy to prepare students for entry into kindergarten.

### *The Curriculum*

One of the first tasks before beginning the first school year was to choose a pedagogical approach and select an appropriate curriculum. The most significant longitudinal study of early childhood education in the United States to date has been the Perry-High/Scope project (*Preschool Program Quality Assessment*, 2003; Saurino & Saurino, 1996; Schweinhart, 2006). In 2006, the High/Scope Research Foundation released the results of its 40-year longitudinal study of the original program participants. Every three years the foundation has released data on those students who were involved from 1964 to 2004. The results are significant. Because of its strong foundation in research, High/Scope is one of the four curricula approved by the New Jersey Department of Education for Abbott preschool

programs (Librera & Frede, 2003). It is also an approved curriculum approved for use in the preschool programs sponsored by the Early Launch to Literacy Initiative. The ELLI program mandated that all curricula be constructivist and developmentally appropriate (Librera, MacInnes, & Frede, 2003). The High/Scope curriculum was and continues to be a model of developmentally appropriate, constructivist curricula. After a collaborative review, the staff of Pittsgrove's preschool program chose the High/Scope Curriculum, persuaded by its very strong research base, and the body of research that found a positive correlation between High/Scope and students' success in later schooling (Schweinhart & Weikart, 1997; Schweinhart, 2006; Barnett, Yarosz, Thomas, & Hornsbeck, 2006; Lamy, Barnet, & Jung, 2005, Frede & Barnett, 1992). However, in spite of the volume of research linking the High/Scope curriculum with success in school and later life, there was no clear research linking the High/Scope Curriculum with any standardized measure of kindergarten readiness.

### Theoretical Framework of the Study

Preschool education theories generally fall into one of two conceptual frameworks. The first argues that the primary focus of program development should be direct instruction in the "basics," and holds that such a focus is the most effective way of teaching preschool children and of preparing them kindergarten and elementary school. The second argues that program development should be "developmentally appropriate," and holds that the children most likely to succeed in kindergarten and elementary school are those whose preschool educational experiences fit the following criteria: (a) they resemble language-rich homes; (b) they devote much time to creative and artistic expression; (c) they allow children a degree of choice over curriculum and activities; and (d) they teach children how to make appropriate

choices regarding their daily work and their interactions with other students (Bredekamp, 1987; Bredekamp & Copple, 1997; Kostelnick, Soderman, & Whiren, 2007). The Pittsgrove district adopted the High/Scope approach, which uses a developmentally appropriate curriculum and methodology.

### Problem Statement

The underlying problem addressed in this study was the gap in research on the impact of preschool education on children's readiness for kindergarten. To address that gap in research, this case study described one school district's preschool program and the impact it had on preparing children for kindergarten.

### Need for Study

Many programs are created or are maintained because they *seem* good or are well liked, but it is important to examine programs' effectiveness. Programs may be appreciated by the community and maintained because of popular support, and therefore assumed to be good. Because the generic concept of caring for our youngest students just seems "right," it can be tempting not to subject them to objective evaluation. However, it is important to evaluate early childhood programs for effectiveness (Frede, 1998; Stipek, Feiler, Daniels, & Milburn, 1995). The High/Scope curriculum has been the subject of innumerable articles and books. The ELLI program studied uses the High/Scope curriculum. But an obvious gap in the research relating to High/Scope, as well as preschool programs in general, is the lack of study of the impact of such programs on kindergarten readiness.

*Gap in research.* This study aimed to address that gap in research. While it was not an evaluation, this study specifically described the relationship between preschool education and kindergarten readiness in one southern New Jersey school district. Many studies have shown the connection between preschool education and success in later elementary school. Others have linked early childhood education (preschool through grade 3) to success in later elementary, middle, and high school education. The Perry High/Scope 40-year longitudinal study links preschool education with success later in life. Nevertheless, an extensive review of the peer-reviewed literature revealed no studies that linked High/Scope preschool education specifically with kindergarten readiness (Schweinhart, 2006; Schweinhart & Weikart, 1997; Saurino & Saurino, 1996; Stipek, Daniels, Galluzzo, & Milburn, 1998; Frede & Barnett, 1992; Loasa, 2005).

This study, which examined the effect of one school district's preschool program on kindergarten readiness, was deemed necessary for several reasons. First, in spite of the enormous amount of research conducted by the High/Scope Foundation, there has been no investigation of a specific relationship between the High/Scope Curriculum and kindergarten readiness (Schweinhart, 2006; Schweinhart & Weikart, 1997). A careful review of related literature revealed no studies on the impact of High/Scope on kindergarten readiness. While research has reported that students who have been in High/Scope preschools do better in middle and late elementary school academically, socially, and behaviorally than do students who attended no preschool, or who attended preschools focused on "the basics." It has also demonstrated that those students who participated in the High/Scope program fare better in adulthood (Schweinhart, 2006). Since the program being studied used the High/Scope

curriculum and methodology, this study also contributed to the body of literature on High/Scope.

*Head Start fade phenomenon.* Second, there was a need to examine the High/Scope preschool's effect on kindergarten readiness in light of what has been called the "Head Start Fade" phenomenon (Love, Kisker, Ross, Schochet, Brooks-Gunn, & Boller et al., 2001). This research demonstrated that many of the students who attended Head Start preschools and had made academic gains lost some of those gains in early and middle elementary school. The Head Start studies focused on student achievement in elementary school, but did not focus on kindergarten readiness specifically.

*Lack of data on Abbott or ELLI preschools and readiness.* Third, the New Jersey Department of Education evaluations of the Abbott preschool and ELLI preschool programs also failed to specifically address kindergarten readiness; the extant studies included no quantitative data on that particular issue (Barnett, Lamy & Jung, 2005; Lamy, Barnett, & Jung, 2005a). There have been some studies of qualitative data and teacher observations (Lamy, Barnett, & Jung, 2005a), but no data regarding Abbott or ELLI preschool students and kindergarten readiness.

*School funding.* A fourth reason for this study relates very practically to issues of school funding. In most non-Abbott districts in New Jersey, preschool is not funded through state aid. ELLI districts receive a grant that pays for a portion of the cost (Librera, MacInnes, & Frede, 2003). Beginning with the new funding formula for New Jersey, called the Formula for Success, the state will begin requiring preschool education—including, in some cases, education of three-year-olds—in the 2008–2009 school year (Roberts & Vas, 2008). In the Pittsgrove district studied herein, the ELLI grant paid approximately 35% of the total cost, on

the condition that it be part of a “braided” formula that included grant funds, parental payment for non-economically disadvantaged families, and district funds. In difficult financial times, boards of education often look at such programs as “extras” not critically important to the district’s mission. Research has demonstrated that economic status of parents is an important variable in preschool attendance (Barnett & Yarosz, 2004). Studies confirming that the High/Scope preschool program was perceived by professional educators to have positive influence on kindergarten readiness—as this study was expected to do—would help establish the importance of such programs. If such programs were demonstrated to significantly aid in preparing children for kindergarten, that data would be helpful in establishing the case for protecting such programs from budget rescissions.

### Purpose of the Study

The purpose of this study was to determine whether the district’s kindergarten teachers perceived that incoming kindergarten students’ participation in this district’s ELLI preschool program had led to those students being better prepared for kindergarten. Kindergarten readiness, from the perspective of advocates of constructivist curricula and developmentally appropriate practice, is evidenced by students being self-directed in their learning, interacting verbally with peers and teachers, being curious about school subjects, using a rich vocabulary, working cooperatively with other children, giving evidence of creativity and creative expression, and exhibiting a positive attitude toward school and learning (Bredekamp, 1987; Bredekamp & Copple, 1997). In contrast, the more traditional



perspective defines kindergarten readiness as knowing the alphabet and numbers, and such basic behaviors as waiting in line and raising their hands to be recognized before speaking.

### Research Question

The question this study posed was this: In the opinion of the kindergarten teachers who received them into their classes and taught them, were children who participated in the preschool program better prepared, and therefore more ready, for kindergarten than those who had not participated?

This study also addressed several additional secondary questions: (a) if, in the opinion of the kindergarten teachers who received them, the children who attended this developmentally appropriate preschool program were more ready for kindergarten than those who had not, in what ways were they more ready?; and (b) were there any ways in which such children were less prepared for kindergarten?

### Definition of Operational Terms

*ELLI*. This is an acronym for the New Jersey state-funded preschool program, the Early Launch to Literacy Initiative, a competitive grant program begun in 2004 that provided partial funding for preschool programs to school districts that met the criteria to respond to the grant RFP (Librera, Frede, & Priestley, 2004; Librera, MacInnes, & Frede, 2003).

*Preschool.* This describes formal education before kindergarten, and generally refers to programs for three- and four-year-old children. This study considered only four-year-old children since the ELLI program only funded education for four-year-olds.

### Definition of Conceptual Terms

*Developmentally appropriate practice.* The phrase *developmentally appropriate practice* (DAP) was first used by the National Association for the Education of Young Children to describe a particular theory of early childhood education and its related programs, techniques, and guidelines for curricula, which are designed to identify and nurture the developmental needs of children from birth to age 8 (Bredekamp, 1987; Smreker & Hansen, 1998). Developmentally appropriate education encourages stage-appropriate play as a primary mode of learning, and places a high value on environments that are language-rich and nurturing, inviting creativity, exploration, and interaction with others.

*Kindergarten readiness.* This critical conceptual term refers to the children's preparedness to begin formal schooling. In this study, kindergarten readiness referred to the observations and evaluations of veteran kindergarten teachers who were the receiving teachers for the students who participated in the ELLI preschool program, as well as their peers who have not participated, over a three-year period.

### Limitations of the Study

First, this was a case study of a single preschool program funded by the ELLI program. It could not be assumed to represent an accurate picture of other developmentally appropriate preschool programs. Second, the study was based on the observations and opinions of the teachers who received the students into their kindergarten classes and was therefore built upon subjective data.

### Delimitations of the Study

In the school that housed the preschool program being studied, educationally classified children, including all those who entered from early intervention programs, attended a separate preschool disabilities class. Since no classified children were in the preschool classes that were part of the ELLI program, this study did not include any data, nor make any findings, about classified preschool students.

## Chapter 2: Literature Review

Due to the paucity of highest order peer reviewed professional literature, the literature review includes reviews of state programs by universities, state departments of education, and by Regional Education Laboratories. The National Institute for Early Education Research at Rutgers University (NIEER) has produced many studies, several of which are pertinent to this study and are reviewed herein. Included also are reviews of 12 articles from six professional journals. The literature review examined literature on state preschool programs, the various perspectives on kindergarten readiness, developmentally appropriate practice and preschool curricula that are related to the case study.

### State Programs

The number of states providing publicly funded preschool programs (sometimes referred to as pre-kindergarten) for three- and four-year-olds has grown dramatically from only 10 states in 1980 to 40 states in 2003 (Goffin & Washington, 2007; Kirp, 2007). In his analysis of the politics and policies of the preschool movement, David Kirp (2007) traced the history and the variety of models that have been used in the United States since the late 1800s. One model he cited was for those programs to be developed and funded by the states themselves. Another model was the state providing additional funds to support Head Start Programs. Gilliam and Zigler, of the Yale University Child Study Center, wrote an overview of state attempts to evaluate the effects of pre-kindergarten programs (Gilliam & Zigler, 2004), and reported that 18 states had performed evaluations. However, they found

significant methodological weaknesses in many of those studies, including a frequent lack of detail and no investigation of the fundamental questions of what kinds of preschool interventions worked and under what circumstances.

In 2005, The National Institute for Early Education Research (NIEER) at Rutgers University did a study of five states' programs and found three specific impacts of the state funded programs:

We found these state-funded preschool programs to have statistically significant and meaningful impacts on children's early language, literacy, and mathematical development, with some evidence of an enhanced program effect for print awareness skills for children in low-income families (Barnett, Lamy, & Jung, 2005, p. 3).

However, Barnett, Lamy, and Jung (2005) found no significant effects on children's phonological awareness. The New Jersey Abbott preschool program specifically targets children from low-income homes and communities. In their evaluation of the New Jersey program, the authors found the same effects as reported in their macro study of the five state programs, concluding that the New Jersey program provided "strong evidence of the positive impact of the Abbott preschool on children's language, literacy and math skills development" (Lamy, Barnett, & Jung, 2005a). Their study of the Michigan, Oklahoma, South Carolina, and West Virginia programs led to similar findings (Lamy, Barnett, & Jung, 2005). The NIEER studies were valuable for and relevant to this study for many reasons. Since the methodology employed is sound and the same researchers evaluated all five state programs, the research methodology is consistent, which allows for valid comparisons of the programs.

