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THE IMPACT OF VOLUNTARY PREKINDERGARTEN ON KINDERGARTEN
READING READINESS IN A LARGE SUBURBAN SCHOOL DISTRICT IN
2012-2014

by
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A dissertation in practice submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the School of Teaching, Learning, and Leadership
in the College of Education and Human Performance
at the University of Central Florida
Orlando, Florida

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Major Professor: Rosemarye Taylor

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ABSTRACT

The purpose of this study was to determine whether the effects of participation in the Florida Voluntary Prekindergarten Program are sustained in kindergarten reading readiness for those who participated in the research school district VPK, those who participated in another provider VPK, and compared to those who did not participate in VPK. Select stakeholder perceptions were also gathered and analyzed, to include research school district parents of VPK participants, research school district VPK instructors, and research school district administrators.

Academic effects were analyzed for VPK participants and non-VPK participants in 2012-2013 within their kindergarten 2013-2014 school year using the FAIR-K portion of the Florida Kindergarten Readiness Screener as well as the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts Performance Measurement Assessment 1. Using a one way analysis of variance (ANOVA) it was determined that participation in VPK produces greater reading readiness in kindergarten. Statistically significant differences were found among the means of research school district VPK participants, another provider VPK participants, and non-VPK participants. On average, VPK participants, regardless of provider, exhibited significantly enhanced reading readiness skills than their non-VPK participant peers within both measurements.

Stakeholder perceptions included the successful and challenging elements of leading and teaching VPK within the research school district as well as how parents come to the decision of selecting the research school district as their VPK provider of choice over other available providers.

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CHAPTER ONE: THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

In his remarks at the Early Childhood Summit in Washington D.C. in June of 2000, then U.S. Secretary of Education, Richard Riley suggested the theme for the growing trend toward a national consensus of valuing early childhood education. Riley's motto could potentially connect with all stakeholders from federal and state legislators to parents of young children; that motto was, "The Stronger the Start, the Better the Finish." (2000). During this address, Riley offered four primary suggestions to support early childhood education programs across the United States that the state of Florida has taken measures to address in the 14 years that have followed. Those four suggestions included expanding the Family and Medical Leave Act, legislating universal voluntary prekindergarten programs, offering parents a translation of current brain research that provides clear evidence that supports the significance of early learning, and ensuring that all voluntary prekindergarten classes are led by teachers that hold at least a bachelor's degree or higher within a specialized field of knowledge that supports early learning (Riley, 2000).

Since the turn of the latest century, a renewed sense of purpose regarding the critical importance of investing in early childhood educational programs has disseminated from the Secretary of Education through local school districts and private providers. The research on early brain development supports this purpose, exemplified by the work of Fischer who summarized, "The early years provide a significant opportunity to shape later development. Evidence suggests that children can be taught important executive

skills in the early years that provide a groundwork for becoming responsible adult citizens” (2012). With the support of scholars and active practitioners, voluntary prekindergarten programs are expanding in Florida and across the United States.

Statement of the Problem

Traditional kindergarten through grade 12 public school districts are investing in voluntary pre-kindergarten (VPK) programs in an effort to improve school readiness and build relationships with students and families early in the education process. During a time of reduced financial resources per student (The National Institute for Early Education Research, 2015), VPK represents a financial investment that may have been redirected from other student achievement efforts. Therefore, the problem to be studied was the lack of research on academic effects of VPK over the time period of 2012-2014.

Purpose of the Study

The purpose of the study was to determine whether the effects of participation in VPK are sustained in kindergarten reading readiness for those who participated in the research school district VPK, those who participated in another provider VPK, and compared to those who did not participate in VPK. Academic effects were analyzed for VPK participants and non-VPK participants in 2012-2013 at kindergarten 2013-2014 school year. Select stakeholder perceptions were gathered and analyzed, to include the research school district parents of VPK participants, the research school district VPK instructors, and the research school district administrators.

Research Questions

There were three research questions to guide this study. The first two research questions offer a quantitative analysis, while the third research question provides a qualitative perspective.

1. What is the difference, if any, in Probability of Reading Success Status on the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?

This question was selected because the Florida Kindergarten Readiness Screener (FLKRS) is mandated for all students upon entry in public school kindergarten in Florida. Measuring letter naming and phonemic awareness skill, FLKRS is used to assign Kindergarten Readiness Rates for both public and private providers of the Florida Prekindergarten Education Program (Florida Department of Education, 2012).

2. What is the difference, if any, in scale scores on the 2013-2014 Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?

This question was selected as the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts was a research district performance measurement assessment used at the time of the study. This measurement assesses complex emergent

reading skills such as plot development, characterization, and similarities and differences (Discovery Education Assessment, 2013).

3. How do select stakeholders perceive the research school district VPK program?

This question was selected to provide the study with a qualitative perspective of the research school district stakeholders, to include VPK administration, instructors, and participant parents. These perceptions were gathered at the request of the research school district executive leadership.

Table 1 displays the research questions, sources of data, independent and dependent variables if applicable, and method of analysis to answer the questions.

Table 1

Research Questions, Variables, and Method of Analysis

Number	Research Questions	Dependent Variable	Independent Variable	Method of Analysis
1	What is the difference, if any, in Probability of Reading Success Status on the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?	2013 FLKRS FAIR-K Probability of Reading Success Status for Kindergarten	Voluntary Prekindergarten Participation	One Way Analysis of Variance (ANOVA)
2	What is the difference, if any, in scale scores on the 2013-2014 Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?	2013 DE Early Skills Assessment for Kindergarten English/Language Arts Scale Scores	Voluntary Prekindergarten Participation	One Way Analysis of Variance (ANOVA)
3	How do select stakeholders perceive the research school district VPK program?	N/A	N/A	Theme Emergence from Interview Data

Conceptual Framework

The significance of early learning highlights the work of a multi-university collaborative known as the National Scientific Council on the Developing Child created in 2003 by Jack P. Shonkoff, M.D., who now serves as Director of The Center on the Developing Child at Harvard University. Shonkoff et al. published *Building the Brain's "Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function: Working Paper No. 11*, wherein the executive function of the brain is defined by the interrelated activity between working memory, mental flexibility, and self-control (2011). The National Scientific Council on the Developing Child cites the research of Weintraub et al., which illustrates children between the ages of three and five experience the most development of the executive function of the brain (2011, p. 5). The timing of the most dramatic executive function development in human life coincides with Florida's four year old students who participate in the Voluntary Prekindergarten Education Program.

In 1982, authors of a longitudinal meta-analysis study entitled, *Lasting Effects of Early Education: A Report from the Consortium for Longitudinal Studies* sought to discover evidence related to participation in preschool programs and differences in learning for children from low income families (Lazar, et al., 1982). The authors followed 12 investigators, including Dr. Edward Zigler of Head Start and Dr. Ira Gordon of The Florida Parent Education Program, who in 1976 through 1979 combined their data from 12 independently designed preschool programs for three and four year olds. At the

time of the study, the subjects ranged from 9-19 years of age. The four outcomes of interest to the authors included, school competence measured by retention and special education assignment, developed abilities measured by standardized intelligence and achievement tests, attitudes and values, as well as family impact (Lazar, et al., 1982).

In their summary of findings, Lazar et al. concluded that participants in early education from low income families were retained approximately half as often as their peers and were less likely to be assigned to special education. The results of the standardized intelligence tests revealed that participants rated considerably higher than their non-participant peers but the difference lasted just three to four years. Due to methodological validity threats, the authors could not cite with confidence the difference in how participants performed on achievement tests compared to the control group, however the evidence did leave Lazar et al. to believe “program graduates in general performed better than did their controls” (1982, p. 56). In the 1979 follow up interviews, more participants than non-participants conveyed positive attitudes toward school achievement. Finally, across all 12 projects, mothers of program graduates expressed greater satisfaction in their child’s school experience than mothers of children from control groups. Overall, the authors determined enough evidence supported that investing in early education programs is one strategy that can be used as part of a comprehensive policy to help serve the needs of low income families (Lazar, et al., 1982).

As parents, educators, and politicians consider the merits of universal prekindergarten programs, all stakeholders want to know if participation in

prekindergarten impacts cognitive development and academic student achievement. One of the landmark studies to date, conducted at Georgetown University's Center for Research on Children in the United States entitled, *The Effects of Universal Pre-K on Cognitive Development* concluded that Oklahoma's universal prekindergarten "has succeeded in enhancing the school readiness of a diverse group of children" (Gormley, Gayer, Phillips, & Dawson, 2005, p. 872). Gormley et al. published their work in 2005, shortly after Florida became one of the first states to commit to universal prekindergarten for all four year olds (Florida Department of Education, 2014). Florida, as well as the other states investing in universal prekindergarten programs, may look to the positive results in Oklahoma to ensure success as well.

Gormley et al. selected a quasi-experimental regression discontinuity research design to study the impact of participation in the universal prekindergarten program in Tulsa, Oklahoma with reduced selection bias. The authors' sample consisted of 1,567 prekindergarten children and 1,461 kindergarten students who just completed the universal prekindergarten program in Tulsa. Gormley et al. utilized the three subtests of the Woodcock-Johnson Achievement test to estimate the impact of participation (2005).

The greatest impact compared to the control group was discovered in the subtest for the Letter-Word Identification score. Students that did participate in Tulsa's universal prekindergarten program scored on average 0.79 of a standard deviation higher than those students that did not participate. Participants also scored higher in both the Woodcock Johnson Achievement tests for Spelling and Applied Problems, respectfully scoring on average 0.64 and 0.38 of a standard deviation higher than non-participants. These

positive results held true for all subgroups to include students of socioeconomically disadvantaged families. Hispanic students experienced the most dramatic positive effects, scoring higher than other subgroups in all three subtests, 1.50 of a standard deviation for the Letter-Word Identification test, 0.98 of a standard deviation for the Spelling test, and 0.99 of a standard deviation for the Applied Problems test (Gormley, Gayer, Phillips, & Dawson, 2005).

John Hattie's preschool influences focus upon two meta-analyses, early interventions and preschool programs. Although early intervention and preschool programs have moderate effect sizes, $d = 0.47$ and $d = 0.45$ respectively, both influences fall within Hattie's zone of desired effects (2009, pp. 58-59). It should be noted that neither of these influences are specific to voluntary prekindergarten for four year olds but cover all early intervention and preschool programs to include early education programs (prior to voluntary prekindergarten) and kindergarten as well. The meta-analysis of early interventions cover 1,704 studies and 88,047 people, while the meta-analysis of preschool programs covers a significantly lower number of studies (358) and roughly half the number of people (44,532) (Hattie, 2009). As a result, one may assume the results from the meta-analysis of early interventions to be more generalizable than the results from the meta-analysis of preschool programs. Both early intervention and preschool programs merit discussion individually.

The full range of early interventions covering all preschool age children has an overall effect of $d = 0.50$, and the overall effect of kindergarten and other specific program interventions is $d = 0.52$ (Hattie, 2009). The results of the meta-analysis of early

interventions concluded the most effective early intervention programs were “structured, intense, include about 15 or more children, and the children are in the program for up to 13 hours per week” (Hattie, 2009, p. 58). In addition, Hattie cites the research of Collins (1984) and Harrell (1983) which revealed that disadvantaged students exhibited the most significant gains from participation in early intervention programs (2009).

Hattie cites the research of Jones (2002) which found all day kindergarten programs had an overall effect of $d = 0.56$ and more specifically correlated to higher effects in reading and language ($d = 0.60$) over the effect ($d = 0.40$) on mathematics achievement (2009). Furthermore, Hattie cites Goldring and Presbrey (1986) who found those disadvantaged students that did participate in a preschool program maintained the positive effect into the elementary years. Compared to their peers that did not participate in a preschool program, disadvantaged students that did participate carried approximately a half standard deviation of greater overall achievement (Hattie, 2009).

Recent advances in research based prekindergarten curricula lead more researchers to question whether or not prescribed prekindergarten curricula have an effect on student achievement. Weiland and Yoshikawa recently published a first of its kind quasi-experimental regression discontinuity study titled, *The Impact of an Urban Universal Public Prekindergarten Program on Children’s Early Numeracy, Language, Literacy, and Executive Function Outcomes* (2011). Weiland and Yoshikawa’s unique study focused upon a large urban district in the Northeast that adopted universal curricula for all their prekindergarten classrooms the year prior, Opening the World of Learning

(OWL) for literacy (Schickedanz & Dickinson, 2005) and Building Blocks (Clements & Sarama, 2007) for mathematics.

Weiland and Yoshikawa selected a group of four year olds attending prekindergarten in the 2008-2009 school year for their treatment group and students from the 2009-2010 cohort for the control group. The authors employed a battery of assessments including the Woodcock-Johnson Letter-Word Identification and the Woodcock-Johnson Applied Problems achievement tests, as well as the Dimensional Change Card Sort to measure pre-literacy, numeracy, and executive function respectfully. The results yielded higher effect sizes than Hattie's meta-analyses for both early interventions and preschool programs. "Effect sizes for numeracy skills as measured by the Applied Problems assessment were largest (0.61), with effect sizes for pre-reading and reading skills (0.55) and vocabulary (0.44) somewhat smaller. Executive functioning effect sizes were in the small range but all positive: 0.25 (inhibitory control), 0.27 (cognitive flexibility), and 0.26 (working memory)" (Weiland & Yoshikawa, 2011).

In their concluding statements, Weiland and Yoshikawa allude to the fact that intentional curricula could very well have led to the observed higher effect sizes but admit their research is too limited to provide for a causal distinction (2011). The authors cite the work of Klein & Knitzer (2006) who found that an intentional curriculum in prekindergarten ensures program quality and consistency, keeping children challenged and engaged while developing literacy and numeracy as well as social-emotional and self-regulation skills. Interestingly, the promise of high quality, research based curricula specifically designed for four year olds possibly leading to higher achievement and better

social-personal skills for young students excites those interested in the investment of voluntary prekindergarten education programs.

As the merit of voluntary prekindergarten programs and how they impact student academic achievement and social-personal development are considered, the quality of the teacher and the classroom environment is of vital significance. Erikson's stages of psychosocial development teach us children learn about trust early in life, and what children learn of trust lasts a lifetime (1950). The quality of the student-teacher relationship is important at every age, but it can be argued that the relationships and the level of trust prekindergarten teachers develop with their four year old students may be the catalyst that helps children develop effective relationships with their teachers from kindergarten through grade 12.

Mashburn et al. sought to discover the impact of classroom and teacher quality on student achievement in their study entitled, *Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills* (2008). The authors used three measures to assess classroom and teacher quality; the standards of program infrastructure and design quality developed by the National Association for the Education of Young Children, observations of the quality of the classroom environment using the Early Childhood Environment Rating Scale–Revised, and observations of the teachers' emotional and instructional interactions with children in their classrooms using the Classroom Assessment Scoring System. The study was the largest of its kind to date, covering 11 states, 2,439 participants in 671 prekindergarten classrooms. The authors estimated the study covered 80% of the nation's

prekindergarten students at the time. In their discussion, Mashburn et al. drive home their conclusions; “these results confirm that for young children, learning occurs via interactions, and high-quality emotional and instructional interactions are the mechanisms through which pre-K programs transmit academic, language, and social competencies to children” (2008, p. 744).

Mashburn et al. once again confirm in pre-K as in other grades, it is the teacher who influences student achievement more than any other school-based factor (McCaffrey, Lockwood, Koretz, & Hamilton, 2003; Rowan & Correnti, 2002; Rivken, Hanushek, & Kain, 2005; Wright, Horn, & Sanders, 1997).

Definition of Terms

1. Discovery Education Interim Benchmark Assessment (DE): Measurement designed to assess progress toward end of grade level expectations as defined by the Common Core State Standards (CCSS) for English/Language Arts and Mathematics (Discovery Education Assessment, 2015).
2. Discovery Education Scale Score: A vertical scale used to compare a student’s performance to a group of students (Discovery Education, 2014).
3. Florida Kindergarten Readiness Screener (FLKRS): Assessment delivered to students in Florida within the first 30 days of kindergarten based upon the *Florida Early Learning and Developmental Standards for Four-Year-Olds* (Office of Early Learning, 2015).

4. Florida Voluntary Prekindergarten (VPK) Education Program: An optional, state funded pre-kindergarten program for Florida's four year olds (Florida Department of Education, 2014).
5. Probability of Reading Success Status: Expressed as a percentage derived using a table based upon total correct responses for letter naming and phonemic awareness (Florida Center for Reading Research, 2013).
6. Stakeholder: One who is involved in or affected by a course of action within an enterprise (Merriam-Webster, 2016).

Methodology

This study was a continuation of the one completed by Rodriguez (2013) to provide an analysis of VPK impact over more years. The differences between the two studies are as follows:

Table 2

Comparison of Rodriguez (2013) and Current Study

Rodriguez (2013)	Current Study
Analysis of Florida Kindergarten Readiness Screener comparing research school district VPK participants and non- research school district participants in 2005-2006	Analysis of data includes Florida Kindergarten Readiness Screener and Discovery Education Performance Measurement Assessment comparing research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013
Analysis of 3 rd grade FCAT Reading and Mathematics comparing research school district VPK participants and non- research school district VPK participants in 2005-2006	Does not include analysis of student academic performance beyond kindergarten.
Quantitative analysis	Quantitative analysis as well as qualitative analysis from select research school district VPK stakeholders

This study employed a mixed methods research design as prescribed by Johnson and Onwuegbuzie (2004). Research questions 1 and 2 provide quantitative analysis, while research question 3 gives the study a qualitative perspective of the research school district’s select VPK stakeholders.

Selection of Participants

The population of 2013-2014 kindergarten students of the research school district was selected to address Research Questions 1 and 2. The three research populations for Research Questions 1 and 2, 2012-2013 research school district VPK participants, 2012-2013 another provider VPK participants, and 2012-2013 non-VPK participants were derived from the population of 2013-2014 kindergarten students of the research school

district ($N = 2210$). For Research Question 3, a purposive sample was derived from selected stakeholders of the research school district VPK program ($N = 9$) to include; VPK parents, VPK instructors, and school district VPK administration.

Data Collection

This study utilized archival data maintained by the research school district and the Florida Department of Education. The required data was obtained from the research school district's departments of Assessment and Accountability (FLKRS FAIR-K and DE Scale Scores), Special Projects (VPK Participants), and Information Services. Student achievement data was deidentified to control for risk of personal identification in compliance with Family Education Rights and Privacy Act (FERPA) / Protection of Pupil Rights Amendment (PPRA). For Research Question 3, selected stakeholders perceptions regarding the research school district VPK program were collected in semi-structured interviews.

Data Analysis

For Research Question 1, Probability of Reading Success Status on the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) of research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013 were compared using a one-way analysis of variance to determine the extent to which the scores of the groups differed on each assessment. These scores were derived from the research school district Department of Assessment and Accountability to include those

research school district students enrolled in kindergarten during the 2013-2014 school year.

For Research Question 2, scale scores on the 2013-2014 Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts Performance Measurement Assessment 1 of research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013 were compared using a one-way analysis of variance to determine the extent to which the scores of the groups differed on each assessment. These scores were derived from the research school district Department of Assessment and Accountability to include those research school district students enrolled in kindergarten during the 2013-2014 school year.

For Research Question 3, interview responses provided a qualitative analysis of select stakeholder perception of research school district VPK. Interview questions elicited information to include; how stakeholders engaged in the research school district VPK, quality of the research school district VPK, and what activities engage research school district VPK students. Participant responses were analyzed for themes. A topic had to be addressed by at least two of three participants within a stakeholder group to become a theme. Responses were analyzed across stakeholder groups for themes. A topic had to be addressed by at least two of three stakeholder groups to become a theme.

Significance of the Study

This study is of critical significance as the Florida Voluntary Pre-kindergarten Education Program represents a substantial taxpayer investment, therefore we should analyze the effectiveness of VPK programs and their impact on reading readiness.

One of the critical limitations of Rodriguez's study was the inability to discern among students who did not participate in the research school district VPK, whether or not these students participated in VPK from another provider other than the research school district or not at all (2013). Discernment among these three populations allowed this research to be of greater use to the research school district leadership as the effectiveness of the research school district VPK is analyzed.

Limitations

1. The sample is derived from one suburban school district in Central Florida; therefore, results may not be generalizable to all school districts in Florida and beyond.
2. Variables outside the control of the researcher could impact student achievement beyond participation in VPK. These variables may include; additional academic support beyond VPK, variance of VPK instructor certification, socioeconomic status of students, and variance in parental involvement.

Delimitations

1. Following the example of Rodriguez (2013), the students selected for this study are delimited to the research school district.
2. Interview participants were selected to provide a contextual perspective of select stakeholders of the client school district and are not intended to represent the population of research school district VPK administrators, instructors, and parents.
3. The research is delimited to the answers provided by the interview participants within the third research question.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

This client based study is the follow up to Rodriguez (2013) completed at the request of the research school district superintendent. The Florida Voluntary Prekindergarten Education Program has been expanded within the research school district to include at least one VPK classroom in each of the elementary school sites within the research school district. This substantial investment of human, capital, and facility resources is representative of research school district leadership's commitment to early education as a means to promote school readiness and develop positive relationships with the residents living both within and outside of the school district's borders.

This chapter is organized to present the global, national, and local trend supporting early education as well as the legislation and curriculum standards that guide the Florida Voluntary Prekindergarten Education Program. This study is based on the conceptual framework of the development of universal access to prekindergarten for four-year-olds and its relationship to reading readiness. Therefore, of particular interest in this review was literature and research related to these four topics: (a) global trends supporting early education, (b) national trends of voluntary prekindergarten, (c) the relationship between voluntary prekindergarten and school readiness, and (d) the organization of the Florida Voluntary Prekindergarten Education Program.

In preparation for the study, the researcher conducted a search of relevant literature concerning the global and local development of early education and universal prekindergarten access for four-year-olds. The researcher conducted the literature review

by searching peer reviewed journals, policy reviews, articles, and research reports by utilizing the University of Central Florida online library and partner databases to include Education Full Text, ERIC-EBSCOhost, and PsycINFO. Within each database, keywords prekindergarten, early education, emergent literacy, and reading readiness were used to discover and organize relevant literature. Reports of note were revealed through websites published by the U.S. Department of Education, the Education Commission of the States, the Florida Department of Education, and the Florida Office of Early Learning. The statutes guiding the Florida Voluntary Prekindergarten Education Program were uncovered using Online Sunshine, the Official Internet Site of the Florida Legislature.

Global Trends Supporting Early Education

This section of the literature review will provide an overview of the International Association for the Evaluation of Educational Achievement (IEA) Preprimary Project. In addition, a closer look at Norway's universal access to early education for all preprimary children from birth is presented. To conclude, this section reviews research designed to measure the quality of international preprimary education programs.

The IEA Preprimary Project

The International Association for the Evaluation of Educational Achievement (IEA) Preprimary Project, was a 15 year longitudinal study completed in three phases researching early learning opportunities in 15 countries to include Belgium, China,

Finland, Greece, Hong Kong, Indonesia, Ireland, Italy, Nigeria, Poland, Romania, Slovenia, Spain, Thailand, and the United States. While phase one consisted of a household survey determining participation in early learning opportunities across each of the 15 participating countries, phase two included qualitative interview and observational reporting of the instructors and facilities of the early education providers discovered in phase one. Phase three was a follow up study of phase one participant children at age seven and their developmental growth who participated in early learning within the facilities described in phase two (Olmstead, 1996; Weikert, 1999; Montie, Xiang, & Schweinhart, 2006).

In phase two, Olmstead found teacher perceptions of the most critical developmental skills for children aged four years varies across countries. For example, among the eight areas of child development as identified by the IEA Preprimary Project, teachers in Ireland rated social skills with peers, self-sufficiency skills, and language skills as most important and rated motor/physical skill development as least important. Teachers in Poland rated motor/physical skill development most important and rated self-sufficiency skills as least important. Teachers in Nigeria rated pre-academic skills most important and like Poland, rated self-sufficiency skills as least important (Olmstead, 1996, p. 14).

On the other hand, in the comprehensive publication of phase two of the IEA Preprimary Project, Weikert reported relative teacher agreement across the participating nations as to what preprimary children should learn; teachers in 12 countries rated social skills with peers, language skills, and self-sufficiency skills as most important, while

teachers in 10 countries rated preacademic skills, self-assessment skills, and social skills with adults as least important (1999, p. 92). Interestingly, social skills with peers was rated as most important by teachers in all but one of the 15 participating nations (Weikert, 1999, p. 92).

The IEA Preprimary Project also collected data regarding preschool instructor certification. During the time of the study (1996), 81% of the preschool instructors in the 78 public, private, and Head Start preschool providers in the United States that participated in the study held at least the most basic certification. Compared to other nations such as Belgium where 100% of the instructors and Hong Kong where 29% of the instructors within public and private providers were certified, the international context of preschool instructor certification status in the United States in 1996 begins to take shape (Olmstead, 1996, p. 16).

Montie, Xiang, and Schweinhart (2006) reported the results of phase three of the IEA Preprimary Project. Phase three concluded the 15 year longitudinal international study including 10 of the original 15 participating countries that sought to identify how different preprimary settings and teaching pedagogy relate to children's cognitive and language development at age seven (2006). The 10 participating countries include; Finland, Greece, Hong Kong, Indonesia, Ireland, Italy, Spain, Thailand, and the United States. The language and cognitive assessments measured children's ability to tell stories, match pictures to words and phrases, order sentences, as well as their ability to judge spatial relations and problem solve (Montie, Xiang, & Schweinhart, 2006).

Findings that did not vary between countries were reported. As teachers' education level increased, their respective students' age seven language performance increased. The less time in whole group activities led by the teacher with more emphasis on free choice activities and child to child interaction, the greater children's age seven language and cognitive performance improved (Montie, Xiang, & Schweinhart, 2006, p. 15).

Findings that did vary among countries were also reported. "Increased adult-child interaction is related to better age-7 language scores in countries that have less adult-centered teaching or activities that require group response, and poorer language scores in countries that have more adult-centered teaching or activities that require group response" (Montie, Xiang, & Schweinhart, 2006, p. 17).

Montie, Xiang, and Schweinhart also found no relation between class size and students' age seven language or cognitive performance. While certain countries such as the United States where the IEA Preprimary Project found prefer to limit class size, other nations, such as Japan prefer larger preschool classes that allow for more child to child interaction (Montie, Xiang, & Schweinhart, 2006, p. 18).

The IEA Preprimary Project is of interest to this study as it reflects an early contextual perspective of the international early education climate at the time. Taking a closer look at varying international access to early education next will ultimately lead this literature review to the Florida Prekindergarten Education Program.

The Example of Norway

Norway is among one of the progressive nations to offer no less than 85% government funded full time Early Childhood Education and Care (ECEC) from one to five years of age for all children (Ministry of Education and Research, 2015). Norway also provides mothers and fathers with 100% paid leave for 49 weeks following the birth of children, and in 2014, Norwegian parents paid no more than 2,405 Norwegian Krone (\$306) per month for full time access to the ECEC program, representing 15% total cost maximum ECEC providers are allowed to charge parents (2015). In 2013, 79.8% of children aged 1-2 and 96.6% of children aged 3-5 participated in Norway's ECEC (Ministry of Education and Research, 2015).

Sibley et al. followed a large cohort of Norwegian children and families (MoBa, n = 60,270) from birth years ranging from 2002 to 2006 and participation in Norway's Early Childhood Education and Care (ECEC) program from 2003-2008 (2015). The main goal of the study was to determine if universal government funded access to the program increased participation from families with less education and income, effectively closing the participation gap between these families and families with more education and income. Sibley et al. found due to the political shift that allowed for universal access to ECEC from age one through five, participation increased across all education and income levels with the gap between those families with more and less education narrowing from 18% to 14% during the time period of study. Sibley et al. "provide a strong demonstration that when high-quality ECEC is available and affordable, the

potential barriers of low parental education and low family income are partially mitigated” (2015, p. 17).

Measuring International Early Education Program Quality

Hardin et al. (2013) studied the use of the Association for Childhood Education International (ACEI) Global Guidelines Assessment (GGA) as a means to evaluate early childhood education programs internationally. The researchers included 336 instructors in 168 early education programs across four countries; China, Guatemala, Taiwan, and the United States participated in the study (2013). The GGA was developed by the World Organization for Early Childhood Education (OMEP) and ACEI across 27 nations in an effort to sensitively navigate cultural differences while effectively measuring early education programs by a single international standard (Association for Childhood Education International & World Organization for Early Childhood Education, 1999).

When measuring the critical constructs of curriculum, environment, parent and community involvement, physical space, and special needs, evidence suggests the GGA may be a reliable tool to evaluate early education programs internationally. Cronbach’s alpha was administered to determine reliability across the five constructs, and the results indicated “strong internal consistency for each subscale (0.89–0.92)...significant at the $p < .01$ level” (Hardin, Bergen, & Hung, 2013, p. 96). These results are promising as the more state, national, and international governments invest in early education, the more critical it becomes to accurately measure program quality.