MacInnes (2009) wrote a book about the New Jersey Abbott reform efforts, including the Abbott preschool program called *In Plain Sight: Difficult Lessons from New Jersey's Expensive Effort to Close the Achievement Gap* (Century Foundation Press, 2009). MacInnes reported that the preschool efforts were quite successful specifically with respect to literacy, and that the Abbott districts had made significant gains in closing the achievement gap for disadvantaged young children. He concluded that that additional money focused on enhancing teachers' ability to assess their students and tailor instruction to the students' needs led to unprecedented success. He pointed out that New Jersey was the only state to demonstrate improvement in elementary test scores in all ethnic categories from 2005 to 2007. Further, he pointed out that in the 2007 administration of the NAEP test, only Massachusetts had higher test scores for 4<sup>th</sup> grade students than New Jersey, a surprising fact given the greater diversity of New Jersey's population (MacInnes, 2009).

Sara Mead, of the New America Foundation, came to a similar conclusion about the effectiveness of the New Jersey Abbott preschool program (Mead, 2009). She warned, however, that while the state did make dramatic gains, it still "falls short of providing all of the state's disadvantaged youngsters the seamless, high-quality PreK–3<sup>rd</sup> early learning experience they really need to succeed."

A recent study (Cavalluzzo, 2009) that focused on the West Virginia's progress toward implementing universal preschool revealed several interesting findings. The author reported that while the preschool education was originally delivered entirely by the public school system, by 2007 about one-third was delivered by state-approved private providers; during that time, participation increased from 26% of all children when the program started in 2002 to 43% in 2007, and there was an inverse relationship between countywide income

and the extent of participation. Participation and impact varied by subgroup. Cavalluzzo (2009) addressed the impact of the program on kindergarten and school readiness but did so only by referring to the work of Barnett, Lamy and Jung (2005) and Schweinhart (2006), not through any first-hand research on that topic specifically.

In a doctoral dissertation on the impact of the Georgia pre-kindergarten program, Candace Lamon reported that at-risk children who had attended the pre-kindergarten program were perceived by teachers to have higher skill levels in identifying colors, multi-task sequences, alphabet usage, and phonemic skills than those who had not. The at-risk children were found to have statistically significant higher skill levels in language, motor, and social skills (Lamon, 2005). These results would indicate a significant impact of preschool programs on kindergarten readiness. Similarly, Kagan argued that universal kindergarten programs have been quite effective (Kagan, 2008), and pointed to the Georgia state preschool program where participating children performed as well as children who attended private preschools and exceeded children who attended Head Start programs on three out of five measures (Henry et al., 2003). Henry and Rickman's (2005) findings that teachers rated children from state preschool programs higher than children from either private programs or Head Start programs on social behaviors and readiness in general led Kagan to argue that the only way to address educational inequity is to create an early childhood education system.

Preschool programs in Oklahoma have been found to have a positive effect on students' school readiness; Gormley, Philips, and Gayer (2008) studied the results of the Woodcock-Johnson Achievement Test administered to incoming kindergarten students and found that participants in the state's universal preschool program scored higher in three subtests: letter-word identification, pre-spelling tasks, and applied problems tests (pre-

mathematics skills). Many aspects of the Oklahoma preschool program were based on research about effective early childhood education programs and paralleled those of other state programs.

The initial four years of the New Mexico preschool program were the subject of a study by the National Institute for Early Education Research on two occasions, after years two and four. The researchers used a sophisticated research design, the regression-discontinuity approach, to assess the academic skills of kindergartens enrolled in the program. This was different from typical approaches to pre-kindergarten assessments that compare test score of children who attend state programs with those who do not (Hustedt, Barnett, Jung, & Figueras, 2008; Hustedt, Barnett, Jung, & Goetze, 2009). These studies estimated the impacts of the preschool program by comparing two groups of children who attended the New Mexico initiative, using a stringent cut-off date for kindergarten entry to define groups of children who were the same age but who had attended or not based on when in the calendar year their birth dates fell. After the second year of the program, Hustedt, Barnett, Jung, and Figueras (2008) found that children who attended had increased scores in vocabulary, mathematics and early literacy. Hustedt, Barnett, Jung, and Goetze (2009) found similar gains after the fourth year. For the fourth-year study, the researchers conducted parent focus groups and studied the economic impact of the New Mexico preschool initiative, including comparing the cost of the program with such outcomes as educational remediation, juvenile crime, labor market earnings, and others; they found that there was a cost-benefit ratio of 18.1% for every dollar invested in the early childhood program in New Mexico (Hustedt, Barnett, Jung, & Goetze, 2009). These findings support those of Kirp (2007).



The Jersey City School District has a pre-kindergarten program that functions in accordance with the New Jersey Abbott preschool guidelines (Librera & Frede, 2003). Lasko (1995) focused on that district to study kindergarten readiness as measured by the Brigance Inventory, but was unable to draw conclusions due to a lack of records storage. The study would have been significant since it used a standardized measurement for calculating the effectiveness of a developmentally appropriate curriculum.

The effectiveness of Head Start programs has also been the subject of many studies, including the major one for the Department of Health and Human Services study (Love et al., 2001) that examined the “Head Start Fade” phenomenon. That study showed that students who attended Head Start preschools did make academic gains but lost some of those gains in early and middle elementary school. From a policy perspective, Head Start led the way to the application of generalized learning expectations or “the standards movement” in early childhood education (Buysse & Wesley, 2006). In his large-scale analysis of the political and cultural struggle over early education, Bruce Fuller (2007) examined several of the major Head Start studies and reported an overall positive effect in many domains of children’s lives, including academic improvement, social skills development, more involved parenting, and even better dental care. His assessment was that the research on Head Start was cause for “guarded optimism” (Fuller, 2007).

### Kindergarten Readiness

Smith and Shepard found that teachers’ beliefs about kindergarten readiness “fall along a dimension of nativism” (Smith & Shepard, 1988). Theories of human development

generally span the scale of beliefs from nativism to environmentalism. Nativism is that view that sees human potential as inborn and inherent. Smith and Shepard (1988) found that teachers tend to pre-judge students' readiness by their perception of the students' innate abilities. Similarly, Rimm-Kaufmann et al. (2002) reported that "teachers' sensitive responses to children (particularly bold children) were associated with positive classroom adjustment." Rimm-Kaufmann and Planta (2000) argued that readiness for and transition to school was a function of a combination of the network of relationships a child has and the combined influence of home, schools, parents, peers, and neighborhood. They also argued that the transition to school must address how these relationships and various contexts changed over time (Rimm-Kaufman & Planta, 2000). Romich (2006) argued that child development depends on proximal causes and is therefore non-linear. Her findings corroborated others' assertions that readiness is not static.

The National Center for Infant and Early Childhood Health Policy commissioned a study on early childhood education in the United States that found that 46% of children entering kindergarten each year were reported as lacking the basic social and emotional competences needed for kindergarten success (Bassok, Stipek, Inkelas, & Kuo, 2005). Reviewing the data on state early childhood programs, those authors found that such programs were effective but to a lesser extent than home environment and parenting practices (Bassok, Stipek, Inkelas, & Kuo, 2005). This was a significant study because of its massive size and scope, as well as its conclusion that preschool programs have a positive effect on kindergarten readiness.

Perry (1999) compared two groups of students' scores on the Slossom Kindergarten Readiness Test and the Metropolitan Assessment Package; the first group of students had

participated in a “developmentally appropriate” preschool (experimental group), and the second group had no preschool experience (control group). The study found that the experimental group had significantly higher score in mathematics readiness. Although this study was limited by its small size (n=80), it was nevertheless significant because it used a standardized quantitative measure.

Haught (2005) measured the impact of pre-school attendance on kindergarten readiness as measured by the DIAL-R Test of Kindergarten Readiness in rural Ohio and concluded that children who attended preschool at least three times per week performed better on the DIAL-R than children who did not. Although the results do comport with the preponderance of literature, the study is of limited value due to its sample size (37). It did, however, use a quantitative measure on a standardized instrument to measure kindergarten readiness, a paired sample t-test.

In contrast to these studies, Baskett (1990) found no significant differences in developmental skills upon entering kindergarten between groups of students that had attended a public preschool and those who had no preschool experience. However, that study did not control for the type of preschool experience, as did Perry (1999), nor did it use a standardized measure of readiness, as did Perry and Haught (2005).

Andrews and Slate (2002) studied the relationship of preschool type (public or private), geographic location, gender, and ethnicity to the kindergarten readiness levels of four-year-old students. Using multivariate analysis of variance on Iowa test data, they found that Caucasian students outperformed African-American students in all areas. They qualified their results, however, by pointing out that the effect size was small. They found no

statistically significant relationships among other variables. The fact that the study did not account for economic status was a significant flaw in this research.

Kurdek and Sinclair (2001) studied the relationship between kindergarten readiness and later achievement in reading and mathematics and found that verbal skills predicted later reading achievement and that both verbal skills and visuomotor skills predicted mathematics achievement. This finding was relevant to this study but did not establish a link between readiness and kindergarten achievement.

In a larger study of the Liberty County, Georgia, public pre-kindergarten program, Bush (1997) found that both at-risk and non-at-risk students who had attended pre-kindergarten were deemed more developmentally prepared for kindergarten than those who had not. Although larger than many of the other studies (n=699), this study did not use a standardized measure of readiness, as did Perry (1999) and Haught (2005).

In a doctoral dissertation that examined the effects of learning disposition on kindergarten readiness and how those effects were moderated by characteristics of the child, family context, and child care context, Emerson (2005) found that child-care context moderated the effects of learning disposition and that moderation of those effects varied with the quality of the child-care context. His findings comport with those of Rimm-Kaufmann et al. (2002) and Smith and Shepherd (1988).

In a summary of research findings, Ackerman and Barnett (2005) found that due to the increasing emphasis on state standards, the definition most commonly used by teachers had changed to mean prior academic preparation rather than the historical meaning of social ability. Ackerman and Barnett concluded, not surprisingly, that readiness was influenced by family and environmental factors and that effective preschool experiences did help prepare

children for kindergarten. Ackerman and Barnett's (2005) most critical contribution from this research was the recognition that the definition of "readiness" does not remain static. The current climate of accountability, as measured by performance on standardized testing, has contributed to the change in the definition.

The changing definition of readiness has caused concern among many early childhood educators (Kagan, 2008; Dillon, 2009; Gilbert, Miller, & Harte, 2009; Gulino, 2008). One of President Obama's initiatives, the Early Learning Challenge Fund, led to an education bill that included \$8 billion to fund programs that improve standards, training and oversight of preschool programs (Dillon, 2009). Part of the initiative included creating a national network, as advocated by Kagan (2008). Both the improved standards and national network require agreement on a definition of readiness. For example, the state of Kentucky is planning Vision 2015, an initiative to improve quality of life for people living in the northern part of the state. The initiative includes a preschool program, funded by the Early Learning Challenge Fund, aimed at ensuring that all five-year old students start school with the background and skills necessary to succeed. The program soon ran into its first roadblock: all efforts to date have focused on developing and disseminating a definition of kindergarten readiness (Gilbert, Miller, & Harte, 2009). Some practitioners find defining kindergarten readiness almost as difficult as the process of helping students become ready (Gulino, 2008).

### Developmentally Appropriate Practice

The groundbreaking work on developmentally appropriate practice (DAP) was done in the 1980s and produced what still remains the standard text, *Developmentally Appropriate*

*Practice in Early Childhood Programs Serving Children From Birth Through Age 8*

(Bredekamp, 1987), published by the National Association for the Education of Young Children (NAEYC). A revised version of the classic work was released ten years later (Bredekamp & Copple, 1997). Many practitioners and scholars (Goffin & Washington, 2007; Groark, Mehalffie, McCall, & Greenberg, 2007; Novick, 1996) have built on the foundation of the NAEYC's early work. From the perspective of developmentally appropriate practice, early childhood education should closely resemble children's growth and development in a "natural" setting. Advocates of developmentally appropriate early childhood education have argued that children should be allowed to make choices over what they do, study, and learn during each day, and that children should be interacting regularly and individually with each other and with adults. Other DAP tenets hold that children should be exposed to a language-rich environment, and that curriculum should be emergent and arise from the interests of children. Supporting the view that children should be given many opportunities for a variety of forms of self-expression, including artistically, musically, and orally, developmentally appropriate programs encourage play as a way of fostering creativity, social interaction, and children's varied interests. Developmentally appropriate programs focus on the development of the "whole child," not on specific elements of disconnected content such as the letters or vowel sounds. Buysse and Wesley (2006) argued that because early childhood is a "distinct period of life in which children's learning is highly dependent on family relationships and environments that are embedded within a wide range of sociocultural contexts," specific content standards or sets of generalized learning expectations are not appropriate for the age group, which exhibits a wide variation in child development.