National Trends of Voluntary Pre-Kindergarten

This section of the literature review presents the historical development of preprimary education access in the United States, followed by the modern development of the national investment in voluntary prekindergarten programs specifically designed for four-year-old children. To conclude, this section explores research designed to evaluate the quality of state-based voluntary prekindergarten programs.

Historical Development of Preprimary Education Access

Discussion of preprimary education in the United States begins with the inception of kindergarten, a German term first used by Friedrich Froebel (1782–1852) translated in English means “children’s garden” (Fromberg, 2007). Froebel’s “approach, prepared for children between 2 and 6 years of age, consisted of an aesthetic and spiritual reverence for nature that included finger play, songs, dances, and games drawn from German folklore and the prescribed use of blocks, other manipulatives, and paper crafts” (Fromberg, 2007, p. 68). In Wisconsin, Margarethe Schurz developed the first kindergarten in the United States in 1856, followed shortly thereafter (1860) by Elizabeth Peabody in Boston, Massachusetts (Spodek & Saracho, 1994). These two early versions of private preprimary education were designed for middle class families, while the St. Louis Public School District was the first public school district in the United States to offer kindergarten, although parents still paid a fee for their children to participate (Fromberg, 2007).

The United States began to substantially invest in universal kindergarten during the middle of the 20th century, due in large part to two contributing factors of the time period, the conclusion of World War II and the rise of the Soviet Union (Fromberg, 2007). As World War II concluded, Fromberg states men of the armed forces returned to the American workforce, displacing women, and publically funded kindergarten programs began to emerge to assist these women now serving as stay-at-home mothers (2007). In addition, the United States began to invest in universal kindergarten as a means to gain a competitive advantage in science and technology following the Soviet Union's launch of Sputnik in 1957 (Fromberg, 2007).

Publically Funded Access to Early Education

In the State of the Union address in 1964, President Johnson declared the war on poverty. In response, Sargent Shriver, along with a panel of experts including Johns Hopkins University pediatrician, Dr. Robert Cooke and Dr. Edward Zigler, a professor of psychology and director of the Child Study Center at Yale University collaborated to create the Head Start program that was recently reauthorized under President Bush in 2007 (U.S Department of Health and Human Services, 2014). "Head Start was designed to help break the cycle of poverty, providing preschool children of low-income families with a comprehensive program to meet their emotional, social, health, nutritional and psychological needs" (U.S Department of Health and Human Services, 2014). Since this investment began in early education, particularly for America's disadvantaged children, researchers and stakeholders have pondered the merit of this grand expenditure of public dollars.

Modern Development of the National Investment in Voluntary Prekindergarten

Each year, the National Institute for Early Education Research publishes *The State of Preschool: State Preschool Yearbook* that identifies current funding and enrollment trends of prekindergarten programs across the United States. The most recent publication details data from the 2013-2014 school year (2015). Nationally, 40 of 50 states provided state funded access to prekindergarten, serving 29% of the population of four year olds in the 2013-2014 school year. The 2013-2014 school year experienced modest growth in enrollment and funding across the United States as compared to the previous year. Adjusting for inflation, funding increased by \$61 per student for a national average of \$4,125 (2015, pp. 7-8). Bassok et al. provide evidence of the rapid growth of government funded preschool programs for children aged four years. From 2002 to 2012, enrollment in voluntary prekindergarten expanded from 14% to 28%, nationally, while Florida, Oklahoma, and Vermont reached enrollment percentages over 70% in 2014 (Bassok, Miller, Galdo, & Johnson, 2014, p. 1).

As states devise the means to include prekindergarten within their menu of educational options for families, the diversity of national access to kindergarten for children age five is worthy of note. The Education Commission of the States reports that 11 states require school districts to provide full day kindergarten defined as four to seven hours per day, while 34 states, including Florida, require school districts to provide half day kindergarten defined as two to three and a half hours per day (Workman, 2013, p. 2). Five states (Alaska, Idaho, New Jersey, New York, Pennsylvania) do not require school districts to provide access to kindergarten through state statute (Workman, 2013, p. 2).

Evaluating Quality of State-Based Prekindergarten Programs

Williams et al. sought to discover how effectively the School Readiness Certification System (SRCS) rates the quality of prekindergarten programs in the state of Texas based on the results of kindergarten outcomes measured by Texas Primary Reading Inventory (2012). Data from 1,255 prekindergarten classrooms was used in the analysis (Williams, Landry, Anthony, Swank, & Crawford, 2012). “A latent profile analysis identified pre-kindergarten classrooms that were high on pre-kindergarten quality indicators and high on kindergarten outcomes (67.3%), low on pre-kindergarten quality and kindergarten outcomes (21.3%), or low on quality but high on outcomes (11.4%)” (Williams, Landry, Anthony, Swank, & Crawford, 2012, p. 1). These results reveal a research based prekindergarten certification system such as the SRCS used in Texas can closely predict the quality of a prekindergarten provider. This is promising for parents as they may use the results of the SRCS quality indicator scores to make informed decisions for where to send their children for a quality prekindergarten experience to prepare for kindergarten reading readiness.

As state governments consider their tax payer investment in prekindergarten, examining the example of Texas and the School Readiness Certification System (SRCS) may be worthwhile. Florida, to be discussed later, publishes a School Readiness Rate for each prekindergarten provider based solely on assessment scores without the aid of a qualitative measure such as the SRCS (Florida Department of Education Office of Early Learning, 2014).

The Relationship Between Voluntary Pre-Kindergarten Programs and School Readiness

This study attempts to measure the effects of participation in voluntary prekindergarten as it relates to kindergarten reading readiness. Examining recent research related to the effect of prekindergarten is critical for this literature review. Studies where limited effects were uncovered will be presented first (Sylvester & Kragler 2012; Rodriguez 2013) followed by those studies where positive effects of participation in voluntary prekindergarten were discovered (Chapman 2010; Sims 2010; Lipsey et al. 2012; Skibbe et al. 2013; Hilbert and Eis 2014).

Limited Effects

The current study is a follow up to Rodriguez (2013) where the author sought to discern the impact, if any of participation in prekindergarten on kindergarten readiness as well as later academic achievement in 3rd grade. Rodriguez selected the cohort of students who participated in 2006-2007 kindergarten as well as 2009-2010 3rd grade within the research school district. The author noted the difficulty of obtaining reliable prekindergarten participation data, considering the youth of the Florida Voluntary Prekindergarten Program during the VPK cohort year, 2005-2006. Data discerning from those students who participated in VPK from another provider other than the research school district or did not participate in VPK were not acquired (Rodriguez, 2013, p. 15). As a result, Rodriguez reports the two populations as either VPK participants or non-VPK participants of the research school district, however many of the students classified as non-VPK participants did in fact participate in VPK from a private provider (2013).

Rodriguez used the Florida Kindergarten Readiness Screener (FLKRS) to measure kindergarten readiness and the 3rd grade Florida Comprehensive Assessment Test (FCAT) Reading and Mathematics to measure lasting academic effects of VPK participation (2013). As mentioned within the discussion and limitations, the inability to discern the difference between those students who participated in VPK from another provider other than the research school district or did not participate in VPK may or may not have contributed to no statistical difference found among all independent samples t tests performed. Although, there was no statistical difference found, descriptive statistics are reported. VPK participants' mean score for the Early Childhood Observation System™ (ECHOS™) was slightly higher (27.07) than non-VPK participants (26.93), however for all other measures (FLKRS Letter Naming and Fluency, 3rd grade FCAT Reading and Mathematics) non-VPK participants mean score was higher than VPK participants (Rodriguez, 2013, pp. 62-64).

The limited effects reported by Rodriguez (2013) provided some of the motivation for the current study. As VPK participation data recording improved since the inception of the Florida Voluntary Prekindergarten Program, school districts and other VPK providers are able to more accurately determine the differences among participation in VPK from public school district providers, private VPK providers, and non-VPK participation.

Sylvester and Kragler performed a yearlong (2009-2010) case study of one Central Florida voluntary pre-kindergarten classroom consisting of 13 students of diverse backgrounds led by three instructors all with at least bachelor's degrees and one with a

PhD in early learning education (2012). The mixed methods study explored classroom observations and qualitative interviews of each of the three instructors as well as a quantitative analysis of three separate assessments given to students both at the beginning and end of the school year. The quantitative analysis revealed limited effects of participation in the voluntary prekindergarten program specifically measuring early literacy development using the Test of Early Reading Ability-Third Edition (TERA-III) (Reid, Hresko, & Hamill, 2001). The qualitative analysis discovered a disconnect between school district administrators and the classroom instructors in regard to the use of the school district prescribed curriculum the lead teacher considered developmentally inappropriate for four-year-olds (Sylvester & Kragler, 2012).

Positive Effects

Chapman conducted a quantitative analysis measuring kindergarten reading readiness based on the results of three Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessments given to kindergarten students in Metropolitan Nashville Public Schools who either did or did not participate in voluntary pre-kindergarten (2010). While controlling for Limited English proficiency, ethnicity, and socioeconomic status, the results of the analysis of variance provided statistically significant evidence at $p < .05$ that students who did participate in voluntary pre-kindergarten outperformed those students who did not participate on each of the three DIBELS assessments, Word Use Fluency, Letter Naming Fluency, as well as Initial Sound Fluency (Chapman, 2010).

Sims (2010) studied the effects of prekindergarten participation over the course of four years (2006-2009) on kindergarten reading readiness in a rural setting as measured by the Dynamic Indicator of Basic Early Literacy Skills (DIBELS) administered to kindergarten students within the first month of the school year. This research was conducted in Oklahoma which at the time of the study met nine of ten national Institute for Early Education research quality standards and was ranked first among the 50 states and the District of Columbia in terms of prekindergarten participation (Sims, 2010, p. 53).

Using the Mann-Whitney *U* test for significance, the Initial Sound Fluency and Letter Naming Fluency DIBELS subtests were each analyzed for all four years of the study. Composite mean scores were reported for those students who participated in prekindergarten compared to those students that did not participate in prekindergarten (Sims, 2010).

This analysis revealed a statistically significant difference ($p = .001$) between prekindergarten participants and nonparticipants as measured by Initial Sound Fluency, where the mean score for participants ($M = 13.70$) was 32% higher than that of nonparticipants ($M = 10.34$) (Sims, 2010, p. 44). The analysis also revealed a statistically significant difference ($p = .011$) between prekindergarten participants and nonparticipants as measured by Letter Naming Fluency, where the mean score for participants ($M = 18.03$) was 29% higher than that of nonparticipants ($M = 13.97$) (Sims, 2010, p. 46).

Representing the Peabody Research Institute at Vanderbilt University in collaboration with the Tennessee State Department of Education's Division of School

Readiness and Early Learning, Lipsey et al. combined two research designs to establish an ongoing study of the effects of the Tennessee Voluntary Prekindergarten Program on school readiness in kindergarten and beyond through third grade (2012). Selecting its first cohort from the 2009-2010 population of prekindergarten students, this study has become one of the largest of its kind to measure the effect of participation in state funded voluntary prekindergarten programs. The authors used the randomized control trial to discover students who participated in the Tennessee Voluntary Prekindergarten Program outpaced their peers who did not participate in the program, with effect sizes ranging from .28 to .42 on all assessments to include the Woodcock Johnson III achievement tests of pre-reading and language acquisition (Lipsey, Hofer, Bilbrey, & Farran, 2012).

In a unique study that sought to discern between the academic effects of prekindergarten and kindergarten on literacy, Skibbe, et al. selected (n = 60) students whose birthdays fell within two months of the cutoff date to begin kindergarten (December 1) within the anonymous Midwestern state in which the study was held (2013). Selecting students within four months of age of one another served the study's purpose to mitigate age factors that may influence academic achievement in order to better isolate the individual effects of prekindergarten as well as kindergarten. Students in both prekindergarten and kindergarten were assessed using the Woodcock-Johnson III Tests of Achievement in the Fall and again in the Spring of the academic school year (Skibbe, Hindman, Connor, Housey, & Morrison, 2013).

The Woodcock-Johnson III subtest for literacy measuring students' phonological awareness administered in the Fall revealed that kindergarten students performed higher

than their prekindergarten age peers ($B = 21.24, p = 0.001$), “suggesting that their prior experience in prekindergarten supported skill development in this area” (Skibbe, Hindman, Connor, Housey, & Morrison, 2013, p. 696). The early reading subtest also revealed a significant prekindergarten effect ($B = 42.44, p < .001$) again suggesting that participation in prekindergarten positively influences reading readiness as students enter kindergarten (Skibbe, Hindman, Connor, Housey, & Morrison, 2013).

Hilbert and Eis recently studied (2014) the relationship between the use of the early intervention emergent literacy program, *Read It Again Pre-K!* (RIA) and early literacy in prekindergarten children from low socioeconomic backgrounds as measured by the Individual Growth and Developmental Indicators (IGDI) and the Test of Preschool Early Literacy (TOPEL). The mean age of children participants was 4.756. 23 of the 154 participants were assigned to the experimental group based on earning the lowest preliminary IGDI scores. The 23 participants received RIA as an early intervention while the remaining 131 participants did not receive an intervention, serving as the control group. RIA was specifically selected as the intervention because it supports vocabulary development as well as print and phonological awareness in meaningful ways to four-year-olds. In addition, RIA is a free curriculum intervention (Hilbert & Eis, 2014).

Results of the ANOVA for picture naming indicative of vocabulary development revealed positive effects of the intervention (Hilbert & Eis, 2014). The mean score for the intervention group increased from 7.39 ($SD = 4.906$) on the pretest to 27.00 ($SD = 6.536$) on the post-intervention test, while the mean score for the control group started at 17.34 ($SD = 6.511$) followed by the mean score of 23.22 ($SD = 6.230$) on the follow up

test (Hilbert & Eis, 2014, p. 108). “The main effect comparing the two groups (control and intervention) was significant, $p = .000$, partial eta squared = .165, suggesting a large difference in the effectiveness of the intervention” (Hilbert & Eis, 2014, p. 109). This positive effect of enacting early interventions to support emergent literacy during the prekindergarten school year provides evidence of the academic development possible during this time.

The Organization of the Florida Voluntary Prekindergarten Education Program

This section of the literature review provides a brief history of state-based investments in school readiness programs in Florida. In addition, the Florida State Statutes as well as the curriculum standards and accountability measures governing the Florida Voluntary Prekindergarten Program are presented.

Florida School Readiness History

The evolution of universal prekindergarten in Florida is a relatively recent endeavor, and the earliest stages of what would ultimately become the Florida Voluntary Prekindergarten Program are seen in the School Readiness Act, passed in the Florida State Legislature in 1999. In the 1990s, Florida’s current universal early education program did not exist. In its place, Bassok et al. found a variety of programs to include the Pre-Kindergarten Early Intervention (PKEI) and Florida First Start programs subsidized by a blend of federal and state funding, all of which were designed to reach at risk populations (2014). The School Readiness Act established the idea and development

of local coalitions to manage the menu of federal Head Start, state, state lottery, and local funding streams to meet the needs of the entire population of Florida four-year-olds.

During the 1999-2000 fiscal year, the accumulation of these funds totaling \$867.3 was expected to be spent on a range of school readiness programs to include prekindergarten for four-year-olds (The Florida Senate, 1999).

The Florida Constitution was amended in 2002 to ensure that voluntary prekindergarten programs are accessible to all four year old children. Article IX, § 1 (b) states, “Every four-year old child in Florida shall be provided by the State a high quality pre-kindergarten learning opportunity in the form of an early childhood development and education program which shall be voluntary, high quality, free, and delivered according to professionally accepted standards” (2002). Article IX, § 1 (b) continues to address the primary concerns of the Florida legislature in regard to the development of its four year old children. In this section, the legislature clearly states that voluntary prekindergarten programs funded by the state of Florida are to ensure the development of language and cognitive capabilities along with the emotional, social, regulatory and moral capacities of all four year old children within its borders (2002). Article IX, § 1 (c) mandated the programs be made available to children and their parents no later than the start of the 2005-2006 academic school year through existing funds used for education, health, and development (2002).

Considering the relative youth of the Florida Prekindergarten Education Program, it is of interest to reveal current statistics. Florida, provides voluntary prekindergarten services mostly through private providers (80%), unlike Oklahoma where 90% of VPK

services are administered through public schools (Bassok, Miller, Galdo, & Johnson, 2014, p. 4). The National Institute for Early Education Research names 10 quality standard benchmarks that address early learning standards, teacher and assistant teacher degree and training, class size, student-teacher ratio, providing meals, student screening for support services, and monitoring. Florida meets or exceeds three of the 10 benchmarks. At \$2,238 per student in the 2013-2014 school year, Florida ranked 36th out of 40 states that provide state funded prekindergarten programs (2015, pp. 45-47).

Florida Statutory Requirements of the Florida Voluntary Prekindergarten Education Program

The 2014 Florida statutes truly shape the delivery of early education and voluntary prekindergarten programs under Title XLVIII, K-20 Education Code, Chapter 1002, Student and Parental Rights and Educational Choices, Part V, Voluntary Prekindergarten Education Program 1002.51-1002.79. §1002.53 (1) states “The Voluntary Prekindergarten Education Program is created and shall be organized, designed, and delivered in accordance with s. 1(b) and (c), Art. IX of the State Constitution” (2014).

§1002.51 offers definitions of terms that will be used throughout this writing. An “early learning coalition” or “coalition” is an organization created to support and administer the voluntary Prekindergarten Education Program. §1002.83 states, “thirty-one or fewer early learning coalitions are established and shall maintain direct enhancement services at the local level and provide access to such services in all 67 counties” (2014). Prekindergarten director is the onsite individual ultimately responsible

for the overall operation of a single private prekindergarten provider. Private prekindergarten provider is any other organization eligible to provide the summer or school year prekindergarten program outside of public schools (2014).

§ 1002.53 (2) details the age requirements for student eligibility. Children that reach the age of four prior to September 1st are eligible to begin a voluntary prekindergarten program that year and may remain enrolled in the program until eligible by age to begin kindergarten. The type of program that a four year may participate includes summer and school year programs held at either public or private entities. This statute also references the availability of specialized instructional programs made available to parents with children with disabilities. Eligible students for these programs must have an individual educational plan as adopted by the local school board (2014).

Enrolling a child in a voluntary prekindergarten program, public or private, includes submitting a certified application developed by the state Office of Early Learning to the selected prekindergarten provider that includes documented proof of age as described within § 1002.53. This statute also requires that all early learning coalitions across the state provide parents with a profile for each of their prekindergarten providers. Within this profile the minimum that must be included is the school's services and offered curriculum, credentials of their instructors, the instructor-to-student ratio, and the school's kindergarten readiness rate based upon the most recent statewide kindergarten screening (2014).

Private prekindergarten providers have the authority to admit or deny any child for any reason under § 1002.53 (6) (a). This same paragraph says that a private

prekindergarten program may admit as many students with no limit so long as staff-to-student ratio and square footage per child guidelines are not violated under § 402.30, child care facilities; legislative intent and declaration of purpose and policy (2014). Public school districts may also limit enrollment based upon available space at any particular public prekindergarten provider, but the school district must admit all eligible children whose parents enroll them into a summer prekindergarten program at one of the schools within its boundaries as detailed within § 1002.53 (6) (b) (2014).

§ 1002.53 (6) (c) requires that all prekindergarten programs, either public or private, comply with federal antidiscrimination regulations under 42 U.S.C. § 2000d, prohibition against exclusion from participation in, denial of benefits of, and discrimination under federally assisted programs on ground of race, color, or national origin. § 1002.53 (6) (c) goes further to state the federal antidiscrimination guideline must be followed regardless of whether or not the schools accept federal funding (2014).

Specific Florida Statutory Requirements for Private Prekindergarten Programs.

§ 1002.55 (1-5) detail requirements that must be met by all private prekindergarten providers that host school year programs. These providers are administered by the county or regional Early Learning Coalition and must provide at least 540 annual instructional hours. If we assume the school year amounts to 36 weeks, then 540 annual instructional hours amounts to 15 hours per week or 3 hours per day in a five day school week. Each private prekindergarten facility must hold state licensure. The private provider must hold accreditation with the National Council for Private School Accreditation, the Florida Association of Academic Nonpublic Schools, or one of the

other five associations mentioned under this paragraph. In addition to licensure and accreditation, all private preschool providers must either carry a current Gold Seal Quality Care designation, or they may be able to provide for the guarantee of quality care and curriculum in an alternative manner. If the provider chooses to demonstrate quality care through alternative measures they must be verified by the early learning coalition, must be properly credentialed and provide for employee background screening. In addition, the private prekindergarten provider cannot exceed 11 students to one instructor ratio. If the class exceeds 11 students, a second instructor must be assigned. All prekindergarten classes must have a minimum of four students but cannot exceed 20 students. Adult supervision must be present in prekindergarten classes at all times without exception. No private prekindergarten provider may participate in the Voluntary Prekindergarten Education Program if they are known to subject children to discipline procedures that involve spanking, humiliation, or deny children rest or food (2014).

Specific Florida Statutory Requirements for Private Prekindergarten Instructors.

Each private prekindergarten instructor must meet minimum requirements under § 1002.55 (3-4) to include a child care associate credential as issued by the National Credentialing Program of the Council for Professional Recognition or an approved credential by the Department of Children and Family Services. Instructors must also successfully complete an emergent literacy training course approved by the Florida Department of Education. In addition to the background screening required at initial employment, all private prekindergarten instructors must be rescreened every five years to ensure they are of sound character. Although these instructors are to be employed by a

private provider, they must not be ineligible to teach in a public school because of suspension or revocation of a Florida Educator Certificate (2014).

Alternative means of obtaining legitimate credentials to serve as a prekindergarten instructor include obtaining a bachelor's degree or higher in early childhood education, or other similar degree programs. An associate's degree may also serve as an appropriate credential if the degree is in child development. A private prekindergarten instructor may also obtain an appropriate credential with an associate's degree or higher if they successfully complete six credit hours in early childhood education or child development and at least 480 hours of teaching or child care experience for children up to eight years of age. The Florida Department of Education may also approve credentialing if the instructor has alternative qualifications the department deems as equivalent or greater than the criteria described above (2014).

Private Prekindergarten Director Credentials

In the state of Florida, individual private prekindergarten programs must be led by a director that meets minimum credential requirements. These requirements are documented within § 1002.57 (3). Since July 1, 2006 all private prekindergarten directors have successfully completed training of the professionally accepted standards for prekindergarten programs that support students successfully meeting state adopted performance standards, training to assist students with disabilities meet the same state adopted standards as their non-disabled peers, as well as training for operational, legal and financial leadership (2014).

§ 1002.57 (3) dictates that the requirements for director credential for Florida's prekindergarten programs must meet or exceed the requirements to become a child care facility director as specified by the Florida Department of Children and Families. This paragraph also states that if an individual acquires credential to serve as a prekindergarten director, this credential will satisfy the credential required to become a child care facility director (2014).

Summer Prekindergarten Program Delivered by Public Schools and Private Prekindergarten Providers

§ 1002.61 details the Florida statutory requirements that must be met by both public and private summer prekindergarten providers. Public providers must be directed by the local school district, while private providers must be directed by the county or regional Early Learning Coalition as mentioned previously (2014).

Both public and private prekindergarten providers must provide 300 instructional hours at minimum, cannot begin any earlier than May 1st of the school year, and can only deliver the program to those children in the summer immediately before they are eligible to begin kindergarten in a public school. Just as is the case during the regular academic school year, summer prekindergarten instructors, either public or private, must be properly credentialed and subject themselves to background screening upon initial employment and at least every five years subsequently. Just as is the case during the regular academic school year, prekindergarten classes, either public or private, must

adhere to the same minimum and maximum class size criteria mentioned previously and must provide adult supervision at all times without exception (2014).

School-year Prekindergarten Program Delivered by Public Schools

Public school districts are provided direction for administering the Voluntary Prekindergarten Education Program through § 1002.63. Public school voluntary prekindergarten programs must comprise at least 540 instructional hours, which is the equivalent instructional hour requirement for private prekindergarten programs. The instructors at public prekindergarten providers must meet the same minimum credential requirements and submit to the same background screenings as private prekindergarten instructors. Just as is the case with private prekindergarten programs offered during the school year, public school prekindergarten classes offered during the school year must adhere to the same minimum and maximum class size requirements mentioned previously (2014).

Curriculum Standards and Accountability

§ 1002.67 briefly addresses the performance standards, curricula, and accountability measures that will be discussed in greater detail later. This statute directs the state Office of Early Learning to develop and adopt performance standards for students that participate in the Voluntary Prekindergarten Education Program. These standards must address the age appropriate “emergent literacy skills, including oral communication, knowledge of print and letters, phonemic and phonological awareness, and vocabulary and comprehension development” (2014). The following sections are

designed to provide an overview of the Florida statutory requirements regarding curriculum standards and accountability measures such as the statewide kindergarten screening, however these topics will be addressed in greater detail later in the literature review.

Statewide Kindergarten Screening

§ 1002.69 mandates an assessment measuring kindergarten readiness based upon the standards developed by the Office of Early Learning mentioned above for the Voluntary Prekindergarten Education Program. All public school kindergarten students must take the readiness assessment within the first 30 days of the start of their kindergarten school year. All private school kindergarten students may be given the assessment if they participated in the Voluntary Prekindergarten Education Program, but regardless if a student attends a public or private kindergarten, parents must submit their child to the statewide kindergarten readiness screening if the child participated in the Voluntary Prekindergarten Education Program. The assessment's purpose is to provide objective data that allows schools and parents to understand how well their students and children are prepared for kindergarten. For students with disabilities, the assessment is to recognize potential discrepancies in achievement (2014).

Kindergarten Readiness Rates.

§ 1002.69 (5) begins to detail how prekindergarten providers are assigned a kindergarten readiness rate. The Florida Office of Early Learning is assigned to adopt procedures to calculate a kindergarten readiness rate for both public and private

prekindergarten providers. The kindergarten readiness rate is conveyed as a percentage of the students that assess as ready for kindergarten compared to the total population of the prekindergarten students at that prekindergarten provider during that particular academic school year. The readiness rate is calculated using both student learning gains when available and the percentage of students who meet all state readiness measures. The Florida Office of Early Learning is to set a minimum Kindergarten Readiness Rate that prekindergarten providers must meet in order to prove satisfactory delivery of the Voluntary Prekindergarten Education Program. If a prekindergarten provider does not meet the minimum kindergarten readiness rate, that school will be placed on probation. If the provider remains on probation for two consecutive years then that prekindergarten provider may only remain open for business if it applies and is granted a good cause exemption (2014).

Good Cause Exemption

§ 1002.69 also details the requirements for obtaining a good cause exemption for those prekindergarten providers that have been placed on probation for two consecutive years for failure to meet the minimum kindergarten readiness rate. As mentioned previously, if either a public or private prekindergarten provider fails to meet the minimum kindergarten readiness rate for two consecutive years, then that provider will be determined ineligible to accept state funding to deliver the Voluntary Prekindergarten Education Program unless the school applies and is granted a good cause exemption. Good cause exemptions are valid for one year only but may be renewed (2014).

For the request for good cause exemption to be granted, the prekindergarten provider, public or private, must submit data that provide evidence of student improvement from the initial prekindergarten enrollment screening to the post assessment given to students at the end of their prekindergarten school year. These assessments are approved by the Florida Office of Early Learning. The prekindergarten provider must also submit data obtained from the early learning coalition for private providers or the school board for public providers that prove the prekindergarten provider is complying with health and safety standards. The Department of Children and Families or other local licensing authority may also provide this data. Once a public or private prekindergarten provider is granted a good cause exemption, the provider must continue corrective action as designed within its improvement plan and use curriculum approved by the Florida Office of Early Learning until it meets the minimum kindergarten readiness rate (2014).

Funding; Financial and Attendance Reporting

Just like financial and attendance reporting in K-12 schools, both public and private prekindergarten providers are subject to state reporting in order to be eligible for state funding under the Voluntary Prekindergarten Education Program (2014). § 1002.71 explains how a “full-time equivalent student” is calculated (2014). A full-time equivalent student is one who participates in either a public or private school year prekindergarten program that offers 540 instructional hours. A full-time equivalent student is offered 300 instructional hours in either public or private summer prekindergarten program. Each year, public and private prekindergarten providers are appropriated funds based upon an estimation of what their enrollment may be during the following school year. If the

actual enrollment exceeds the estimation, then the funds appropriated for the subsequent year for that provider are to be used first before any other funds may be used to provide for services (2014).

Each prekindergarten provider, public or private, is required to report student attendance on a monthly basis to the Florida Department of Education. Both public and private providers may not accept full-time equivalent student state funding for absences beyond 20% of the hours offered in either the school-year or summer prekindergarten program. These providers may dismiss children for excessive absences beyond 20% of the offered program, but that does not mean the child is deemed ineligible to participate in the Florida Prekindergarten Education Program. Children dismissed from one prekindergarten provider may enroll in a different provider of their parents' choice (2014).