Children Now (2009) recently released a policy brief that argued for developmentally appropriate kindergarten readiness observation tools to measure readiness. The brief further advocated a multidimensional approach to kindergarten readiness that would include physical well being and motor development, social and emotional development, students' approach toward learning, communication and language use, and general knowledge. Children Now argued against a narrow definition of readiness that focused on proficiency in academic skills such as counting or reciting the alphabet.

In a study of the educational effects of the Tools of the Mind curriculum, a group of researchers (Barnett et al., 2008) from Rutgers University investigating developmentally appropriate curricula concluded, "Our findings indicate that a developmentally appropriate curriculum with a strong emphasis on play can enhance learning and development so as to improve both the social and academic success of young children." They further related a decrease in behavior problems to appropriate curricula that enhanced self-regulation.

### Constructivist Preschool Curricula

#### *The Tools of the Mind Approach*

The Tools of the Mind (TOM), a constructivist curriculum based on the work of Lev Vygotsky (1928a, 1928b, 1962, 1978). TOM views learning as socially mediated by peers and teachers, an approach is shared by many of the constructivist early childhood curricula. Such programs provide opportunities for children to be active participants. Research has demonstrated that early literacy success depends on children being active participants in the learning environment. It is also critical that children be encouraged and supported in their

learning (Frede, 1998), and the TOM curriculum is consistent with that approach. A Rutgers university panel (Barnett, Yarosz, Thomas, & Hornsbeck, 2006) studied the educational effectiveness of this Vygotskian approach through a randomized trial. A series of regression analyses revealed that students who participated in the TOM preschool did score significantly higher on the productivity subscale and on three measures of learning and development. Because TOM is consistent with the constructivist and child-centered approach of the New Jersey Department of Education, it is one of the approved curricula for Abbott preschool programs (Librera & Frede, 2003). Copple (2003) found that the TOM curriculum's emphasis on play, and specifically on advance planning for play, enabled children to develop more mature interactive play, which in turn gave rise to children advancing in language skills, problem solving, self-regulation, and social skills.

In another study of the Tools of the Mind curriculum, Barnett et al. (2008) concluded that it, "improve[d] classroom quality and children's executive function as indicated by lower scores on a problem behavior scale." Further the same study stated that there were indications that the Tools curriculum also improved children's language development but that the effects were smaller. Each study of the TOM curriculum has consistently demonstrated positive effects in preparing children for kindergarten.

### *The Reggio Emilia Approach*

Like TOM, Reggio Emilia is based on the work of Vygotsky (Copple, 2003), although the founder and leading theorist of Reggio Emilia, Loris Malaguzzi, cites as additional sources of inspiration and philosophical foundation Erikson, Piaget, Bronfenbrenner, Montessori, and Dewey. Reggio Emilia has attracted international attention because it



involves of the entire community in its preschool program. Howard Gardner referred to it as the best preschool program in the world. Kirp (2007) pointed out that “a panel of experts commissioned by *Newsweek* hailed the preschools of Reggio Emilia as the finest in the world.” It models a constructivist, child-centered approach to curriculum.

Hertzog (2001) summarized six themes that characterize the Reggio Approach. The first theme, and a current running through her analysis of every aspect of this approach, is respect for the child. Copple (2003) concluded that the primary value of the Reggio Emilia approach was that it encouraged children to form ideas, make plans for their actions and then, in carrying out their plans, describe and discuss their actions. Copple (2003) interpreted its stress on art as a form of moving from one symbolic language (graphic representation) to another (language). This approach, while different due to its very different cultural setting, parallels in many ways the approach of High/Scope.

### *The High/Scope Approach*

The High/Scope curriculum and approach has been the subject of the longest longitudinal study of the impact of an educational program in the United States. Because of the importance of this 40-year-long study and because research on High/Scope is central to this study, the following summary of the project and research is included:

The High/Scope Perry Preschool study is a scientific experiment that has identified both the short- and long-term effects of a high-quality preschool education program for young children living in poverty. From 1962 through 1967, David Weikart and his colleagues in the Ypsilanti, Michigan, School District operated the High/Scope Perry

Preschool Program for young children to help them avoid school failure and related problems. They identified a sample of 123 low-income African-American children who were assessed to be at high risk of school failure and randomly assigned 58 of them to a program group that received a high-quality preschool program at ages 3 and 4 and 65 to another group that received no preschool program. Because of the random assignment strategy, children's preschool experience remains the best explanation for the subsequent group differences in their performance over the years. Project staff collected data annually on both groups from ages 3 through 11 and again at ages 14, 15, 19, 27, and 40, with a missing data rate of only 6% across all measures. After each period of data collection, staff analyzed the information and wrote a comprehensive official report. The study has produced 8 monographs over the years. The findings of program effects through age 40 span the domains of education, economic performance, crime prevention, family relationships, and health. (Schweinhart, 2006, p. 10).

With respect to education, the program outperformed the control group in every measure from intellectual and language tests at the elementary level through graduation rates (Schweinhart, 2006). The High/Scope Perry Preschool study was of utmost importance to this study because of its experimental design and the length of time the subjects have been studied. The above results were based on the recent conclusion of the 40-year longitudinal study. However, identical results were found at the conclusion of the 23-year longitudinal study (Schweinhart & Weikart, 1997). It could be argued that the researchers lacked

objectivity in this longitudinal study. However, there is no evidence that their reporting of the data was skewed.

Saurino and Saurino (1996) tracked implementation of the High/Scope curriculum and approach to early childhood education in one elementary school in Gordon County, Georgia, which provided publicly funded preschool for its children. This multi-year qualitative study had as its short-term goal finding ways to increase program effectiveness through monitoring program implementation, and as its long term-goal tracking program effectiveness by monitoring kindergarten readiness of program graduates. Saurino and Saurino (1996) found that graduates of the High/Scope pre-kindergarten program were more developmentally ready for kindergarten than non-program participants. It is critical to note that their conclusion underscored that the children were more ready for school from a developmental perspective.

A thorough review of the extant literature revealed no quantifiable investigation of the impact of a High/Scope preschool on kindergarten readiness. However, there have been many studies on the impact of High/Scope preschools on school readiness and later elementary school success (Barnett, Yarosz, Thomas, & Hornsbeck, 2006; Baskett, 1990; Bush, 1997; Haught, 2005; Henry & Rickman, 2005; Lamon, 2005; Lamy, Barnett, & Jung, 2005; Lamy, Barnett, & Jung, 2005a; Laosa, 2005; M. Moore, 2003; Raden, 1999; Frede & Barnett, 1992). These studies have shown that High/Scope preschools do have a positive impact on school readiness in general. There have also been studies of the impact of a High/Scope preschool program on indicators of success in later life (K. Moore, 1985; Schweinhart, 2006; Schweinhart & Weikart, 1997).

Frede and Barnett (1992) addressed the question of the effectiveness of the High/Scope curriculum on economically disadvantaged children, although their study focused on the impact at first grade. Those studies have all shown that High/Scope has been positively correlated with success in elementary school and later life.

Many aspects of the High/Scope model have been studied independently. For example, the National Institute for Early Education Research at Rutgers University studied class size in preschool programs (Barnett, Schulman, & Shore, 2004), and concluded with the policy recommendations that classes sizes of 10 to 13 were optimal. Both the High/Scope and Abecedarian models call for class size in that range. Thus, the findings of aspect of this independent study collaborate the findings of High/Scope.

In another study, Ackerman and Barnett (2006) found that class size and well educated teachers were aspects of high quality and effective programs. Small class size and having teachers with at least a Bachelor's degree are two aspects of the High/Scope model (Schweinhart, 2006).

Frede and Barnett (1992) studied the impact of the High/Scope preschool curriculum on disadvantaged students' skills at first grade. Their work, conducted in South Carolina, was based on a more recent application of the High/Scope principles. They asserted that implementing the High/Scope curriculum moderately well to very well led to greater school success than implementing low levels, and that providing large-scale developmentally appropriate experiences to disadvantaged children helped increase skills in first graders.

Copple (2003), focusing on the plan-do-review sequence of the High/Scope curriculum, wrote "The High/Scope pedagogy is based on the constructivist view that the child is an active learner who learns best through direct personal interaction with the world

and through opportunities to reflect on this interaction,” and concluded that this pedagogy equipped children with the cognitive skills needed for later schooling as well as life as adults.

Luster and McAdoo (1996) conducted a secondary analysis of the High/Scope Perry data. Noting that the earlier research focused on the effects of the preschool on the students' later development, they chose to research the influence of family and child characteristics and found them predictive of the students' achievement. This was a significant finding since the High/Scope Perry data seemed to be an indication that an educational intervention could have an effect of child development and educational achievement independent of the family. Luster and McAdoo (1996) specifically found an effect on student achievement based on maternal attitude toward education and involvement in early education. In a more recent article, Brown (2005) stated that some researchers have found “no statistically reliable social competence differences” between the High/Scope pedagogy and direct instruction preschool curricula, adding that current research has weakened Schweinhart's claims and that more study is needed.

## Chapter 3: Methodology

### Subjects

#### *The Receiving Kindergarten Teachers*

This case study analyzed the preschool program of a mid-sized, middle-class (DFG C/D), rural/suburban southern New Jersey school district, the Pittsgrove Township School District. This study solicited the opinions of the 12 kindergarten teachers who during the past four years had received ELLI and non-ELLI students into their classes. All 12 were surveyed. The following chart is a summary of the respondents.

Table 1

#### *Summary of Kindergarten Teachers Who Received ELLI Students into Classes*

---

Teacher	Gender	Status	Years of Experience	Years Teaching Kindergarten	Level of Education	ELLI Cohorts Received
A	F	Active	3	1	BA	1
B	F	Active	2	1	BA	1
C	F	Active	2	2	BA	2
D	F	Active	1	1	BA	1
E	F	Active	21	2	BA	2
F	F	Active	1	1	BA	1
G	F	Active	16	16	BA	4
H	F	Retired	33	33	BA	3
I	F	Active	22	22	BA	4
J	F	Retired	34	34	BA	3
K	F	Active	9	6	BA	1
L	F	Active	17	17	MA	4

Three teachers remained as kindergarten teachers during the first four years of the ELLI program; those three teachers received four cohorts of students from the ELLI program. One teacher left after two years and was replaced by another teacher who received two cohorts of students. After the third year, two teachers retired; they were replaced by two teachers who both received one cohort of students. During the last year two new teachers were added in the kindergarten, one as an in-class support teacher and one as a basic skills teacher. Both were assigned to kindergarten classes that received ELLI students.

Although all 12 of the teachers were female, they were diverse with respect to age, years of experience, and educational background. The two teachers who retired after the first three years were both senior teachers who both had taught in the same district for over 30 years. The other 10 teachers were a mixed group, ranging from their early 20s through mid-50s in age and from 1 to 22 years of experience. All were fully certified. While only one possessed a master's degree, 4 of the 12 had done some graduate-level work.

#### *The Pittsgrove Township School District*

This study focused on the preschool program of a medium-sized southern New Jersey district located on the far reaches of the Philadelphia commuter belt. While overall New Jersey District Factor Group C/D guidelines would classify the district economically as middle class, the area was far from homogeneous; there were distinct neighborhoods within its 50 square miles. One poorer corner of the district bordered two poor southern New Jersey districts, yet in another area new homes were selling for over \$1 million. Some of the newer residents in the district were upper-class professionals from the Philadelphia area, and recently a few well-known professional athletes moved to the community. This has resulted

in an economic bifurcation of the community. As research has long demonstrated, educational achievement varies with economic status (Boethel, 2004; Kirp, 2007). This has led to a situation in which children entering kindergarten come with very different background knowledge, skills and attitudes (Haskell, 2005).