Records of Children in the Voluntary Prekindergarten Education Program

§ 1002.72 ensures the records of all children enrolled in the Voluntary Prekindergarten Education Program are exempt from the open Florida public records requirement under § 119.07. The records that are included in the exemption and therefore held confidential from public view include “assessment data, health data, records of teacher observations, and personal identifying information of an enrolled child and his or her parent” (2014). This statute makes certain to account for the records of all children enrolled in the Voluntary Prekindergarten Education Program either before or after the effective date of the exemption.

Parents of children enrolled in the Voluntary Prekindergarten Education Program may view and obtain their own child's records by right of this statute. Other individuals that may be allowed to view confidential Voluntary Prekindergarten Education Program records include but are not limited to the United States Secretary of Education or Secretary of Health and Human Services, approved researchers, or emergency personnel such as police or paramedics. Any of these organizations or individuals that rightfully obtain student records must protect the data so the personal identifying information of children enrolled in the Voluntary Prekindergarten Education Program are not viewed by unauthorized organizations or persons (2014).

Curriculum Standards and Accountability Measures of the Voluntary Prekindergarten Education Program

The standards created by the Florida Department of Education have evolved over time since legislation established the Florida Prekindergarten Education Program in 2004. In 2005, the Florida State Board of Education adopted the *Florida Voluntary Prekindergarten Education Standards*. These standards were developed primarily from the 2002, *Florida School Readiness Performance Standards*. The new standards were the result of a collaborative effort that ultimately included additional language and indicators to further explain those addressed in the *Florida School Readiness Performance Standards*. In addition, the *Florida Voluntary Prekindergarten Education Standards* emphasized the research concerning emergent literacy, so the original Language and Communication domain was split to form two separate domains; Language and Communication as well as Emergent Literacy. Upon adoption of the *Florida Voluntary*

Prekindergarten Education Standards, the Florida Department of Education set a timetable to review the standards once every three years (Florida Department of Education Office of Early Learning, 2011).

Upon the initial review of the *Florida Voluntary Prekindergarten Education Standards* in 2008, the Florida Department of Education made a few adjustments to the Cognitive Development and General Knowledge domain. As a result, this domain was split as well to emphasize its four areas; mathematics, scientific thinking, social studies, and the arts. Aside from these changes, the name for the standards remained the same as before (Florida Department of Education Office of Early Learning, 2011).

Upon the second review of the *Florida Voluntary Prekindergarten Education Standards* in 2011, the Florida Department of Education convened with early education specialists in an effort to modernize the standards using the most recent research and best practices. The new standards were to align with what kindergarten students are expected to know when they first arrive based upon both the *Next Generation Sunshine State Standards* and *Common Core State Standards*. As a result, the Florida State Board of Education adopted the *Florida Early Learning and Developmental Standards for Four-Year-Olds* as published by Florida Department of Education Office of Early Learning within the requirements of § 1002.67 of the Florida Statutes (2011). In the following section, the *Florida Early Learning and Developmental Standards for Four-Year-Olds* and the accountability measures put in place by the Florida Department of Education will be summarized.

Florida Early Learning and Developmental Standards for Four-Year-Olds

According to the Florida Department of Education Office of Early Learning “the *Florida Early Learning and Developmental Standards for Four-Year-Olds* describe skills that four-year-olds should know and be able to do by the end of their prekindergarten year. They are designed to guide prekindergarten administrators and teachers in designing and implementing appropriate early learning environments” (2011, p. 15). The standards are addressed in five domains; Physical Development, Approaches to Learning, Social and Emotional Development, Language, Communication and Emergent Literacy, as well as Cognitive Development and General Knowledge (Florida Department of Education Office of Early Learning, 2011).

Physical Development

The physical development domain is divided into four components; health and wellness, self-help, gross motor development, and fine motor development. The health and wellness component is designed to provide children with basic knowledge of sound nutrition and establish the importance of exercise through participation in physical activities. In addition, the health and wellness domain gives instructors guidance to effectively monitor for auditory processing, visual acuity, and basic hygiene. Within the self-help domain, children are encouraged to strengthen their independence in self-care activities such as hand washing and tying of shoes. Gross motor development focuses upon overall balance and coordination and is achieved through impromptu activities such as running, jumping, and climbing upon playground equipment as well as planned activities led by the instructor. The final component of the physical movement domain,

fine motor development primarily focuses on a child's hand and finger dexterity through such tasks as grasping writing implements for coloring and writing (Florida Department of Education Office of Early Learning, 2011).

Approaches to Learning

The four components of the Approaches to Learning domain are; eagerness and curiosity, persistence, creativity, as well as planning and reflection. Approaches to Learning is the one domain not directly related to specific academic content, rather the manner in which we learn is emphasized instead. Eagerness and curiosity are critical elements as prekindergarten instructors take advantage of a four-year-old's natural instinct to question their immediate surroundings in order to teach global lessons that allow a child to come to a greater understanding of the world around them. Persistence involves teaching students that overcoming obstacles is a common part of the learning process. The creativity component requires instructors to help students develop their "flexibility of thought and imagination" (Florida Department of Education Office of Early Learning, 2011, p. 54). The final component of the Approaches to Learning domain, planning and reflection involves guiding children beyond the process of trial and error and helping them see how to utilize multiple strategies to problem solve during the learning process (Florida Department of Education Office of Early Learning, 2011).

Social and Emotional Development

This domain consists of three components; self-regulation, relationships, and social problem solving. Instructors seek to provide four-year-olds the tools they need to

independently understand the differences between appropriate and inappropriate behavior within self-regulation. The relationships component helps children understand the value of establishing and maintaining positive relationships with their peers and the adults in their lives. Instructors seek to help children gain an initial understanding of bullying and that conflict can be resolved through the social problem solving component (Florida Department of Education Office of Early Learning, 2011).

Language, Communication, and Emergent Literacy

With seven components, the Language, Communication, and Emergent Literacy is the most comprehensive of the five domains and represents the central focus of this study. The components are as follows; listening and understanding, speaking, vocabulary, sentences and structure, conversation, emergent reading, and emergent writing (Florida Department of Education Office of Early Learning, 2011, p. 87).

The two benchmarks of the listening and understanding component are increasing knowledge through listening and following multi-step directions. The speaking component focuses upon the child speaking in a manner that can be understood by adults that are familiar and even those adults that may be unfamiliar with the four-year-old. The six benchmarks under the vocabulary component involve the child attaining an age appropriate vocabulary that includes a wide range of descriptive words, mastery of prepositions such as before, after, above, and below, disciplinary words such math and science, as well as words that describe objects, actions and events. Sentences and structure also includes two benchmarks that include the child using age appropriate grammar while speaking to include subject-verb agreement, as well as the ability to

connect intricate sentences and phrases to construct new ideas. In the conversation component, students are taught to use language to appropriately express their feelings, ask and answer questions from adults and their peers, and provide information that is appropriate for their setting. Students are also taught the general rules for conversation such as taking turns without interrupting others and the nonverbal rules such as appropriate eye contact (Florida Department of Education Office of Early Learning, 2011).

Within the final two components of Language, Communication, and Emergent Literacy domain, students are provided instruction and guidance in both emergent reading and writing. The four benchmarks of emergent reading include; motivation for reading, interacting appropriately with books and other print materials, an age appropriate phonological awareness, knowledge of the alphabet, and comprehension of text that is read aloud. Emergent writing includes four benchmarks as well; motivation to write, scribbling of letters and shapes to represent ideas that are different from simple drawing, an age appropriate ability to write letters, and knowledge of the purpose of writing to express ideas (Florida Department of Education Office of Early Learning, 2011, p. 72). These final two components, emergent reading and emergent writing are specifically addressed in research questions one and two of this study, while research question two arguably addresses the entirety of the domain.

Cognitive Development and General Knowledge

The final domain of the Florida Developmental Standards for Four-Year-Olds consists of four complex components; mathematical thinking, scientific inquiry, social

studies, and creative expression through the arts. It is this domain, in addition to emergent literacy, that is most similar to what a child is to expect from their formal primary and secondary years that follow prekindergarten. Instructors seek to help children understand varied mathematical concepts within the mathematical thinking domain to include; number sense, number and operations, patterns and seriation, geometry, spatial relations, and measurement (Florida Department of Education Office of Early Learning, 2011, p. 144). The five elements students explore within scientific inquiry include; investigation and theory, physical science, life science, as well as earth and space (Florida Department of Education Office of Early Learning, 2011, p. 197). Within the social studies component, teachers guide children through a basic understanding of their individual development and identity, people, places, and their environment, technology, and civic ideals and practices (Florida Department of Education Office of Early Learning, 2011, p. 211). And finally, the creative expression through the arts component focuses upon an appreciation and creation of visual arts, music, creative movement and dance, as well as dramatic play and theatre (Florida Department of Education Office of Early Learning, 2011, p. 223).

Accountability Measures

It is the standards detailed above, adopted and implemented under Florida Constitutional and Florida State Statutory authority, which derive the assessments that ultimately determine the Kindergarten Readiness Rate for each child and prekindergarten provider that participate in the Voluntary Prekindergarten Education Program in the state of Florida (§1002.69). The Florida Department of Education Office of Early Learning

developed two assessments in particular of critical importance to the public and private providers of the Voluntary Prekindergarten Education Program. The first is required and used up to three times as a pre-assessment and post-assessment for students currently enrolled with a Florida Voluntary Prekindergarten Education Program provider. This assessment is known as Florida Voluntary Prekindergarten (VPK) Assessment (Florida Department of Education Office of Early Learning, 2014). The second assessment is the known as the Florida Kindergarten Readiness Screener (FLKRS). This assessment is given to kindergarten students within the first month of kindergarten in order to measure if children are ready to begin kindergarten and determine each Voluntary Prekindergarten Education Program provider with its Provider Kindergarten Readiness Rate. The Provider Kindergarten Readiness Rate is used to ultimately determine if individual Florida prekindergarten providers will continue to serve Florida's four-year-olds (Florida Department of Education Office of Early Learning, 2015).

Florida Voluntary Prekindergarten Assessment

Florida VPK Assessment is used as an instrument to guide instruction. It is not specifically used as an accountability measure for Florida's prekindergarten providers, as there is no provision in state statutes to use the results of this assessment in the Provider Kindergarten Readiness Rate calculation. All providers that participate in the Florida Prekindergarten Education Program are required to participate at least twice per year in September and then again in April/May. Providers may also voluntarily participate in January. The Florida Department of Education sponsors professional development for providers and their instructors that administer, record, and score the assessment. Those

providers that are not on probation may simply receive training through viewing the VPK Assessment Administration DVD. Providers on probation must attend instructor-led face-to-face training. (Florida Department of Education Office of Early Learning, 2014).

The Florida VPK Assessment primarily covers the emergent literacy standards such as print knowledge, phonological awareness, oral language, and vocabulary as well as the number sense component from the cognitive development and general knowledge domain. These domains are included in the assessment as they have been determined by the Florida Department of Education as the best predictors of later success in reading and mathematics. The Florida VPK Assessment is aligned with the Florida Kindergarten Readiness Screener and as such provides prekindergarten providers with valuable information that drives instructional decisions (Florida Department of Education Office of Early Learning, 2014).

Florida Kindergarten Readiness Screener and the VPK Provider Kindergarten Readiness Rate

The Florida Kindergarten Readiness Screener (FLKRS) is used as both a tool for kindergarten teachers to begin to understand their students' ability level as well as the accountability measure that is used to calculate each of the Voluntary Prekindergarten Education Program providers across the state of Florida. Under §1002.69, the Florida Department of Education is required to calculate the VPK Provider Kindergarten Readiness Rate (Florida Department of Education Office of Early Learning, 2015).

The FLKRS is composed of two assessments; the Early Childhood Observation System (ECHOSTM) and the Florida Assessments for Instruction in Reading (FAIR). The

VPK Provider Kindergarten Readiness Rate is calculated by dividing the number of children substantially completing the prekindergarten program who score ready on both measures, ECHOS™ and FAIR, by the number of children substantially completing the program and screened on both measures. In order for a child to count toward the readiness rate, they must complete at least 70% of the program, or 378 hours during the school year or 210 hours during the summer program. Once the department calculates the VPK Provider Kindergarten Readiness Rate for all providers, the State Board of Education then sets the minimum VPK Provider Kindergarten Readiness Rate for the state that determines if a provider will or will not be placed on probation. Since the FLKRS carries such high stakes, each prekindergarten provider is required to verify the students they have served through the VPK Provider Verification of Children Served online tool (Florida Department of Education Office of Early Learning, 2015).

During the cohort year of this study, 2013-2014, individual children were deemed ready for kindergarten by consistently scoring in the demonstrating or emerging/progressing categories on the ECHOS™ as well as achieving a probability of reading success score of 67% on the FAIR (Florida Department of Education Office of Early Learning, 2015). The FAIR probability of reading success score is the measure used in research question 1 of this study to determine the difference if any in reading readiness between VPK participants from the research school district, VPK participants from another VPK provider, and non-VPK participants.

Summary

Florida state government's commitment to universal prekindergarten access is worthy of note. In terms of percentages of the overall population of four-year-olds in the state, Florida ranks among the top three states in government funded access and enrollment in voluntary pre-kindergarten, however Florida's funding per child as well as measures of quality rank among the lowest in the United States according to multiple measures (Bassok, Miller, Galdo, & Johnson 2014; The National Institute for Early Education Research 2015). In light of these facts, it is critical to continue investigating the quality of the Florida Voluntary Prekindergarten Education Program both at the state and local level.

This review of literature encompassed four primary sections with several-subsections designed to inform the reader of the scope of preprimary education internationally leading to the structure of the voluntary prekindergarten program governing the research school district and private voluntary prekindergarten providers of which this study is based. The first section comprised a synopsis of the global trends supporting government funded preprimary education as well as the means to measure international preprimary education program quality. The second section covered national trends of voluntary prekindergarten to include a brief history of preprimary education in the United States as well as the modern development of voluntary prekindergarten. The third section comprised recent literature revealing both limited and positive effects of voluntary prekindergarten participation on reading readiness and overall academic achievement. The final section served to inform the reader of the specific organization of

the Florida Voluntary Prekindergarten Education Program to include a brief history of school readiness in Florida, the statutory requirements, as well as the curriculum standards and accountability measures of the program.

CHAPTER THREE: METHODOLOGY

Introduction

As stated in Chapter 1, the primary purpose of this study is to determine whether the effects of participation in VPK are sustained in reading readiness for those who participated VPK in the research school district, those who participated in VPK from another provider, and compared to those that did not participate in VPK. Select VPK stakeholder perceptions of the research school district were also collected. The methodology and instrumentation to address the research questions is presented in this chapter. The chapter is organized into four sections: (a) selection of participants, (b) instrumentation, (c) data collection, and (d) data analysis.