The Pittsgrove District serves approximately 2100 students in four school buildings and receives children from one small sending district. Before it was forced to integrate in 1973 by a federal court order, the district had two elementary schools, each serving K–8. The larger school served the predominantly white and wealthier section of the township, and the smaller school served the predominantly black and poorer section of the township. That poorer section had originally been settled by Russian Jews who fled Czarist Russia in the late 1880s, but by the time of WWII most of the original emigrants had left; at the time of this study, the poorer neighborhood was largely populated by African Americans from the rural south and their descendents, a population shift that changed the demographics of many of the urban areas of the northeastern United States. The African Americans and white farming families remained largely separate.

This separation changed with the integration order, which led to forced busing between the different neighborhoods and schools. In 1978 the district opened a high school, and in 1984 a middle school, at which time the district was re-configured: the smaller elementary school now served only pre-kindergarten and kindergarten children; the larger elementary school served grades 1–4; the middle school served grades 5–6; and the high school served grades 7–12. In 2000, a major addition to the middle school was completed, and grades 7–8 were moved there, leaving the high school to serve to just grades 9–12.



While technically and legally speaking the schools were integrated, the neighborhoods tended to remain clustered by race and ethnicity; thus, the educational opportunities remained quite distinct for the different populations. As people continued to move into the district in the years just prior to this study (2000–2004), the economic bifurcation of the area became even more obvious. For example, even though the median income rose to over \$50,000, the percentage of students eligible for free and reduced lunch at the elementary level rose to 40% then dropped to about 30%, where it has remained constant. These figures suggest that the district was growing, but that the growth was at the economic extremes. Several academic issues arose as a result of these changes in demographics. For the purpose of this study, the most serious issue was the rapid rise in the number of kindergarten children who were being placed into “basic skills” classes upon entry into kindergarten. Additionally, about a dozen children every year were judged not able to begin the regular full-day kindergarten program, and were consequently placed into the “ABC Kindergarten” program, a remedial pre-kindergarten program.

For the past four years, the Pittsgrove School District has operated the preschool program that was the focus of this study. The program operated out of the early childhood center of the district in the building that had formerly been the smaller elementary school. The building housed six kindergarten classes, one pre-school disabled class, one “ABC K” class (for children who were age-appropriate for kindergarten but who were not considered developmentally ready), and four ELLI classes (the pre-school program for four-year-old students). Approximately 120 children entered kindergarten each year at this school. Of those 120 students, about 12 entered the ABC program and the rest entered regular kindergarten. All students who entered kindergarten took the Kindergarten Readiness Test (KRT) prior to

placement in a class; the results were used to determine placement into the ABC or regular kindergarten program, and placement into the basic skills program or not.

The three preschool teachers who were employed by the district during the four years previous to this study were trained in the High/Scope curriculum and methodology. The preschool program and teachers were regularly evaluated by district administration, the state of New Jersey (as part of monitoring the ELLI grant), and by outside consultants in order to assure that they were following the High/Scope curriculum and methodology.

### Methodology

Each of the 12 total kindergarten teachers received a survey that consisted of ten questions regarding aspects of kindergarten readiness (Appendix C); one question asking them to give their opinions of what constituted kindergarten readiness; and one question asking them to give their opinions of the ELLI preschool program globally. The teachers' answers to the first ten questions on the students' readiness were analyzed to determine in what ways the children who had attended the ELLI preschool were or were not considered more ready for kindergarten than students who had not attended. The answers to the second question on the teachers' understanding of the meaning of readiness gave insight into their perspectives and indicated whether these views comported with the concept of developmentally appropriate practices. The answers to the final question about the ELLI program in general provided an opportunity for the teachers to make evaluative, subjective comments about the program.

### *Instrument*

Data collection was accomplished through a researcher-developed survey of kindergarten teachers in the school (Appendix C). The 12 current and former kindergarten teachers were asked to respond to that survey. The survey had 10 questions regarding the teachers' impressions of kindergarten readiness in each of ten specific categories. Each of those ten items on the survey related to aspects of kindergarten readiness as presented in early childhood research (Bredekamp, 1987, Bredekamp & Copple, 1997; Copple, 2003; Kostelnick, Soderman, & Whiren, 2007). The researcher used the "The Integrated Components of Appropriate and Inappropriate Practice for 4- and 5-Year-Old Children," as defined by Bredekamp (Bredekamp, 1987, p. 54-59) as the structure for the questions. Appendix D contains an annotated survey providing the research basis for each question. Additionally, the teachers were asked to define kindergarten readiness (Question 1) and to compare their impressions of readiness of children who had attended the ELLI preschool program compared with children who had not attended (Question 12). Responses were then analyzed to determine if and in what ways children who attended the ELLI preschool were more prepared for kindergarten.

### *Data Collection*

The survey was mailed to all 12 teachers in hard copy. Surveys were returned to the researcher in by U.S. Mail. All responses were anonymous and kept confidential. After only three teachers responded to the first survey, a second survey was mailed. Upon the second mailing two additional teachers responded.

### *Data Analysis*

The approach of analytic induction was used to analyze the data in this study. Based on a thorough review of the literature, the researcher established a theory-driven hypothesis, which was clearly substantiated in the literature, namely, that developmentally appropriate practice better prepares children for school and life (Barnett, Lamy, & Jung, 2005; MacInnes, 2009; Schweinhart 2006; Schweinhart & Weikart, 1997; Barnett, Jung, Yarosz, Thomas, Hornsbeck, & Burns, 2008; Copple, 2003; Frede & Barnett, 1992; Hustedt, Barnett, Jung, & Figueras, 2008). The approach of analytic induction requires the researcher to establish a theory-driven hypothesis (Patton, 2002). In this case study, the inductive leap was to hypothesize that developmentally appropriate practice would also better prepare children for kindergarten. As noted above, that specific connection has been missing in the current research and literature.

### Coding

A key component of the methodology was the process of coding the teachers' responses so that they might be analyzed and distilled into findings. The researcher developed a coding system based on the major components of developmentally appropriate practice as described by Bredekamp (1987), Bredekamp and Copple (1997), and Kostelnick, Soderman, and Whiren (2007). The coding system is included in Appendix E.

## Chapter 4: Findings

The purpose of this case study was to determine whether children who had participated in the ELLI preschool were more ready for kindergarten than their classmates who had not participated in the program, based on the opinions of the teachers who received them into their classes over the past four years. Although the researcher sent surveys to all 12 of the teachers, the initial response was low: only three teachers responded. The researcher sent the same survey a second time three weeks later, and received two additional responses. The total number of responses was five, or 42% of the teachers identified as the prime subjects. The data was analyzed in two dimensions.

*Dimension one.* First, there was a careful reading of each respondent's responses to all survey questions, during which the researcher identified themes among the responses. Questions 1 and 12 in the survey were added to allow analysis of intra-respondent consistency by determining if the respondent subscribed to the theory of developmentally appropriate practice or not: that is, the theory evidenced by the teachers' responses to questions 1 and 12 provided the background of the theory each teacher espoused, and allowed the researcher to study and analyze the responses to questions 2 through 11 in light of that evidence to identify themes and consistencies. The teachers' responses to the open-ended questions (i.e., 1 and 12) demonstrated whether the teacher adhered to the perspective of developmentally appropriate practice. Questions 2, 4, 5, 7, 9, and 10 represented criteria that have been used regularly in the literature to describe developmentally appropriate preschool practices (Ackerman & Barnett, 2005; Bredekamp, 1987; Bredekamp & Copple, 1997; Copple, 2003). If a teacher's responses to questions 1 and 12 indicated that the teacher

did adhere to that theory and practice of early childhood education, then it was expected that the same teacher's responses to questions 2, 4, 5, 7, 9, and 10 regarding the children's readiness would comport with the theory of developmentally appropriate practice.

Alternatively, if a teacher's responses to questions 1 and 12 indicated that the teacher was not an adherent of this theory and practice of early childhood education, then it was expected that the same teacher's answers to the questions regarding children's readiness would not comport with that perspective. Questions 3, 6, and 8 defined kindergarten readiness in more traditional terms and did not reflect criteria described as developmentally appropriate (Ackerman & Barnett, 2005; Bredekamp, 1987; Bredekamp & Copple, 1997; Copple, 2003; Kostelnick, Soderman, & Whiren, 2007). It was expected that teachers' self-description of their respective theories and practices of early childhood education would be consistent with their answers regarding children's readiness.

*Dimension two.* Once the individual responses were thoroughly analyzed, the researcher examined the data to explore common themes among the respondents. Core consistencies that were shared by the respondents were identified and interpreted. After examining intra-respondent consistency, the researcher examined the existence (or nonexistence) of inter-respondent consistency. The respondents were grouped into those that espoused the developmentally appropriate theory and those that did not. This investigation led to an exploration of the major themes of the respondents regarding how the ELLI preschool program prepared the children for kindergarten. The global question regarding the ELLI program (Question 12) that provided the teachers an opportunity to openly evaluate the ELLI program gave yet one more perspective, and also provided the researcher with one more opportunity to evaluate consistency in the responses.

As the researcher examined the surveys both individually (intra-respondent) and as a group (inter-respondent), a code, described in Appendix E, was assigned to each response to enable the analysis that would allow conclusions to be drawn.

### Intra-Respondent Analysis

#### *Respondent 1*

The first respondent reported no difference from an academic perspective between students who had participated in the ELLI program and those who had not with respect to their readiness for kindergarten. She did, however, perceive them to be more ready for and experienced in the social interactions that are part of the school experience. Respondent 1 wrote that she did not regard that interest in and desire for social interaction to be entirely positive; in her opinion, the students socialized too much, and it distracted them from the rigors of the curriculum. Respondent 1's perspective on early childhood education, as evidenced by her response to the first question, did not comport with the DAP approach.

In describing kindergarten readiness, Respondent 1 stressed the need for basic skills such as being able to “read/recite all letters of the alphabet...identify some letter sounds...count to 10 or beyond correctly.” In her response to Question 12, Respondent 1 wrote, “ELLI students are not prepared for the great demands of kindergarten. The lack of basic skills in math and letter/sound recognition is getting greater with each new class.”

Given that Respondent 1 was consistent in her answers to questions 1 and 12, it was not surprising that she did not see ELLI students as more prepared as a result of their preschool experience.

Table 2  
*Survey Answers, Respondent 1*

Question	Comments	Coding
Question 1	<p>A child is ready for kindergarten when they know how to write and read their name, read/recite all letters of the alphabet, can identify some letter sounds, can count to 10 or beyond correctly.</p> <p>A child must also be socially and emotionally read to handle a long school day.</p>	InCurr
Question 2	ELLI children tend to tell the teacher what they do and do not want to do until they understand that certain assignments/tasks are not choices, rather work that needs to be completed.	InTeach
Question 3	I don't think that ELLI or non-ELLI children do this better. I think that asking children to raise hands and wait is something that needs to be taught and enforced...	InTeach
Question 4	Most ELLI children work well cooperatively. Non ELLI students, especially those who didn't attend preschool of any form, sometimes tend to shy away from cooperative activities.	
Question 5	<p>I wouldn't say that ELLI or non ELLI students do this really well.</p> <p>Most kids tend to be too social and aren't focused on work.</p>	
Question 6	Most ELLI students know the alphabet, but very few letter sounds. Non ELLI students tend to be the same way.	InCurr InLAL
Question 7	ELLI students tend to be more verbal than non ELLI students.	
Question 8	ELLI students tend to be able to count to 10 correctly, but I've noticed many errors when counting teen numbers. Non ELLI students tend to count higher and know more numbers.	
Question 9	ELLI students can write their name, but not all do this correctly. Non ELLI kids who attended preschool usually can write their name....	



Question 10	ELLI and non ELLI students are engaged and participating on a pretty equal scale.	
Question 11	Non ELLI students with no preschool experience often take longer to socialize and play creatively. ELLI students do tend to be imaginative and creative during play.	DATEach
Question 12	<p>ELLI students are more ready for kindergarten in the sense that they have schooling experience and understand that there are rules and expectations when in class.</p> <p>Academically, ELLI students are not prepared for the great demand so kindergarten. The lack of basic skills in math and letter/sound recognition is getting greater with each new class.</p>	InTeach InCurr InAss

### *Respondent 2*

Respondent 2 exhibited the most favorable opinion of the ELLI program. She wrote that the ELLI students were more ready for kindergarten “because they are receiving an education from a certified elementary school teacher.” Respondent 2 also noted that that ELLI students had better work habits, were less impulsive, worked with other students in a more cooperative fashion, were a bit more verbal, and knew their numbers better. She wrote that she would have liked more emphasis on the alphabet and sound and letter recognition.

Her perspectives on early childhood education were mixed. Some of her responses suggested that that she had adhered to the DAP philosophy, while others suggested a more teacher-driven and curriculum-centered approach. Her favorable conclusion regarding the ELLI program was based on the minimum teacher qualification rather than on student performance, and not one that would be viewed as developmentally appropriate.

Table 3

*Survey Answers, Respondent 2*

Question	Comments	Coding
Question 1	They have basic skills such as writing their name, most letter recognition, some sounds, colors, shapes and counting to 20.	InCurr
Question 2	I think the program did benefit with work habits.  Students were able to work in a structured environment much better than students without preschool.	InTeach
Question 3	They did raise their hands but at this age some couldn't resist. The program...benefited those students because of the expectations set by the teacher. They were less impulsive than others.	
Question 4	The ELLI program helped with this and students with no preschool are at a disadvantage.	
Question 5	The program helped students accomplish work habits and stay on task verse [sic] children with no experience.	InTeach
Question 6	I would have liked some more emphasis on that (alphabet and letter sounds)...	InLAL, InCurr
Question 7	For the most part ELLI students were more verbal and active in the classroom.	
Question 8	Yes, that skill was something that the students were able to do.	
Question 9	There could have been more emphasis on that (writing names) with the program. Students needed more fine motor skills with some introduction to the formation of letters.	
Question 10	They were active.	
Question 11	They did a lot of that, however in kindergarten, there is no [sic] much of creative play. Centers are focused with math and literacy in kindergarten...	InCurr  InTeach
Question 12	They are more ready because they are receiving instruction from a certified teacher....	InPrep

*Respondent 3*

Respondent 3 reported no difference between ELLI and non-ELLI students regarding kindergarten readiness. Her definition of readiness fit within the developmentally appropriate criteria, and was not overly quantitative. She saw no difference in readiness between the student groups in any of the measurable criteria (questions 2–11). Her conclusion (question 12) was that there was no difference between ELLI and non-ELLI students.

Table 4

*Survey Answers, Respondent 3*

Question	Comments	Coding
Question 1	I feel a child needs to be ready socially and emotionally for kindergarten	DACurr
	A child needs to be ready to sit and attend for a period of time reasonable for his/her age.	InTeach
	A child needs to function in the K classroom without anxiety and frustration so it can be a positive experience.	
Question 2	I honestly do not see a significant difference between ELLI and non ELLI students.	
Question 3	Most do not in the beginning. Some still need reminding at the end of the year!	
Question 4	Some are able to accomplish this, other are not.	
Question 5	With practice (guided reading) it take [sic] a while.	
Question 6	I have had many who do not. Both ELLI and non ELLI.	
Question 7	Some are, while others are not. I think personality plays a big part in this.	
Question 8	Some are able, others are not. Both ELLI and non ELLI.	
Question 9	Some were writing their names upon entering K, others were not. Both ELLI and non ELLI.	
Question 10	Some are engaged for a longer time than others. It depends on their interests.	
Question 11	Yes, most who come out of ELLI do.	
Question 12	No. I have as many student who have attended other programs or stayed [home] be just as ready or at times more ready.	

*Respondent 4*

Respondent 4 saw no difference with respect to their readiness for kindergarten in the readiness of students who had attended the ELLI program and students who attended other preschool programs, or none at all. Her explanation of kindergarten readiness was in clear, quantifiable terms. She saw no difference between ELLI and non-ELLI students in any of the quantifiable criteria in questions 2 through 11. She specifically did not appreciate the emphasis on student choice in the ELLI program. Respondent 4 repeatedly emphasized the rigor of the kindergarten curriculum and made it clear that in her opinion, the ELLI program did not help prepare students for that curriculum.

Table 5

*Survey Answers, Respondent 4*

Question	Comments	Coding
Question 1	Students should be able to identify their name, now some letters and numbers, be able to count to 10. Students should also be able to go to the restroom independently.	InCurr InAss
Question 2	I cannot see a difference between ELLI and non ELLI students.	
Question 3	I cannot see a difference between ELLI and non ELLI students.	
Question 4	I cannot see a difference between ELLI and non ELLI students.	
Question 5	Both ELLI and non ELLI students are capable. However, ELLI students have a hard time being assigned to a center. They continually want to choose their center that does not align with our K curriculum.	InTeach
Question 6	The non ELLI students seem to know more letters and sounds than the non ELLI students. [sic]	InLAL

Question 7	The non ELLI students are on par with the ELLI students in terms of vocabulary and verbal participation.	
Question 8	ELLI students are better able to count independently, however, neither ELLI or non ELLI students have been able to consistently identify numbers through 20.	
Question 9	All the students who attended ELLI or another pre-K program came in knowing how to write their names.	
Question 10	I cannot identify a difference between ELLI and non ELLI students.	
Question 11	I don't see a difference between ELLI and non ELLI students.	
Question 12	No, I believe that the students that attended ELLI and other pre-K students were prepared for K similarly. The other pre-K programs prepare their students just as well as the ELLI program if not better.	

#### *Respondent 5*

Respondent 5 had the most negative assessment of the ELLI program, stating that she thought that ELLI students were “less ready because of our kindergarten curriculum.” In all of the questions about quantifiable student behaviors, she saw no difference between ELLI and non-ELLI students, with the exception of question 6, where she stated that ELLI students “know a lot less than student who are non-ELLI” regarding the alphabet and sounds of letters. Her response to question 1 was not detailed enough to reveal a perspective on readiness as being either developmentally appropriate or not. However, her emphasis was on the rigor of the kindergarten curriculum. Respondent 5’s conclusion was that the ELLI program did not help prepare students for kindergarten and she also did not appreciate the ELLI emphasis on giving students choice in their daily work.

Table 6

*Survey Answers, Respondent 5*

Question	Comments	Coding
Question 1	Mature enough, some alphabet skills, recognizes name.	DACurr
Question 2	ELLI students expect to "choose" what they want to do in the classroom and that isn't part of our kindergarten program here. They need as much redirection as non-ELLI students.	InTeach InCurr
Question 3	They raise their hands as much as non-ELLI students (don't see a difference).	
Question 4	Just the same as non-ELLI (don't see a difference).	
Question 5	Just the same as non-ELLI (don't see a difference).	
Question 6	No! If I notice anything, they know a lot less than students who were non-ELLI. Very few alphabet skills. Not ready for kindergarten curriculum.	InLAL InCurr
Question 7	Don't notice a difference.	
Question 8	Not the students I have had.	
Question 9	A few can, only first name, but I don't think they can do more than non-ELLI students.	
Question 10	I don't notice any more participation.	
Question 11	I don't see more creative play.	
Question 12	No, I think they are less ready because of our kindergarten curriculum. Our kindergarten curriculum requires students know a lot of sight words and their letters and sounds. I don't see a difference between those students who attended ELLI and those who did not.	InCurr

### Inter-respondent Analysis

As a group, the five respondents did not present a favorable view of the ELLI program. Only one of the teachers who responded believed that the students who attended the ELLI program were better prepared for kindergarten than were their peers who had not attended, and her reasoning was based solely on the knowledge that the ELLI teachers had to be state-certified. None of the respondents perceived the ELLI students to be more ready for kindergarten than students who attended other preschool programs, or no preschool at all. None of them made any mention of the ELLI students being more ready in terms of developmentally appropriate criteria, per Bredekamp and Copple.

One emphasis of developmentally appropriate practice is providing students with the opportunity to make choices over their daily routine, their work, and even over the curriculum (Bredekamp, 1987; Bredekamp & Copple, 1997). As a result, it is theorized, students become more self-directed and more able to make decisions about their daily work (Gormley, Phillips, & Gayer, 2008). Question 2 was an attempt to elicit opinions that spoke directly to this theory of self-direction. Not only did none of the respondents believe that the ELLI students were more ready in terms of this criterion, two of them (i.e., 1 and 5) made it clear that they disapproved of the idea of letting students be involved in curriculum. And, in fact, respondents 1 and 5 actually saw the ELLI emphasis on providing students choice as negative and that the ELLI students were less ready due to this emphasis.

All of the respondents mentioned the rigor of the district's kindergarten curriculum, and all implied that to succeed in that environment, incoming students needed to be ready to work in a teacher-driven environment. All seemed to use the rigor of the kindergarten

curriculum as the measuring stick against which they measured the effectiveness of the ELLI program—and the readiness of all incoming students.

None of the respondents espoused a clear definition of kindergarten readiness that would be in accordance with developmentally appropriate practices. Instead, they all placed an emphasis on knowing discrete bits of information or having specific skills, such as knowing the alphabet and letter sounds, or being able to count. Since the respondents' shared a consistent understanding of readiness as the achievement of basic knowledge and/or specific skills, it was not surprising that none offered a completely positive perspective on a program that is based on developmentally appropriate practices.

### Conclusion

This case study was designed to ascertain whether receiving kindergarten teachers perceived that participation in the Pittsgrove district's ELLI preschool program helped students become better prepared for kindergarten. Based upon their responses to the surveys, they did not. Since the program uses the High/Scope curriculum and methodology, the study was also intended to determine whether participation in a High/Scope program helped students become better prepared for kindergarten in the opinion of the kindergarten teachers. Again, the answer was that it does not help prepare the students for kindergarten. In the perception of the kindergarten teachers who received the ELLI preschoolers into their classes, the ELLI program, which uses the High/Scope curriculum, did not better prepare children for kindergarten than non-participation.



This case study did not substantiate the theory-driven hypothesis that developmentally appropriate practice would better prepare children for kindergarten. It has been well established in the literature that developmentally appropriate practice better prepares children for school and life. The inductive leap was to hypothesize that developmentally appropriate practice would also better prepare children for kindergarten. This case study does not support that inductive leap.

## Chapter 5: Conclusions and Recommendations

### Conclusions

The obvious conclusion from the surveys in this case study is that none of the teachers who responded to the survey thought that the ELLI preschool program prepared children for kindergarten in any significant way. The group indicated that they thought that students who came from other preschool programs, and even those who had no preschool experience at all, were just as well prepared for kindergarten as were the ELLI students. Another observation, based on the teachers' responses to the survey questions, is that none of the kindergarten teachers clearly espoused a developmentally appropriate approach to the education of four- and five-year-olds; that made their lack of enthusiasm for the ELLI program both logical and consistent, if disheartening. The teachers' answers indicated that they would have preferred students who knew discrete facts, such as numbers and the alphabet, over students who were independent and socially engaged.

Two themes stood out in the respondent's answers to the survey questions. The first was that several of them commented on the rigors of the kindergarten curriculum. The teachers were all concerned that students enter their kindergarten classes with enough knowledge of discrete facts, even if those facts were not contextualized, to be ready for the serious nature of the kindergarten class. This runs counter to the original concept of kindergarten, which was conceived as a place where students would be prepared for academic instruction; that is, they would learn the social skills, the basics of the alphabet, letter sounds, and begin writing and reading simple words, so they would be ready to begin

rigorous learning in first grade (Haines, Fowler, Schwartz, Kottwitz, & Rosenkoetter, 1989; Walsh, 1989; Graue, 1992, 2009; Wesley & Buysse, 2003). It is also in direct conflict with the clear, written goals of state's Department of Education to establish preschools based on developmentally appropriate practice (NJDE, 2008). There has recently been an outcry on the part of practitioners that kindergarten students are coming to be viewed as older children and that curriculum expectations have become inappropriate for them (Graue, 2009). The fact that students from 3 to 5 years old are grouped together in the NAEYC literature in a single developmental stage would seem to stand in opposition to a major focus on a "rigorous curriculum" for kindergarten (Bredekamp, 1987; Bredekamp & Copple, 1997). At the same time, it should be observed that the literature on developmentally appropriate curriculum also groups these ages together (Kostelnick, Soderman, & Whiren, 2007). This indicates again that the kindergarten teachers who were surveyed have a different perspective on early childhood education.

The second theme uncovered here was the unanimous belief among the five respondents that they did not appreciate the emphasis in the ELLI program on giving students choices over their day's activities and lessons. The respondents all seemed to prefer teacher-directed classes. Again, this seems to counter to the current pedagogical theories in the literature that stress developmentally appropriate practice. A recent evaluation of the New Mexico state-wide initiative concluded with a comment specifically supporting the idea of giving children curricular choices as well as choices over activities in order to teach and foster children's ability to make choices, stating that "to the extent that child care commonly increases behavior problems, this outcome may be reversed through the use of more appropriate curricula that tactually enhance self-regulation" (Barnett et al., 2008). However,

in the context of a curriculum-driven and teacher-centered environment, it is very difficult to use appropriate curricula and pedagogy to foster children's self-regulation.