This study employed a mixed methods research designed to triangulate the concept of voluntary prekindergarten beyond quantitative measures (Johnson and Onwuegbuzie 2004, Torrance 2012). Research questions 1 and 2 provide quantitative analysis of the reading readiness of the three populations mentioned above during their first months of kindergarten. Research question 3 provides the study a qualitative exploration of the research school district's select VPK stakeholders. As mentioned in the delimitations of Chapter 1, interview participants were selected to provide a contextual perspective of select stakeholders and are not intended to represent the population of research school district VPK administrators, instructors, and parents. For reference, the research questions follow here in Table 3.

Table 3

Research Questions and Data Sources

Number	Research Questions	Data Source
1	What is the difference, if any, in Probability of Reading Success Status on the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?	2013 FLKRS FAIR-K Probability of Reading Success Status for Kindergarten
2	What is the difference, if any, in scale scores on the 2013-2014 Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?	2013 DE Early Skills Assessment for Kindergarten English/Language Arts Scale Scores
3	How do select stakeholders perceive the research school district VPK program?	Interview

Selection of Participants

The population of 2013-2014 kindergarten students of the research school district was selected to address Research Questions 1 and 2. The three research populations for Research Questions 1 and 2, 2012-2013 research school district VPK participants ($N = 311$), 2012-2013 another provider VPK participants ($N = 1614$), and 2012-2013 non-VPK participants ($N = 285$) were derived from the population of 2013-2014 kindergarten students of the research school district of whom were assessed using the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) and the 2013 Discovery Education (DE)

Early Skills Assessment for Kindergarten English/Language Arts. Table 4 displays the participants included in Research Questions 1 and 2 based on research population.

Table 4

Research Populations for Research Questions 1 and 2 (N = 2210)

Population	Total Assessed with both 2013 FAIR-K and DE
2012-2013 Research School District VPK Participants	311
2012-2013 Another Provider VPK Participants	1614
2012-2013 Non-VPK Participants	285

For Research Question 3, a purposive sample was derived from selected stakeholders, to include; three research school district VPK parents, three research school district VPK instructors, and two research school district VPK administrators. The purposive sample of research school district instructors and parents was selected in an effort to reflect the racial and socioeconomic diversity of research school district participants and schools. These individuals were recruited to participate through personal request at specific research school district sites. Torrance argues the purpose of this qualitative measure is to provide insight into the culture and motives of individuals within an organization beyond that which quantitative analysis can offer (2012).

Instrumentation

The 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) was used to answer Research Question 1. FAIR-K is partially expressed as a percentage known as the Probability of Reading Success Status derived from the broad screen consisting of letter naming and phonemic awareness (Florida Center for Reading Research, 2009). All tasks of the FAIR-K were originally calibrated in 2009-based on a state wide sample of kindergarten students ($N = 1967$) closely resembling the statewide demographic based on race/ethnicity, socioeconomic status, English Language Learner (ELL), and Exceptional Student Education (ESE) status. Scores range from 9 to 94, 94 representing a perfect score (Florida Center for Reading Research, 2009).

The 2012-2013 Florida FLKRS Administration Manual reports FAIR-K bases validity of the assessment concurrently with the nationally normed Expressive Vocabulary Test, Second Edition (Florida Department of Education, 2012). No further explanation is provided that details exactly how the FAIR-K portion of FLKRS shares “concurrent validity with the Expressive Vocabulary Test” (2012, p. 8). This same administration manual reports FAIR-K reliability is achieved using item response theory to analyze question difficulty and to control for gender and ethnicity bias (2012, p. 8). Specific validity and reliability measures for FAIR-K are not provided within the 2012-2013 Florida FLKRS Administration Manual.

The Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts is designed to assess progress toward the Common Core State

Standards (Discovery Education Assessment, 2013). The DE Early Skills Assessment for Kindergarten English/Language Arts (2013) moves beyond letter naming and phonemic awareness to assess complex reading skills such as; comparing similarities and differences between two texts, making inferences beyond the explicit text, and determining setting as well as characterization. Scale scores are derived using the Rasch Model of Item Response Theory and range from 1000 to 2000 (Discovery Education Assessment, 2013).

Reliability for the DE Early Skills Assessment for Kindergarten English/Language Arts is addressed in Discovery Education's Common Core Interim Benchmark Technical Manual (2013). Cronbach's alpha was used to assess reliability at 0.71 across the national sample of 2012-2013 kindergarten students ($N = 44,925$) of whom were assessed with Test A of the DE Early Skills Assessment for Kindergarten English/Language Arts (2013, p. 23). Validity for the common core interim benchmark assessments is addressed by the above mentioned manual for grades 3 – 8 only, therefore validity for the DE Early Skills Assessment for Kindergarten English/Language Arts is unknown.

Original interview questions were developed at the request of the research school district superintendent for the purpose of this study (Appendix C). A preliminary discussion was held with research school district VPK administrators in advance of the interviews to gain perspective and shape appropriate interview questions in alignment with the purpose of this study. The questions designed for each stakeholder group are primarily open-ended to elicit a more comprehensive response from each participant.

Data Collection

Research Questions 1 and 2 utilized archival data maintained by the research school district and the Florida Department of Education. The research school district has a comprehensive procedure for requesting permission to conduct research within the school district using school district student data. Permission was requested and granted by the deputy superintendent of the research school district.

The required data for Research Questions 1 and 2 were obtained from the research school district's departments of Assessment and Accountability (FLKRS FAIR-K and DE Scale Scores), Special Projects (VPK Participants), and Information Services. Student achievement data was deidentified to control for risk of personal identification in compliance with Family Education Rights and Privacy Act (FERPA) / Protection of Pupil Rights Amendment (PPRA).

As prescribed by Rabionet (2011) Research Question 3 data was obtained from semi-structured interviews with select stakeholders of the research school district VPK program to include parents, instructors, and district administrators. Rabionet's (2011) semi-structured interview method was used in an effort to increase validity of participant responses; each participant was asked the same questions in the same order, however most questions required an open-ended response. In addition, each participant was asked the same final question; "What else would you like me to know?" This question allowed participants the opportunity to present contextual information not elicited from the structured interview questions.

Interviews took place in person at research school district VPK provider school locations as well as the research school district VPK offices. All interviews were conducted by the researcher. Interview participants were greeted and presented with the HRP-508: Summary Explanation for Exempt Research (Appendix B). Interviews were voice recorded at the permission of the respondents and lasted between 2 and 20 minutes in length. Audio recordings were stored in a locked cabinet in the researcher's office on a voice recorder and subsequently destroyed following analysis.

Data Analysis

For Research Question 1, Probability of Reading Success Status on the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) of research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013 were compared using a one-way analysis of variance (ANOVA) to determine the extent to which the scores of the groups differed on each assessment (Steinberg, 2011). These scores were derived from the research school district Department of Assessment and Accountability to include research school district students enrolled in kindergarten during the 2013-2014 school year.

For Research Question 2, scale scores on the 2013-2014 Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts 1 of research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013 were compared using a one-way analysis of variance

(ANOVA) to determine the extent to which the scores of the groups differed on each assessment (Steinberg, 2011). These scores were derived from the research school district Department of Assessment and Accountability to include research school district students enrolled in kindergarten during the 2013-2014 school year.

For Research Question 3, interview responses provided a qualitative analysis of select stakeholder perception of research school district VPK. Interview questions elicited information to include; how stakeholders engaged in the research school district VPK, quality of the research school district VPK, and what activities engage research school district VPK students. Audio recordings were transcribed using voice to text dictation software. Participant responses were analyzed by stakeholder group to determine themes among respondents. A topic had to be addressed by at least two of three participants within a stakeholder group to become a theme. Responses were analyzed across stakeholder groups for themes. A topic had to be addressed by at least two of three stakeholder groups to become a theme.

Summary

This chapter presented the methodology used in determining the difference in kindergarten reading readiness among those who participated in the research school district VPK, those who participated in another provider VPK, and those that did not participate in VPK. This chapter also presented the methodology for collecting and analyzing select VPK stakeholder perceptions of the research school district. The selection of participants, instrumentation, data collection, and data analysis for each of

the three research questions was presented. Chapter four will highlight the presentation and analysis of the data.

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA

Introduction

This study was designed to determine the relationship, if any, of participation in VPK and kindergarten reading readiness. Populations of concern included research school district VPK participants, another provider VPK participants, and non-VPK participants. Analysis of variance (ANOVA) was used to determine the existence of statistical differences among the three research populations measured by the FLKRS FAIR-K Probability of Reading Success as well as the DE Early Skills Assessment for Kindergarten English/Language Arts. This study also sought to gather and report the perceptions of select stakeholders of the research school district VPK program to include; parents, instructors, and administrators.

The results of this study were intended to contribute to the existing research on the efficacy of VPK programs and their relationship to reading readiness in kindergarten. Qualitative data gathered from research school district stakeholders were intended to inform research school district leadership in order to further develop and improve the research school district VPK program.

This chapter is organized in five sections. The first section details the student demographics of each of the three research populations of research questions one and two. The second and third sections present the mean scores for each of the three research populations within the FLKRS FAIR-K Probability of Reading Success Status as well as the DE Early Skills Assessment for Kindergarten English/Language Arts. Within these sections, a one-way analysis of variance and post hoc Tukey HSD are used to compare

means and determine if statistically significant differences exist among means. The fourth section summarizes the responses and presents themes of the qualitative analysis of select research school district stakeholders, while the final section summarizes the chapter.

Demographics

Table 5 presents the student demographic variables among the three research populations of concern in research questions one and two. The reported demographic variable is presented in the first column. The second column offers the percentage representation of each demographic variable among all students included in the study ($n = 2,210$). The third column presents the percentage representation of each demographic variable among research school district VPK participants. The fourth column presents the percentage representation of each demographic variable among another provider VPK participants. The final column offers the percentage representation of each demographic variable among non-VPK participants. Of note is the demographic variable, ethnicity. Ethnicity represents all students reporting Hispanic heritage of whom also reported as one or more of the listed racial designations.

Table 5

Demographics Variables Among Populations in Research Questions One and Two (N = 2210)

Descriptor	% of Total	% of Research School District VPK Participants (n = 311)	% of Another Provider VPK participants (n = 1614)	% of Non-VPK Participants (n = 285)
Race *				
White	83	80	85	78
Black or African American	15	19	13	23
Asian	5	5	5	4
American Indian or Alaska Native	1	1	1	1
Hawaiian or Other Pacific Islander	1	1	1	0
Ethnicity *				
Hispanic	23	28	21	35
Non-Hispanic	77	72	79	65
Economic Status				
Free/Reduced Lunch Benefit	45	60	37	76
Non-Free/Reduced Lunch Benefit	55	40	63	24
Exceptional Student Education				
Gifted ESE	1	1	1	0
Non-Gifted ESE	7	14	5	8
English Language Learner Status				
English Language Learner	5	7	4	14
Non-English Language Learner	95	93	96	86

* Race and ethnicity are reported separately. More than one race may be reported.

Research Question One

What is the difference, if any, in Probability of Reading Success Status on the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?

The probability of reading success as measured by FAIR-K is determined through a student's ability to recognize letters of the alphabet as well as determining phonemic combinations. The Probability of Success Status is then expressed as a percentage ranging from 1 to 99. Within this study, student scores ranged from 9% to 94%. Table 6 presents the mean scores for each of the three research populations. The mean score for research school district VPK participants was 84.33% ($SD = 15.72$), followed closely by another provider VPK participants at 84.24% ($SD = 16.68$). Students who did not participate in VPK performed significantly lower than both VPK participant populations with a mean score of 64.83% ($SD = 26.88$).

Table 6

Ranked FAIR-K Probability of Reading Success Status

Population	Frequency	Mean %	Standard Deviation
Research School District VPK	311	84.33	15.72
Another Provider VPK	1614	84.24	16.68
No VPK	285	64.83	26.88
Total	2210	81.75	19.32

A one-way between subjects ANOVA conducted to compare the effect of VPK participation on the FAIR-K Probability of Reading Success Status for research school district VPK participants, another provider VPK participants, and non-VPK participants is reported in table 7. There was a significant effect of VPK participation on the FAIR-K Probability of Reading Success Status at the $p < .05$ level for the three populations ($F(2, 2207) = 141.52, p = .00$).

Table 7

ANOVA: FAIR-K Probability of Reading Success Status

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	93692.62	2	46846.31	141.52	.00
Within Groups	730556.00	2207	331.02		
Total	824248.63	2209			

The results of the post hoc comparison using the Tukey HSD test reported in table 8 indicate the mean score for non-VPK participants ($M = 64.83, SD = 26.88$) on the FAIR-K Probability of Reading Success Status was significantly different than both research school district VPK participants ($M = 84.33, SD = 15.72$) and another provider VPK participants ($M = 84.24, SD = 16.68$). The mean probability of reading success status results significantly favor VPK participation within either the research school district or another provider by 19.5 and 19.41 respectively. There was no significant difference between research school district participants and another provider VPK participants as measured by the FAIR-K Probability of Reading Success Status.

Table 8

Tukey HSD: FAIR-K Probability of Reading Success Status

(I) VPK Type	(J) VPK Type	Mean Difference (I-J)	Standard Error	Significance
None	Another Provider	-19.4117*	1.1690	.00
	Research School District	-19.5063*	1.4919	.00
Another Provider	None	19.4117*	1.1690	.00
	Research School District	-.0946	1.1267	.10
Research School District	None	19.5063*	1.4919	.00
	Another Provider	.0946	1.1267	.10

*The mean difference is significant at the 0.05 level.

Research Question Two

What is the difference, if any, in scale scores on the 2013-2014 Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?

Scale scores resulting from the DE Early Skills Assessment for Kindergarten English/Language Arts (ELA) are derived from a student’s ability to understand complex reading skills beyond letter naming and phonemic awareness to include comparing similarities and differences, making inferences, and determining setting and characterization. Performance is calculated as a scale score ranging from 1000 to 2000. Within this study, student scores ranged from 1075 to 1573. Table 9 presents the mean scores for each of the three research populations. The mean score for another provider VPK participants was 1248.73 ($SD = 62.21$), followed by research school district VPK

participants at 1238.69 ($SD = 56.69$). Students who did not participate in VPK performed lower than both VPK participant populations with a mean score of 1214.28 ($SD = 55.04$).