One additional conclusion is that the kindergarten teachers and the preschool teachers in the Pittsgrove Township School System seemed to be operating on different understandings of early childhood curriculum and pedagogy. The preschool teachers were trained in the High/Scope methodology, which is rooted in the theory of developmentally appropriate practice. The kindergarten teachers seem to be operating on the basis of a more traditional, teacher-centered, and standards-based, curriculum-directed approach to early childhood education. This conflict is important given that the New Jersey Preschool Program Implementation Guidelines (Librera, MacInnes, & Frede, 2003) and the New Jersey Preschool Standards of Quality (Librera, Frede, & Priestley, 2004) both mandate a developmentally appropriate approach to state funded early childhood programs. At the same time, the New Jersey Core Curriculum Standards and the concomitant elementary standards-based testing program drives elementary teachers—including kindergarten teachers—away from developmentally appropriate practices. The kindergarten teachers responding here were clearly concerned that the developmentally appropriate practices would not adequately prepare students for the rigors of kindergarten and beyond, and thus they could not embrace the notion of a child-centered approach.

It is interesting to speculate about the differences between what would be expected to be the perceived benefits of participating in the preschool program and the kindergarten teachers' perceptions. The literature reviewed indicated that developmentally appropriate preschool experiences had positive impacts on children's later schooling. One obvious explanation is that the kindergarten teachers have different understandings and perceptions.

However, it is possible that their perceptions are correct; namely, that a developmentally appropriate preschool did not, in this case study, better prepare children for kindergarten but that it very well may provide a strong foundation for later schooling. It is possible that some of the skills and behaviors learned in the ELLI program will lead to greater success in later elementary school. The literature review would indicate such. And, the gap in the research may correspond with a gap in the benefit of developmentally appropriate preschool.

Although a response rate of 42% on a mailed survey is above average, the actual sample size was small, and far lower than expected. There are several possible reasons for what seemed to be, in this context, a low rate of response. First, teachers are often busy and often feel overwhelmed by paperwork. Therefore, an obvious possibility is that the survey was viewed as just another piece of paperwork, and since it was optional, it was passed over, ignored, or forgotten by most of the 12 addressees in their efforts to complete other, more directly relevant paperwork.

However, the teachers' universally negative impression of the effectiveness of the ELLI program for preparing children for kindergarten suggested two other possible explanations for the low response. One, it was possible that the teachers felt loyal to their colleagues teaching in the ELLI program, but held negative opinions of the ELLI program and did not want to offend those colleagues by making those opinions known, particularly in writing. This possibility was suggested by comment by this one: "I would have liked some more emphasis on that [alphabet and sound recognition] but I know Ms. X added as much as she could."

A second explanation is similar. Many of the teachers knew the researcher and also knew that as superintendent he had been committed to the ELLI program, to High/Scope, and

to the concept of developmentally appropriate early childhood education. It is possible that some of teachers who received surveys did not want to express thoughts that might have offended the researcher. This possibility was bolstered by the knowledge that none of the teachers who had transferred to another school in the district nor either of the two long-time teachers who had retired were among those who chose to respond. Perhaps their impressions comported with those of the five who did respond and they did not want to share their own similar thoughts in this context.

### Recommendations for School Districts

The findings clearly point out a disconnect between the preschool curriculum and pedagogy in the ELLI program and the expectations of the kindergarten teachers in the school district. It is recommended that the district provide in-service education to the kindergarten staff regarding the High/Scope curriculum and developmentally appropriate early childhood practices. It seemed that the goals of the two programs were so dissimilar that the preschool program was not able to provide a strong preparatory program for kindergarten. Having a consistent approach and shared understanding of the goals between the preschool and kindergarten programs could foster a more cooperative understanding and practice among staff.

It is further recommended that the district reassess its position on early childhood education. According to the NAEYC standards, education for four- and five-year-old students should be quite similar (Bredekamp & Copple, 1997). Many see a need for consistency in school, district, and even national approaches to early childhood education (Kagan, 2008;

Kirp, 2007; Mead, 2009). The district should attempt to close the philosophical gap between programs. As mentioned above, this disconnect may be due to the opposing nature of the state's Early Childhood Standards, which are explicitly committed to a developmentally appropriate perspective, and the Elementary portion of its Core Curriculum Content Standards, which are entirely curriculum-driven, content-oriented, and are the basis of continual testing of students against externally constructed standards. Clearly this philosophical difference is beyond anything in the district's control, but it does point to a possible explanation for these findings. It also points to an obvious need to address the differences between the standards and come to some resolution between them.

### Policy Recommendations

The first policy recommendation is that the New Jersey Department of Education should align its preschool standards and expectations with its K–12 standards. In early childhood education, most researchers and practitioners consider pre-kindergarten through grade 3 as a unit (Mead, 2009). There needs to be a clear transitional pedagogical path for students start their formal education in preschools based on DAP standards, which require the use of constructivist, developmentally appropriate curricula, and then enter kindergarten, with its content- and standards-oriented K–12 standards. The pressure felt by teachers to ensure that their students “perform” adequately leads to teacher-centered pedagogy. The call for consistency in appropriate early childhood education is clear (Kagan, 2008; Children Now, 2009; Mead, 2009). This recommendation is already beginning to be addressed by the state; New Jersey recently created a new P–3 teaching certificate that will require new

teachers of young children to have training in early child development as well as in developmentally appropriate practices. In her policy recommendations, Mead (2009) suggested that New Jersey policymakers should “strengthen New Jersey’s P–3 teacher credential for early childhood educators by improving quality and standards in P–3 teacher preparation programs and educating principals and administrators about the credential’s value” (p. 9).

In light of the success of the state-wide programs in New Jersey, New Mexico, Michigan, Oklahoma, South Carolina, and West Virginia, it is clear that increased funding for early childhood does have a significant positive impact on children’s readiness for school and attainment in school (Barnett, Lamy, & Jung, 2005; Cavalluzzo, 2009; Hustedt, Barnett, Jung, & Figueras, 2008; Hustedt, Barnett, Jung, & Goetze, 2009; Kirp, 2007; Mead, 2009). Therefore it is recommended that policymakers provide funding to maintain and expand these initiatives. Dollars invested in early childhood education do yield a high return for society (Hustedt, Barnett, Jung, & Goetze, 2009; Kirp, 2007; Rolnick & Grunewald, 2003).

The third recommendation is that policymakers create a national, or at least statewide, systemic approach to early childhood education. Several have called for an early childhood network in order to align standards, curricula, and pedagogy (Gormley, Phillips, & Gayer, 2008; Kagan, 2008; Schwitzer, 2009).

Unless we reconceptualize American early childhood education research and policy for all and unless we counter centuries of history to think about the creation of an early childhood system, our strategies, as promising as they appear, will *perpetuate*, not *prevent*, inequity and inequality. (Kagan, 2008, p. 35)



The creation of such a network, one that involves not just early childhood educators but a wide-ranging community partnership, is the emphasis of Vision 2015, Kentucky's new Kentucky (Gilbert, 2009). The same emphasis is evident in the "Children's Village" initiative of Davenport, Iowa (Almanza, 2009). A recent report by the United States Department of Education emphasized the effectiveness of the Maryland model of a systemic approach to early childhood that included early childhood educators as well as a wide variety of other services (Schwitzer, 2009). This systemic approach seems to be part of the emphasis of President Obama's plan for early childhood education (Dillon, 2009). The disconnects that can arise from a non-systemic approach were starkly evident in this study, with the disparate goals of the ELLI preschool program and the kindergarten teachers of the same district. It is recommended that we develop statewide and a national system of early childhood education.

#### Recommendations for Further Study

This study should be replicated in other New Jersey school districts that use developmentally appropriate early childhood curricula as are mandated by the Early Childhood Standards of Quality. It would be important to discover whether teachers in other kindergarten programs in districts that follow the High/Scope Curriculum for preschool perceive the impact of their programs in the same way. Since New Jersey has made the commitments it has both in early childhood education and in elementary education, it seems important to study the nexus of those programs to determine if any genuine articulation does exist. The results of that study could have a significant impact on early childhood education

throughout the state. This further study would possibly add credence to the recommendation that we develop a systemic approach to early childhood.

It is also recommended that there be quantitative analyses of the impact of early childhood programs. Teachers' impressions are an important source of knowledge on this subject, but obtaining objective data on the impact of developmentally appropriate early childhood programs is also critical to a complete analysis of their impact. Within recent months, Hustedt, Barnett, Jung, and Goetze (2009) have begun such a quantitative analysis of the impact of developmentally appropriate early childhood programs on kindergarten readiness (Hustedt, Barnett, Jung, & Goetze, 2009). This is a new direction for research in preschool education. There should be more. There should also be such quantitative studies of other preschool programs effectiveness in preparing students for kindergarten. Only through such scientific studies will there be clarity with regard to the value of the various types of programs.

Another study worth considering would be one that focused on the attitudes and commitments of early childhood teachers, both preschool and kindergarten. It would be important to discover their underlying commitment and understanding regarding how children learn, how children should be taught, and the perceived priorities of various curricular components. Such insights could lead to a more unified and consistent approach to early childhood education, which could inform the practice of teacher preparation for early childhood educators per Mead's recommendation (Mead, 2009).

There is arguably nothing more critical to a culture than how that culture, or state, educates its children. This study has demonstrated that in at least one school district there is a significant difference in understanding between the teachers of four-year olds and the

teachers of five-year olds. The findings highlight the need for more clarity and more unanimity of understanding among the professionals who teach our youngest students, as well as among the policymakers and the educational system. Only then can our society hope to achieve a consistent, child-centered, developmentally appropriate system of early childhood education.

## References

- Ackerman, D. J., & Barnett, W. S. (2005). *Prepared for kindergarten: What does "readiness" mean?* New Brunswick: National Institute for Early Education Research.
- Almanza, J. R., Reynolds, E., Schulte, K., & Long, B. (2009). A village route to early childhood education. *The School Administrator*, 10(66), 16–21.
- Andrews, S. P., & Slate, J. R. (2002). Public and private prekindergarten programs: A comparison of student readiness. *Educational Research Quarterly*, 25(3), 59–64.
- Barnett, W. S., & Ackerman, D. J. (2006). Increasing the effectiveness of preschool programs. *Preschool Policy Brief, 11*. Retrieved January 6, 2010, from [http://works.bepress.com/d\\_ackerman/1](http://works.bepress.com/d_ackerman/1)
- Barnett, W. S., Jung, K., Yarosz, D. J., Thomas, J., Hornsbeck, A., & Burns, S. (2008). Educational effects of the Tools of the Mind curriculum: A randomized trial. *Early Childhood Research Quarterly*, 23(3), 299–313.
- Barnett, W. S., Lamy, C., & Jung, K. (2005). *The effects of state kindergarten programs on young children's school readiness in five states*. New Brunswick, NJ: The National Institute for Early Education Research, Rutgers University.
- Barnett, W. S., Schulman, K., & Shore, R. (2004). Class size: What's the best fit? *Preschool Policy Matters*, 9, 1–11.
- Barnett, W. S., & Yarosz, D. J. (2004). *Who goes to preschool and why does it matter?* New Brunswick, NJ: NIEER.
- Barnett, W. S., Yarosz, D. J., Thomas, J., & Hornsbeck, A. (2006). *Educational effectiveness of a Vygotskian approach to preschool education: A randomized trial*. New Brunswick, NJ: National Institute for Early Education Research.
- Baskett, T. J. (1990). *An analysis of the relationship between preschool education and kindergarten developmental readiness skills*. Kirksville, MO: Northeast Missouri State University.

- Bassok, D., Stipek, D., Inkelas, M., & Kuo, A. (2005). *Building community systems for young children: Early childhood education*. Los Angeles, CA: National Center for Infant and Early Childhood Health Policy.
- Boethel, M. (2004). *Readiness: School, family, and community connections*. Austin, TX: Southwest Educational Development Laboratory.
- Bredenkamp, S. (Ed.). (1987). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. Washington, DC: The National Association for the Education of Young Children.
- Bredenkamp, S., & Copple, C. (Eds.). (1997). *Developmentally appropriate practice in early childhood programs*. Washington, DC: National Association for the Education of Young Children.
- Brown, W. H. (2005). Sometimes the null hypothesis is useful information. *Journal of Early Intervention, 27*(2), 87–92.
- Bush, S. S. (1997). *A study to evaluate the effectiveness of a structured prekindergarten program*. Walden University.
- Buysse, V., & Wesley, P. W. (Eds.). (2006). *Evidence based practice in the early childhood field*. Washington, DC: Zero To Three.
- Cavalluzzo, L., Clinton, Y., Holian, L., Marr, L., & Taylor, L. (2009). *West Virginia's progress toward universal prekindergarten*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Appalachia.
- Children Now (2009). *Kindergarten readiness data: Improving children's success in school*. Oakland, CA: Children Now.
- Copple, C. (2003). Fostering young children's representation, planning, and reflection: A focus in three current early childhood models. *Journal of Applied Developmental Psychology, 26*(6), 763–771.
- Dillon, S. (2009, September 20, 2009). Initiative focuses on early learning programs. *The New York Times*.

- Emerson, G. D. (2005). *Moderation of the effects of learning disposition on school readiness by family and child care contexts*. Tulsa, OK: Oklahoma State University.
- Frede, E. C. (1998). The role of program quality in producing early childhood program benefits. In W. S. Barnett, & S. S. Boocook (Eds.), *Early care and education for children in poverty: Promises, programs, and long-term results*. Albany, NY: State University of New York Press.
- Frede, E. C., & Barnett, W. S. (1992). Developmentally appropriate public preschool: A study of implementation of the High/Scope curriculum and its effects of disadvantaged children's skills at first grade. *Early Childhood Research Quarterly*, 7(4), 483–499.
- Fuller, B. (2007). *Standardized Childhood: The Political and Cultural Struggle Over Early Childhood*. Stanford: Stanford University Press.
- Gilbert, J. M., Miller, K., & Harte, H. (2009). Collaborating with community partners to create new directions for young children. *Metropolitan Universities*, 20(1), 115–129.
- Gilliam, W. S., & Zigler, E. F. (2004). *State efforts to evaluate the effects of prekindergarten: 1977 to 2003*. New Haven, CT: Yale University Child Study Center.
- Goffin, S. G., & Washington, V. (2007). *Ready or not: Leadership choices in early care and education*. New York: Teachers College Press.
- Gormley, W., Jr., Phillips, D., & Gayer, T. (2008). Preschool programs can boost school readiness. *Science*, 320.
- Graue, E. (1992). Social interpretations of readiness for kindergarten. *Early Childhood Research Quarterly*, 7(2), 225–243.
- Graue, E. (2009). Reimagining kindergarten. *The School Administrator*, 10 (11).
- Groark, C. J., Mehalffie, K. E., McCall, R. B., & Greenberg, M. T. (Eds.). (2007). *Evidence based practices and programs for early childhood care and education*. Thousand Oaks, CA: Corwin Press.
- Gulino, J. (2008). Kindergarten readiness: A challenge. *Principal*, 87, 30–35.

- Haines, A. H., Fowler, S. A., Schwartz, I. S., Kottwitz, E., & Rosenkoetter, S. (1989). A comparison of preschool and kindergarten teacher expectations for school readiness. *Early Childhood Education Quarterly*, 4(1), 75–88.
- Haskell, J. P. (2005). Low socioeconomic status and its effects on student achievement and behavior. *Masters Abstracts International*, 44(01), 50.
- Haught, A. (2005). *The effects of preacademic experiences on kindergarten readiness*. Marietta, OH: Marietta College.
- Henry, G. T., Henderson, L., Ponder, B., Gordon, C., Mashburn, A., Rickman, D. (2003). *Report of the findings from the early childhood study: 2001–02*. Atlanta: Georgia State University, Andrew Young School of Policy Studies.
- Henry, G. T., & Rickman, D. K. (2005). *The Georgia early childhood study, 2001–2004*. Atlanta: Georgia State University, Andrew Young School of Policy Studies.
- Hertzog, N. B. (2001). Reflections and impressions from Reggio Emilia: “It’s not about art!” *Early Childhood Research and Practice*, 3(1), 1–10.
- High/Scope Educational Research Foundation (H/S ERF). (2003). *Preschool program quality assessment* (2<sup>nd</sup> ed). Ypsilanti, MI: High/Scope Press.
- Hustedt, J., Barnett, W. S., Jung, K., & Figueras, A. (2008). *Impacts of New Mexico pre-k on children’s school readiness at kindergarten entry: Results from the second year of a growing initiative*. New Brunswick, NJ: Rutgers University: The National Institute for Early Education Research.
- Hustedt, J., Barnett, W. S., Jung, K., & Goetze, L. (2009). *The New Mexico pre-k evaluation: Results from the initial four years of a new state preschool initiative*. New Brunswick, NJ: Rutgers University: The National Institute for Early Education Research.
- Kagan, S. (2008). American early childhood education: Preventing or perpetuating inequity? In *Comprehensive educational equity: Overcoming the socioeconomic barriers to school success*. New York: Teachers College, Columbia University.
- Kirp, D. L. (2007). *The sandbox investment: The preschool movement and kids-first politics*. Cambridge, MA: Harvard University Press.

- Kostelnick, M., Soderman, A., & Whiren, A. (2007). *Developmentally appropriate curriculum*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Kurdek, L. A., & Sinclair, R. J. (2001). Predicting reading and mathematics achievement in fourth-grade children from kindergarten readiness scores. *Journal of Educational Psychology, 93*(3), 451–455.
- Lamon, C. C. (2005). *The impact of the Georgia pre-k program on the achievement gap between at-risk and not-at-risk students for kindergarten readiness as measured by teacher perception and student assessments*. Valdosta, GA: Valdosta State University.
- Lamy, C., Barnett, W. S., & Jung, K. (2005). *The effects of the Michigan school readiness program on young children's abilities at kindergarten entry*. New Brunswick, NJ: The National Institute for Early Education Research, Rutgers University.
- Lamy, C., Barnett, W. S., & Jung, K. (2005a). *The effects of New Jersey's Abbott preschool programs on young children's school readiness*. New Brunswick, NJ: National Institute for Early Education Research, Rutgers University.
- Laosa, L. (2005). *Effects of preschool on educational achievement*. New Brunswick, NJ: The National Institute for Early Education Research.
- Lasko, G. G. (1995). *The Jersey City early childhood program: Kindergarten readiness gains of the participants and issues related to conducting the evaluation*. New York: Columbia University Teachers College.
- Librera, W. L., & Frede, E. C. (2003). *Abbott preschool program implementation guidelines*. Trenton, NJ: The New Jersey Department of Education.
- Librera, W. L., Frede, E. C., & Priestley, K. D. (2004). *Preschool teaching and learning expectations: Standards of quality*. Trenton, NJ: The New Jersey Department of Education.
- Librera, W. L., MacInnes, G., & Frede, E. C. (2003). *Preschool program implementation guidelines (non-Abbott)*. Trenton, NJ: New Jersey Department of Education.



- Love, J. M., Kisker, E. E., Ross, C., Schochet, P. Z., Brooks-Gunn, J., & Boller, K., et al. (2001). *Building their futures: How early Head Start programs are enhancing the lives of infants and toddlers in low-income families*. [Report]. Commissioners Office of Research and Evaluation and the Head Start Bureau, Administration on Children, Youth and Families, U.S. Department of Health and Human Services. Princeton, NJ: Mathematica Policy Research. (ERIC Document Reproduction Service No. 454952)
- Luster, T., & McAdoo, H. (1996). Family and child influences on educational attainment: A secondary analysis of the High/Scope Perry preschool data. *Developmental Psychology*, 32(1), 26–39.
- MacInnes, G. (2009). *In plain sight: Difficult lessons from New Jersey's expensive effort to close the achievement gap*. New York: Century Foundation Press.
- Mead, S. (2009). *Education reform starts early: Lessons from New Jersey's pre-k–3rd reform efforts*. [Report]. New America Foundation. Retrieved January 6, 2010, from [http://www.newamerica.net/publications/policy/education\\_reform\\_starts\\_early\\_0](http://www.newamerica.net/publications/policy/education_reform_starts_early_0)
- Moore, K. (1985). Altering life's trajectory. *Family Planning Perspectives*, 17, 190–191.
- Moore, M. (2003). *The impact of pre-kindergarten program experience on kindergarten readiness*. East Whiteland, PA: Immaculata College.
- National Association for the Education of Young Children (NAEYC). (1996). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8: A position statement of the National Association for the Education of Young Children*. Washington, DC: National Association for the Education of Young Children.
- New Jersey Department of Education (NJDE). (2008). *New Jersey administrative code, 6A:13A, 1.1–11: Elements of high quality preschool programs*. New Jersey Department of Education. Retrieved January 7, 2010, from [http://www.state.nj.us/education/code/current/title6a/chap13a.pdf&ei=30tLS5GvKJen8Aa4gYX\\_Ag&sa=X&oi=nshc&resnum=1&ct=result&cd=1&ved=0CAoQzgQoAA&usg=AFQjCNFFLw4T80gBocGZvSW5WAI76GuqFw](http://www.state.nj.us/education/code/current/title6a/chap13a.pdf&ei=30tLS5GvKJen8Aa4gYX_Ag&sa=X&oi=nshc&resnum=1&ct=result&cd=1&ved=0CAoQzgQoAA&usg=AFQjCNFFLw4T80gBocGZvSW5WAI76GuqFw)
- Novick, R. (1996). *Developmentally appropriate and culturally sensitive education: Theory in practice*. Portland, OR: Northwest Regional Educational Laboratory.

- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Perry, D. G. (1999). *A study to determine the effects of pre-kindergarten on kindergarten readiness and achievement in mathematics*. Salem, WV: Salem-Teikyo University.
- Raden, A. (1999). *Universal prekindergarten in Georgia: A case study of Georgia's lottery-funded pre-k program*. New York: Foundation for Child Development.
- Rimm-Kaufman, S. E., Early, D. M., Cox, M. J., & Saluja, G. et al. (2002). Early behavioral attributes and teachers' sensitivity as predictors of competent behavior in the kindergarten classroom. *Journal of Applied Developmental Psychology*, 23(4), 451–470.
- Rimm-Kaufman, S. E., & Planta, R. C. (2000). An Ecological Perspective on the Transition to Kindergarten: A Theoretical Framework to Guide Empirical Research. *Journal of Applied Developmental Psychology*, 21(5), 491–511.
- Roberts, J. J., & Vas, J. (2008). Assembly, No. 500 (Vol. No. 500): State of New Jersey, 212th Legislature.
- Rolnick, A., & Grunewald, R. (2003). Early childhood development: Economic development with a high public return. *Fedgazette: Federal Reserve Bank of Minneapolis*, 1–4.
- Romich, J. L. (2006). Randomized social policy experiments and research on child development. *Journal of Applied Developmental Psychology*, 27(2), 136–150.
- Saurino, D. R., & Saurino, P. L. (1996). Collaborative action research: The High/Scope curriculum for Georgia public preschools. In *Annual Conference of the American Educational Research Association* (p. 22). New York: American Educational Research Association.
- Schweinhart, L. J. (2006). *The High/Scope Perry preschool study through Age 40: Summary, conclusions, and frequently asked questions*. Ypsilanti, MI: High/Scope Educational Research Foundation.
- Schweinhart, L. J., & Weikart, D. P. (1997). The High/Scope preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly*, 12, 117–143.

- Schwitzer, S. (2009). *Getting it right, right from the start: Birth to five kindergarten readiness. Education Innovator, 7*(5), 1–4.
- Smith, M. L., & Shepard, L. A. (1988). Kindergarten readiness and retention: A qualitative study of teachers' beliefs and practices. *American Educational Research Journal, 25*(3), 307–333.
- Smreker, J., & Hansen, A. (1998). Developmentally appropriate practice: Buzz words or best practice? *Texas Child Care, 2*(1), 8–11.
- Stipek, D., Daniels, D., Galluzzo, D., & Milburn, S. (1998). Good beginnings: What difference does the program make in preparing young children for school? *Journal of Applied Developmental Psychology, 19*(1), 41–66.
- Stipek, D., Feiler, R., Daniels, D., & Milburn, S. (1995). Effects of different instructional approaches on young children's achievement and motivation. *Child Development, 66*(1), 209–223.
- Walsh, D. J. (1989). Changes in kindergarten: Why here? Why now? *Early Childhood Education Quarterly, 4*(3), 377–391.
- Wesley, P. W., & Buysse, V. (2003). Making meaning of school readiness in schools and communities. *Early Childhood Research Quarterly, 18*(3), 351–375.