Table 9

Ranked Discovery Education Early Skills Assessment for Kindergarten English/Language Arts

Population	Frequency	Mean	Standard Deviation
Another Provider VPK	1614	1248.73	62.21
Research School District VPK	311	1238.69	56.69
No VPK	285	1214.28	55.04
Total	2210	1242.87	61.64

A one-way between subjects ANOVA conducted to compare the effect of VPK participation on the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts for research school district VPK participants, another provider VPK participants, and non-VPK participants is reported in table 10. There was a significant effect of VPK participation on the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts at the $p < .05$ level for the three populations ($F(2, 2207) = 40.03, p = .00$).

Table 10

ANOVA: Discovery Education Early Skills Assessment for Kindergarten English/Language Arts

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	293776.39	2	146888.20	40.03	.00
Within Groups	8099270.08	2207	3669.81		
Total	8393046.47	2209			

The results of the post hoc comparison using the Tukey HSD test reported in table 11 indicate the mean score for non-VPK participants ($M = 1214.28$, $SD = 55.04$) on the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts was significantly different than both research school district VPK participants and another provider VPK participants. A significant difference also exists between research school district participants ($M = 1238.69$, $SD = 56.69$) and another provider VPK participants ($M = 1248.73$, $SD = 62.21$) as measured by the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts. The mean scale score results favor VPK participation from another provider over research school district participants and non-VPK participants by a respective 10.04 and 34.45 scale score differential.

Table 11

Tukey HSD: Discovery Education Early Skills Assessment for Kindergarten English/Language Arts

(I) VPK Type	(J) VPK Type	Mean Difference (I-J)	Standard Error	Significance
None	Another Provider	-34.4477*	3.8923	.000
	Research School District	-24.4077*	4.9676	.000
Another Provider	None	34.4477*	3.8923	.000
	Research School District	10.0400*	3.7515	.020
Research School District	None	24.4077*	4.9676	.000
	Another Provider	-10.0400*	3.7515	.020

*The mean difference is significant at the 0.05 level.

Research Question Three

How do select stakeholders perceive the research school district VPK program?

Perceptions of three research school district stakeholder groups were gathered representing research school district VPK administrators, research school district VPK

instructors, and parents of research school district VPK participants utilizing Rabionet's (2011) semi-structured interview method. In an effort to increase validity of participant responses, each participant was asked the same items in the same order. In addition, each participant was asked the same final query; "What else would you like me to know?" This item allowed participants the opportunity to present contextual information not elicited from the structured interview items.

Interviews took place in person at school locations and at the research school district VPK office. All interviews were conducted by the researcher. Interview participants were greeted and presented with the HRP-508: Summary Explanation for Exempt Research (Appendix B). Interviews were voice recorded at the permission of the respondents and were between 2 and 20 minutes in duration. Audio recordings were transcribed verbatim (Appendix D). Audio recordings were stored in a locked cabinet in the researcher's office and subsequently destroyed following transcription and analysis.

Administrators

Research school district VPK administrators' perceptions were gathered with a semi-structured interview. There were four items asked of each participant. Each interview item follows along with a summary of responses for each item. Several themes common across the interviews are presented. Two of the three participants had to address the same topic for it to become a theme. Participants are represented with alpha-numeric codes of A1, A2, and A3.

Interview Item 1. Explain the history and current elements of the research school district VPK program.

Administrators discussed the history and current elements of the research school district VPK program. Themes present include the beginning date of the state funded VPK program, the number of state funded hours per day, and additional hours available through federal funding to qualified families. Two of three administrators cited the voter approved Florida Voluntary Prekindergarten Education Program enacted in 2005. Although not the same two administrators, two of three mentioned state funding for three hours per day and federal school readiness funding available to those students who qualify by scoring low on the Lollipop Test: A Diagnostic Screening Test of School Readiness Revised Edition (Chew, 1989).

Although not themes, individual comments were of note. A1 added that the program for four-year-olds originated in the 1990s as a federally funded early intervention, and that the instructor to student ratio rose from 18:2 in 2005 to 20:2 in 2015. A2 indicated that instructors hold a Child Development Associate (CDA) credential or higher degree, and several classroom models are in use to support special needs students. A3 accentuated the growth of the program serving students in 100% (36) of elementary schools and 1 high school. A3 added that all lessons are based on the 2011 Florida Early Learning and Developmental Standards for Four-Year-Olds.

Interview Item 2. Explain the elements of the research school district VPK program that you believe are effective. How do you know?

Administrators also discussed perceived successful elements of the program and supported them with evidence. Themes present included standards-based lesson plans

created by certified early education resource teachers, academic and social/emotional focused curriculum, hands-on discovery learning through play, and progress monitoring through three VPK assessments.

All three administrators described how lessons are written by certified early education resource teachers and then distributed to paraprofessional non-certified instructors in each of the VPK sites to provide both consistency and fidelity to the 2011 Florida Early Learning and Developmental Standards for Four-Year-Olds. Two of three administrators mentioned that the program focuses on both academic and social emotional development. The same two administrators discussed learning with a hands-on, discovery process through play. Although not the same two administrators, two of three discussed the use of three VPK assessments used to progress monitor and identify students who require additional intervention or greater challenge.

Although not themes, there were other individual comments of note. A1 stated that instructors are trained in the High Scope instructor-student interaction philosophy and lessons are infused with science, technology, engineering, and mathematics (STEM) problem solving and critical thinking skill development. A3 stated that the research school district has no VPK sites scoring below the minimum Kindergarten Readiness Rate (KRR) published by the Florida Office of Early Learning determined through VPK participant performance on the FLKRS. A3 added “We do well with our (kindergarten) readiness rates, and I believe that shows that we are doing a good job.”

Interview Item 3. What challenges do you experience [sic about the VPK program]?

The three administrators spoke about the challenges faced in leading VPK within the research school district. The themes that emerged were low funding, high instructor turnover, student misbehaviors, and instructor training.

Two of three administrators stated that low funding essentially eliminates the research school district's financial ability to hire certified teachers to serve in each of the VPK sites. The same two administrators mentioned high instructor turnover, which they attributed to a combination low instructor pay and high professional performance expectations. Although not the same two administrators, two of three identified student misbehaviors as a challenge.

A third combination of two of three administrators discussed the difficulty of preparing instructors due to geographic and contractual challenges. VPK sites are spread across the research school district. The instructors' paraprofessional contract strictly adheres to paid hours of service without overtime and does not easily allow for travel to the central VPK office.

An individually noted challenge to provide support for instructors on site related to funding. A2 stated that the certified early education resource teachers cannot visit all school sites to provide support as much as is needed.

Interview Item 4. What else would you like me to know [sic about the VPK program]?

The final item sought to elicit additional information not specifically asked in the rest of the interview. No themes were present but individual comments were of note. A1 stated full day VPK and extended care is available to those families who qualify, "We

want those at-risk kids, so we give them the full day for free and even extended care up to 5:00 pm if the parent is able to show they are working with a letter from their employer.”

A2 described the challenge of the new Teaching Strategies Gold assessment which is ongoing and requires portfolio building for each student. The result is increasing the expectations of VPK instructors. A3 attributed much of the success of the research school district VPK program to the passionate staff to include administration, resource teachers, and classroom instructors.

In Table 12, the three administrators are represented with alpha-numeric codes of A1, A2, and A3. Critical themes are presented based on the successful elements and challenges of the research school district VPK program.

Table 12

Administrator Perception Themes of the Research School District VPK Program (N = 3)

Theme (Participants)	A1	A2	A3
Standards Based Lessons Created by Resource Teacher (3)	“The way we ensure we follow the standards is one of our resource teachers writes all the lesson plans.”	“Certified early childhood resource teachers support, guide, and mentor the VPK instructors and assistants.”	“Our resource teacher writes all lesson plans, and that creates a uniformity amongst the district.”
Academic and Social/Emotional Focused (2)	“When you’re talking about school readiness, it’s not just about academics... A lot of focus in our program is in social and emotional development”	Not Mentioned	“The curriculums cover everything to include literacy and social/emotional development.”
Hands-on Discovery Learning (2)	“We do a lot of learning through play, and a lot of learning by doing.”	Not Mentioned	“Everything revolves around hands on discovery learning.”
VPK Assessments for Progress Monitoring (2)	Not Mentioned	“After each round of VPK assessment... teachers are provided with a color coded tracking sheet, showing which children are below, meeting, or exceeding expectations.”	“We track students’ growth through three VPK assessments that are given each year.”
High Instructor Turnover (2)	Not Mentioned	“Turnover is high due to low pay and high expectations.”	“I feel like in the last couple of years I am interviewing all the time.”
Instructor Training (2)	“Running a school of over a thousand students at a remote location, and everyone is out and about.”	“Finding the time and money to pay (instructors) to attend after-hours training or to pay for subs during hours is difficult.”	Not Mentioned
Student Misbehaviors (2)	“We have a lot of challenges with behaviors, kids that have not been parented for four years.”	Not Mentioned	“There’s a lot of four-year-olds running their households. They have a real hard time when they come into the schools and are told no.”

Instructors

Research school district VPK instructors' perceptions were gathered with a semi-structured interview. There were seven items asked of each participant. Each interview item follows along with a summary of responses for each item. Several themes common across the interviews are presented. Two of the three participants had to address the same topic for it to become a theme. Participants are represented with alpha-numeric codes of I1, I2, and I3.

Interview Item 1. How long have you been teaching VPK?

Each instructor provided the number of years teaching VPK. Years ranged from 8 to 11 years. 2015-2016 was the eleventh year of the Florida Voluntary Prekindergarten Education Program. I1 has taught VPK for 11 years. I2 has taught VPK for eight years. I3 has taught VPK for 11 years but has 30 years total experience teaching four-year-olds.

Interview Item 2. How long have you been teaching in the research school district VPK?

Each instructor provided the number of years teaching VPK in the research school district. Years ranged from 1 to 11 years. 2015-2016 is the eleventh year of the Florida Voluntary Prekindergarten Education Program in the research school district. I1 has taught VPK in the research school district for 11 years. I2 has taught VPK in the research school district for one year. I3 has taught VPK in the research school district for 11 years.

Interview Item 3. Tell me how you were prepared to teach VPK?

Instructors provided information regarding how they were prepared to teach VPK. Themes present included teaching experience and credentialing. All three instructors detailed their experience teaching VPK. Two of three instructors cited their credentials to include a bachelor's degree (I2) and CDA (I3).

There were other individual comments of note related to experience. I1 said becoming a High Scope curriculum trainer provided preparation for teaching at-risk students. I3 said experience teaching exceptional students (ESE) in prekindergarten provided preparation for teaching VPK.

Interview Item 4. What curriculum do you believe is important for four-year-olds?

Instructors discussed perceived important curriculum for four-year-olds. A curriculum that is interactive, offering opportunities for exploration was a present theme. Two of three instructors detailed how a curriculum for four-year-olds must be interactive, hands-on, engaging, and allow for exploration.

Although not themes, individual comments were of note. I1 said the curriculum must be differentiated to meet the needs of each student. I2 said the curriculum should be age appropriate. I3 said it is important for curriculum to be appropriately paced for in depth learning.

a. How do you teach this curriculum?

There were no themes present as each of the three instructors offered a different manner in which to teach important curriculum. I1 discussed the integration of content

areas within activities. I2 mentioned blending the resource teacher provided lesson plan with student interests. I3 discussed the importance of role playing in a manner that keeps four-year-olds engaged in the content.

Interview Item 5. What curriculum do you believe is least important for four-year-olds?

As instructors discussed perceived least important curriculum, no themes emerged. Individual comments however were of note. I1 said activities that involve sitting for too long, copying, or tracing are not best practice. I2 stated a too stringent focus on academics causes students to disengage. I3 said the Keys to Character is difficult to understand for four-year-olds.

Interview Item 6. What are the greatest challenges in instruction of four-year-olds in the research school district do you face?

Instructors discussed perceived challenges of teaching VPK in the research school district. A present theme was student misbehaviors. Two of three instructors said student misbehaviors are a challenge.

Although not themes, individual challenges are of note. I1 discussed the challenges of keeping four-year-olds engaged and addressing a wide range of student readiness, “Children come in reading in some schools, so we have to keep them interested and challenged. Then on the other hand, we have children who’ve never been read to.” I2 said the lack of parent involvement in the area served is of concern. I3 said instructional imbalances among students occur before a child who may require special education services is ultimately staffed for those services.

Interview Item 7. What else would you like me to know?

The final item sought to elicit additional information not specifically asked in the rest of the interview. One present theme was the enjoyment instructors experience teaching VPK. Two of three instructors said they enjoy teaching VPK and have fun doing so.

Although not themes, individual comments were of note. I1 expressed excitement that the research school district now offers VPK at all elementary schools. I2 approved of the research school district's involvement in early learning for children and families in need from birth to age three. I2 also added that more flexibility is needed within the lesson plans provided by research school district's resource teachers.

In Table 13, the three instructors interviewed are represented with alpha-numeric codes of I1, I2, and I3. Themes are presented based on the instructors' perceptions of teaching VPK in the research school district.

Table 13

Themes of Instructors of the Research School District VPK Program (N =3)

Theme (Participants)	I1	I2	I3
Preparation to Teach VPK Through Experience (3)	“I taught early intervention pre-k for five years... I was just with at risk four-year-old students and their families.”	“Mostly from experience in early education.”	“I got a lot of practice and training in Palm Beach County where I taught ESE prekindergarten.”
Credential to Teach VPK in Florida (2)	Not Mentioned	“I attended college courses at Seminole State and Bethune Cookman University where I earned a bachelor’s degree in Educational Studies.”	“I got my CDA (Child Development Associate).”
Importance of an Interactive Curriculum (2)	“One that is interactive, engaging, lots of hands-on materials where they are moving.”	“A curriculum that allows children to be themselves and explore.”	Not Mentioned
Student Misbehaviors (2)	“Behaviors are always a challenge. Socioeconomic status doesn’t matter. Children misbehave no matter how much money mommy and daddy have.”	“The behavior. Getting the children to self-regulate. That’s the biggest challenge right now.”	Not Mentioned

* Instructors are para-professional employees.

Parents

Research school district VPK participant parent perceptions were gathered with a semi-structured interview. There were five items asked of each participant. Each interview item follows along with a summary of responses for each item. Several themes

common across the interviews are presented. Two of the three participants had to address the same topic for it to become a theme. Participants are represented with alpha-numeric codes of P1, P2, and P3.

Interview Item 1. How did your family first hear about opportunities to participate in the research school district VPK program?