Appendix A: Letter of Permission

**PITTSGROVE TOWNSHIP SCHOOLS**  
**Administration Building**  
**1076 Almond Road**  
**Pittsgrove, New Jersey 08318-3950**

(856) 358-3094 Fax: (856) 358-6020

**Henry Bermann**  
*Superintendent*

**Suzanne R. Fox**  
*Bus. Admin./ Board Secy.*

**Michael Brodzik**  
*Asst. Supt. for Curric. & Instruc.*

May 19, 2009

**Dr. Mary Ruzicka**  
Seton Hall University  
400 South Orange Avenue  
South Orange, NJ 07079

Dear Dr. Ruzicka:

Mr. Loren Thomas was granted permission by Mr. Matthew Jamison, former Superintendent of the Pittsgrove Township School District, to conduct research on the district's ELLI preschool program as part of his doctoral work at Seton Hall University. I am writing to confirm that he does have permission under the new administration. Further, please know that he also has permission to name the school district. Since knowing the history of the community and district is so important to understanding the current educational issues and problems it faces, it is critical that he describe the specific situation of the Pittsgrove Township Schools within parameters permissible through the university's IRB process.

I also understand that part of his research will be conduction surveys of Pittsgrove teachers. Please be advised that he has permission to survey teachers in the Pittsgrove Township School District, again given the parameters of the university's IRB.

Thank you for your encouragement of his work.

Sincerely,



**Henry Bermann**  
Superintendent

## Appendix B: Solicitation Letter



October 1, 2009

Dear Teacher:

As a teacher in the Pittsgrove Township kindergarten during all or part of the four school years from September, 2004 through June, 2009, you received students into your classes who had participated in the district's preschool program. That program was funded through the Early Launch to Literacy Initiative and used the High Scope Curriculum. It is often referred to as the ELLI program. As part of my doctoral study at Seton Hall University, I am researching the impact of that program on students' readiness for kindergarten from the perspective of the teachers who received those children into their classes. Therefore, I am writing to ask you to participate in an anonymous survey of those teachers who received the ELLI students.

Enclosed please find the survey, which has been designed to obtain your impressions of the districts preschool program. To collect data for this study, all 12 teachers who have taught in the Pittsgrove Township kindergarten during the years from the beginning of the ELLI preschool program through the 2008-2009 school year are being asked to participate.

If you are willing to participate in the study, please fill out the enclosed survey and return it in the self-addressed stamped envelope. Returning the survey is indicative of your willingness to voluntarily participate. Please return the survey by October 15, 2009. Do not put your name on the survey.

I sincerely appreciate your help. In addition to gaining a clear understanding of your perceptions of the effectiveness of the program for preparing students for kindergarten, it is also my hope that this study will contribute to the discussion of the value of preschool on a larger scale.

Seton Hall University  
Institutional Review Board

SEP 30 2009

Approval Date

Expiration Date

SEP 30 2010

College of Education and Human Services  
Executive Ed.D. Program  
Tel. 973.275.2728

400 South Orange Avenue • South Orange, New Jersey 07079-2685

Please do not hesitate to contact me with any questions at any time. I hope you will agree to participate in this study that may benefit anyone who wishes to understand the impact of such preschool programs. If you have further questions, you can call Dr. Mary Ruzicka, Professor and my Dissertation Mentor, at Seton Hall University, (973) 275-2723. If you have any questions regarding your rights as a human subject in research, please contact the IRB office at Seton Hall University at (973) 313-6314.

Sincerely,



Loren Thomas  
Researcher  
Home/Cell Phone (973) 970-4498  
Work Phone: (856) 769-0101, ext. 301  
Email: lorenthomas@mac.com

Seton Hall University  
Institutional Review Board

SEP 30 2009

Approval Date

Expiration Date

SEP 30 2010



## Appendix C: Teacher Survey

**Kindergarten Readiness  
Students Who Have Participated in ELLI and Students Who Have Not Participated  
Teacher Survey Questions**

The purpose of this survey is to ascertain your perception of kindergarten readiness of children you have received into your classes. My study is investigating the effectiveness and value of the ELLI pre-school program. The specific purpose of this questionnaire is to determine if students who enter kindergarten after participating in the ELLI pre-school are equally, more, or less ready for kindergarten than peers who have not participated in the ELLI preschool program.

Please answer each question honestly and thoroughly. If possible, please explain your thoughts in full paragraphs. Your questionnaire will remain anonymous.

**Questions:**

1. In your opinion, what makes a child ready for kindergarten?

**For questions 2 through 11, compare and contrast the performance of ELLI and non-ELLI students in relation to each of the following descriptors. In order to provide strong comparisons please comment as thoroughly as you can.**

2. The students are able to make decisions about their daily work such as choosing what they will work on, making a plan for their day to accomplish their goals and re-focusing themselves as needed. Students can work in a self-directed manner.

3. The students raise their hands and wait their turn to comment in class.

4. The students work cooperatively with others.

5. The students are capable of independent work during class time.

6. The students know the alphabet and recognize the sounds of most letters.

7. The students use a rich vocabulary and are active and willing verbal participants in class.

8. The students know the numbers through 20 and are able to count independently.

9. The students can write their name.

10. The students actively participate in class and are engaged in the learning activities.

11. The students play creatively, using imagination and language.

**Summary Question.**

12. In your opinion, are the students who have attended the ELLI preschool more ready for kindergarten than those who have not attended? Why or why not?

**Personal Questions**

These questions are for research only. They will not be used for identification.

Gender \_\_\_\_\_

Age \_\_\_\_\_

Years Experience:

Teaching \_\_\_\_\_

Teaching kindergarten \_\_\_\_\_

Highest academic degree \_\_\_\_\_

Additional graduate study (credits, years) \_\_\_\_\_



## Appendix D: Annotated Survey

**Kindergarten Readiness  
Students Who Have Participated in ELLI and Students Who Have Not Participated  
Teacher Survey Questions**

The purpose of this survey is to ascertain your perception of kindergarten readiness of children you have received into your classes. My study is investigates the effectiveness and value of the ELLI pre-school program. The specific purpose of this questionnaire is to determine if students who enter kindergarten after participating in the ELLI pre-school are equally, more, or less ready for kindergarten than peers who have not participated in the ELLI preschool program.

Please answer each question honestly and thoroughly. If possible, please explain your thoughts in full paragraphs. Your questionnaire will remain anonymous.

**Questions:**

1. In your opinion, what makes a child ready for kindergarten? (Rimm-Kaufman, Early, Cox, Saluja, & al., 2002; Smith & Shepard, 1988)

**For questions 2 though 11, compare and contrast the performance of ELLI and non-ELLI students in relation to each of the following descriptors. In order to provide strong comparisons please comment as thoroughly as you can.**

2. The students are able to make decisions about their daily work such as choosing what they will work on, making a plan for their day to accomplish their goals and re-focusing themselves as needed. Students can work in a self-directed manner.  
(Bredekamp, 1987; Bredekamp & Copple, 1997; Copple, 2003)

3. The students raise their hands and wait their turn to comment in class.  
(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997)

4. The students work cooperatively with others.  
(Ackerman & Barnett, 2005; Copple, 2003)

5. The students are capable of independent work during class time.  
(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997)

6. The students know the alphabet and recognize the sounds of most letters.

(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997)

7. The students use a rich vocabulary and are active and willing verbal participants in class.

(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997, (Copple, 2003)

8. The students know the numbers through 20 and are able to count independently.

(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997)

9. The students can write their name.

(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997)

10. The students actively participate in class and are engaged in the learning activities.

(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997)

11. The students play creatively, using imagination and language.

(Ackerman & Barnett, 2005, Bredekamp, 1987; Bredekamp & Copple, 1997, Copple, 2003)

### **Summary Question:**

12. In your opinion, are the students who have attended the ELLI preschool more ready for kindergarten than those who have not attended? Why or why not?

### **Personal Questions**

These questions are for research only. They will not be used for identification.

Gender \_\_\_\_\_

Age \_\_\_\_\_

Years Experience:

Teaching \_\_\_\_\_

Teaching kindergarten \_\_\_\_\_

Highest academic degree \_\_\_\_\_

Additional graduate study (credits, years) \_\_\_\_\_

## Appendix E: Coding

The groundbreaking research on developmentally appropriate practice was done by Bredekamp (1987) and updated by Bredekamp and Copple (1997). Bredekamp listed developmentally appropriate practices, as well as non-appropriate practices in the program components of curriculum goals, teaching strategies, guidance of social-emotional development, language development and literacy, cognitive development, physical development, aesthetic development, motivation, parent-teacher relations, assessment of children, program entry, and teacher qualifications. These standards were endorsed by the National Association for the Education of Young Children (NAEYC, 1996). These same standards have been “operationalized” into books of best practices in early childhood education (Kostelnick, Soderman, & Whiren, 2007). The same standards of developmentally appropriate practice, which have been endorsed by NAEYC, High/Scope, and the New Jersey Department of Education, have become part of the body of literature used by practitioners.

Based on the literature, the researcher developed the following list of codes to correlate the teachers’ responses with program components appropriate practice. The codes are listed after each program component for both the appropriate practice and the corresponding inappropriate practice.

## *Curriculum*

### *Developmentally Appropriate Practices (DACurr)*

1. Experiences that are provided that meet children's needs and stimulate learning in all developmental areas—physical, social emotional and intellectual.
2. Each child is viewed as a unique person with an individual pattern and timing of growth and development.
3. Interactions and activities are designed to develop children's self-esteem and positive feelings towards learning.

### *Inappropriate (non-DAP) Practices (InCurr)*

1. Experiences that are narrowly focused on the child's intellectual development.
2. Children are evaluated against a predetermined measure, such as a standardized group norm, or adult standard. All are expected to perform the same tasks and achieve the same narrowly defined, easily measure skills.
3. Children's worth is measured against how they conform to rigid expectations.

## *Teaching Strategies*

### *Developmentally Appropriate Practices (DATeach)*

1. Teachers prepare the environment for children to learn through active exploration and interaction with adults and other children.
2. Children select many of their own activities from a variety of learning areas that the teacher prepares.
3. Children are expected to be physically and mentally active.

*Inappropriate (Non-DAP) (InTeach)*

1. Teachers use highly structured, teacher-driven, lessons almost exclusively.
2. The teacher directs all the activity, deciding what children will do and when.
3. The children are expected to sit down, watch, be quiet, and listen, or do paper-and-pencil tasks.
4. A major portion of time is spent passively sitting, listening, and waiting.

*Language Development and Literacy*

*Developmentally Appropriate Practices (DALAL)*

1. Children are provided many opportunities to see how reading and writing are useful before they are instructed in letter names, sounds, and word identification.
2. Activities focus on listening to and reading stories, dictating stories, discussion of field trips, seeing classroom charts, participating in dramatic play and other experiences requiring communication, talking informally with adults and other children.

*Inappropriate (Non-DAP) Practices (InLAL)*

1. Reading and writing instruction stresses isolated skill development such as recognizing single letters, reciting the alphabet, being instructed in correct formation of letters, etc.

## *Cognitive Development*

### *Developmentally Appropriate Practices (DACog)*

1. Focuses on children developing understanding of concepts about themselves, others, and the world around them through observation and interactions with people and real objects.
2. Instruction in math, science, social studies, health, and other content areas are integrated through meaningful activities.

### *Inappropriate (Non-DAP) Practices (InCog)*

1. Uses primarily direct instruction that stresses isolated skill development through memorization and rote methods such as counting, drilling, using maps, etc.

## *Motivation*

### *Developmentally Appropriate Practices (DAMot)*

1. Relies on children's natural curiosity and desire to make sense of their world.

### *Inappropriate (Non-DAP) Practices (InMot)*

1. Relies on extrinsic motivation (e.g., stickers, privileges) and mandatory participation in all activities to obtain the teachers' approval or to avoid punishment.

### *Assessment*

#### *Developmentally Appropriate Practices (DAAss)*

1. Multifaceted and primarily related to information obtained from observations by teachers and parents.

#### *Inappropriate Practices (InAss)*

1. Relies solely on psychometric tests for placements.

### *Teacher Qualifications*

#### *Developmentally Appropriate Practices (DAPrep)*

1. Teachers must be qualified to work with four- and five-year-olds through college-level preparation in Early Childhood Education of Child development.

#### *Inappropriate Practices (InPrep)*

1. Accepts as qualified teachers with no specialized training or supervised experience with four- and five-year-olds as qualified providing they are state certified: relies on traditional and legal qualifications for certification, without specialized training for preschool age students.