VPK participant parents discussed how they first learned about the opportunity for their child or children to participate in the research school district VPK program. Although no themes were present individual comments were of note. P1 learned about the research school district VPK program while enrolling an older child in the Community Coordinated Care for Children (4C) program eight years prior. P2 was offered the opportunity to participate in VPK with the family's day care provider. P2 then decided to research other VPK options and discovered the research school district VPK program. P3 learned about the research school district VPK program from word of mouth from previous program participant parents who were pleased with the program.

Interview Item 2. Tell me about your decision to participate in the research school district VPK program instead of other VPK options available?

VPK participant parents discussed why they decided their child or children would participate in the research school district VPK program instead of another VPK provider. Although no themes were present individual comments were of note. P1 said all six of the family's children participated in the research school district VPK program. P1 also said the family appreciates the perceived quality of the research school district VPK program. P2 decided to participate in the family's zoned research school district elementary school VPK. P2 desired a

smooth transition from VPK to kindergarten and beyond. P3 researched “school district ratings” and made the decision for the family’s twin children to participate in the research school district VPK program at one of its highly rated schools.

Interview Item 3. Explain your overall feelings regarding the enrollment process in the research school district VPK program.

VPK participant parents discussed the research school district VPK program enrollment process. Present themes were that the enrollment process was perceived as simple and the VPK employees were helpful. Two of three parents said the enrollment process was simple or easy while commenting on the employees acting in a helpful or understanding manner.

Although not a theme one individual comment was of note. P2 described personal dislike for paperwork in general.

Interview Item 4. Do you feel as if your child will be prepared to begin kindergarten as a result of participation in the research school district VPK program? Why or why not?

VPK participant parents discussed whether or not they felt their child or children would be prepared for kindergarten as a result of participating in the research school district VPK program. Present themes were that that their child or children would be prepared for kindergarten because of high quality instructors. All three parents said their child or children would be prepared for kindergarten as a result of participating in the research school district VPK program. Two of three parents attributed their child or children’s kindergarten preparedness on the “amazing” VPK instructors.

Although not a theme one individual comment was of note. P1 added that additional learning at home also contributed to kindergarten preparedness.

Interview Item 5. What else would you like me to know?

The final item sought to elicit additional information not specifically asked in the rest of the interview. A present theme included overall satisfaction with the research school district VPK program. Two of three parents described the research school district VPK program as a great opportunity for their child or children. P3 said, “I’m so happy with the (research school district VPK) program overall.”

Although not themes individual comments were of note. P1 said the research school district VPK program connected the family to the Great Start program. P1’s family has received over 50 books from Great Start. P1 believes more needs to be done to promote Great Start. P2’s child was not recognizing letters in print as measured in the first VPK assessment but is now recognizing letters after one half year of participation in the research school district VPK program.

In Table 14, the three parents interviewed are represented with alpha-numeric codes of P1, P2, and P3. Themes are presented based on the parents’ perceptions of their child or children’s experience as a participant in the research school district VPK program.

Table 14

Parents' Perceptions of the Research School District VPK Program (N = 3)

Theme (Participants)	P1	P2	P3
Child or Children will be Prepared for Kindergarten (3)	“My daughter is not only in school. We do activities at home, so we are always learning and writing. I encourage all of that in my house. I don’t mind a little art on the wall.”	“His teachers are amazing. He knows quadruple what he knew before. I wasn’t great about helping him with the ABCs... he didn’t know as much as he should have going in there. Now he is caught up because his teachers are wonderful.”	“The teachers are amazing. I’m so amazed about how much they (twins) have learned.”
Simple Enrollment Process Guided by Helpful VPK Staff (2)	“It’s simple. I don’t find it that difficult. If you call, the ladies are very helpful.”	Not Mentioned	“It was easy. They talk you through it.”

Themes across Stakeholder Groups

Perceptions across each of the three research school district VPK stakeholder groups were analyzed for themes. Themes common across the interviews are presented. Two of the three stakeholder groups addressed the same topic for it to become a theme.

A positive perception of the research school district VPK program was the most prevalent theme. All nine participants mentioned at least one positive comment regarding the program.

Kindergarten preparedness was mentioned across research school district VPK administrators and parents of VPK participants. All three administrators and all three

parents said the research school district VPK program effectively prepares students to enter kindergarten. It is of note that VPK instructors were not asked directly to comment on kindergarten preparedness.

The importance of an interactive curriculum was mentioned by research school district VPK administrators and instructors. Two of three administrators (A1, A3) and two of three instructors (I1, I2) said that an interactive curriculum that incorporates hands-on exploratory learning is important for four-year-olds.

Student misbehaviors were mentioned as a challenge by both research school district VPK administrators and instructors. Two of three administrators (A1, A3) and two of three instructors (I1, I2) said that student misbehaviors have become a challenging element of the research school district VPK program.

The growth of the research school district VPK program was mentioned by both research school district VPK administrators and instructors. Two of three administrators (A1, A3) and one instructor (I1) commented on the growth of the research school district VPK program.

Table 15 displays themes across research school district VPK stakeholder groups. Themes are presented in descending order of the number of participants who commented with a significant participant quote to illustrate the theme.

Table 15

Themes across Stakeholder Groups (N = 9)

Theme (Participants)	Administrator Sample Quote	Instructor Sample Quote	Parent Sample Quote
Positive (9)	“We are all really passionate about early childhood” (A3).	“I think we are so lucky to have this program in every school now” (I1).	“I think VPK is awesome. We are so appreciative” (P2).
Kindergarten Preparedness (6)	“VPK kids are ready to go when they walk in the door of kindergarten” (A3).	Not Mentioned	“We found out from the first VPK assessment that our child was not recognizing letters Now he is caught up” (P2)
Interactive Curriculum (4)	“We do a lot of learning through play, and a lot of learning by doing” (A1).	“(Curriculum) that is interactive, engaging, lots of hands-on materials where they are moving (is important)” (I1).	Not Asked
Student Misbehaviors (4)	“Behaviors have gotten really out of control. There’s a lot of four-year-olds running their households” (A3).	“The behaviors. Getting the children to self-regulate. That’s the biggest challenge right now” (I2).	Not Mentioned
Growth of School District VPK (3)	“Four years ago, our (school) district had VPK at 22 schools. Now we have VPK at all the 36 elementary schools plus one high school. It has grown by leaps and bounds” (A3).	“We are reaching all these different areas. They all have challenges, but it is so good we are reaching out to so many people” (I1).	Not Asked

Summary

This chapter presented the data as it was analyzed for each of the three research questions. Kindergarten reading readiness as measured by the Florida Kindergarten Readiness Screener (FLKRS) Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) as well as the Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts was analyzed for the three research populations of interest; research school district participants, another provider VPK participants, and non-VPK participants. A one-way analysis of variance for both measures was conducted to determine statistical significance. In addition, semi-structured interview responses were analyzed and presented from select research school district stakeholders to include administrators, instructors, and parents of research school district parents.

Chapter five comprises a summary and discussion of the results of the data analysis. The answers of research questions one and two were intended to provide the research school district with a conception of recent performance of the VPK program in terms of reading readiness in kindergarten as compared to other VPK providers and non-VPK participants. The answer to the third research question was intended to provide the research school district with recent perceptions of select research school district stakeholders. Therefore, chapter five includes implications for practice for the research school district and recommendations for future research.

CHAPTER FIVE: SUMMARY, DISCUSSION, AND CONCLUSIONS

Introduction

While the previous chapter offered a reporting of the data analysis, this chapter includes a summary of the study, discussion of the findings based on the results, implications for practice, and recommendations for further research. These sections will clarify the findings of this study in its attempt to discern the impact of participation in VPK on kindergarten reading readiness and reveal the perceptions of select research school district VPK stakeholders.

Summary of the Study

During a time of reduced financial resources per student (The National Institute for Early Education Research, 2015), VPK represents a financial investment that may have been redirected from other student achievement efforts. Therefore, the problem studied was the lack of research on academic effects of VPK over the time period of 2012-2014. The purpose of the study was to determine whether the effects of participation in VPK are sustained in kindergarten reading readiness for those who participated in the research school district VPK compared to those who participated in VPK from another provider, as well as those who did not participate in VPK. Select stakeholder perceptions were gathered and analyzed, to include administrators, instructors, and parents of participants of the research school district VPK program.

Academic effects were analyzed for VPK participants and non-VPK participants in 2012-2013 at kindergarten 2013-2014 school year using the FAIR-K Probability of

Reading Success portion of the Florida Kindergarten Readiness Screener as well as the first administration of the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts. A one-way ANOVA was used for both assessments to determine if statistically significant differences existed between the means of each of the three populations. The one-way ANOVA indicated that significant differences were present between populations in both assessments meaning participation in VPK had a positive effect on kindergarten reading readiness. The Tukey HSD post hoc test was utilized to discern which population means proved significantly different when compared individually with the other two means.

Stakeholder perceptions of administrators and instructors included the successful and challenging elements of leading and teaching VPK within the research school district. Research school district VPK participant parents discussed how they came to the decision of selecting the research school district as their VPK provider of choice over other available providers. All parents reported their perceptions that their child or children were prepared for kindergarten as a result of participation in the research school district VPK program.

The population for the quantitative portion of this study consisted of 2,210 kindergarten students from the research school district in the 2013-2014 school year. Among these students, 1,614 participated in another provider VPK, 311 participated in the research school district VPK, and 285 did not participate in VPK. The population for the qualitative portion of the study consisted of three research school district

administrators, three research school district instructors, and three parents of 2015-2016 research school district VPK participants.

Discussion of the Findings

Guided by three research questions, this study sought to determine the differences, if any, on kindergarten reading readiness among those who participated in VPK from the research school district, VPK from another provider, and non-VPK participants. This study also sought to collect and determine the perceptions of select research school district VPK stakeholders. The following section includes a discussion of the findings for each of the three research questions obtained from the collected quantitative and qualitative data.

Research Question One

What is the difference, if any, in Probability of Reading Success Status on the 2013 Florida Assessments for Instruction in Reading-Kindergarten (FAIR-K) portion of the Florida Kindergarten Readiness Screener (FLKRS) among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?

The probability of reading success as measured by FAIR-K is determined through a student's ability to recognize letters of the alphabet as well as determining phonemic combinations. Within this study, student scores ranged from 9% to 94%. The mean score for research school district VPK participants was 84.33% ($SD = 15.72$), followed

by another provider VPK participants at 84.24% ($SD = 16.68$). Students who did not participate in VPK performed significantly lower than both VPK participant populations with a mean score of 64.83% ($SD = 26.88$). The results of a one-way between subjects analysis of variance (ANOVA) conducted to compare the effect of VPK participation among the three research populations determined a statistically significant effect of VPK participation on the FAIR-K Probability of Reading Success Status at the $p < .05$ level ($F(2, 2207) = 141.52, p = .00$).

When reviewing the FAIR-K Probability of Reading Success Status data more closely, Tukey HSD post-hoc tests revealed significant differences between the means of both VPK participant populations when compared to the non-VPK participant population as reported above. These findings support the positive effects of VPK participation as published in previous research (Chapman 2010; Sims 2010; Lipsey et al. 2012; Skibbe et al. 2013; Hilbert and Eis 2014). As mentioned in the literature review, Language, Communication, and Emergent Literacy is one of the five domains of the Florida Early Learning and Developmental Standards for Four-Year-Olds (Florida Department of Education Office of Early Learning, 2011). The FAIR-K Probability of Reading Success Status specifically addresses just two of the seven components of the Language, Communication, and Emergent Literacy domain (letter naming and phonemic awareness). FAIR-K is limited in its ability to assess a child's overall kindergarten readiness within the scope of the Florida Early Learning and Developmental Standards for Four-Year-Olds or even the Language, Communication, and Emergent Literacy domain. In terms of kindergarten reading readiness as specifically addressed in this

research question, letter naming and phonemic awareness are however critical elements that support emergent reading skills. Clearly, participating in VPK, either with the research school district or with another provider helps prepare children for reading in kindergarten in terms of letter naming and phonemic awareness.

Conversely, there was no statistically significant difference between the means of research school district VPK participants 84.33% ($SD = 15.72$) and another provider VPK participants 84.24% ($SD = 16.68$) within the FAIR-K Probability of Reading Success Status. Among those students who took the FAIR-K during their kindergarten year within the research school district, whether a student participated in the research school district VPK or from another provider VPK did not matter nearly as much as whether or not the student did indeed participate in VPK the year before.

Research Question Two

What is the difference, if any, in scale scores on the 2013-2014 Discovery Education (DE) Early Skills Assessment for Kindergarten English/Language Arts among those who were research school district VPK participants, another provider VPK participants, and non-VPK participants in 2012-2013?

The Discovery Education Early Skills Assessment for Kindergarten English/Language Arts arguably tests more complex emergent reading skills than FAIR-K. Scale scores are derived from a student's ability to understand multifaceted reading skills beyond letter naming and phonemic awareness to include comparing similarities and differences, making inferences, and determining setting and characterization. Within

this study, student scores ranged from 1075 to 1573. The mean score for another provider VPK participants was 1248.73 ($SD = 62.21$), followed by research school district VPK participants at 1238.69 ($SD = 56.69$). Students who did not participate in VPK performed significantly lower than both VPK participant populations with a mean score of 1214.28 ($SD = 55.04$). The results of a one-way between subjects analysis of variance (ANOVA) conducted to compare the effect of VPK participation among the three research populations determined a statistically significant effect of VPK participation on the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts at the $p < .05$ level for the three populations ($F(2, 2207) = 40.03$, $p = .00$).

The results of the post hoc comparison using the Tukey HSD indicate the mean score for non-VPK participants ($M = 1214.28$, $SD = 55.04$) was significantly different than both research school district VPK participants and another provider VPK participants. A significant difference also exists between research school district participants ($M = 1238.69$, $SD = 56.69$) and another provider VPK participants ($M = 1248.73$, $SD = 62.21$) as measured by the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts.

These findings reveal once again the positive effects of VPK participation as was discovered in previous research (Chapman 2010; Sims 2010; Lipsey et al. 2012; Skibbe et al. 2013; Hilbert and Eis 2014). Students who participate in VPK begin kindergarten with significantly enhanced reading skills than their non-VPK participant peers. The ability to compare similarities and differences, make inferences, and determine setting

and characterization support each of the elements of the Language, Communication, and Emergent Literacy domain to include; listening and understanding, speaking, vocabulary, sentences and structure, conversation, emergent reading, and emergent writing (Florida Department of Education Office of Early Learning, 2011). These literacy skills are tested with the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts, and the findings of this study prove that participating in VPK, regardless of provider, improves literacy as students begin kindergarten within the research school district.

These findings also reveal a statistically significant difference between the means of research school district participants ($M = 1238.69$, $SD = 56.69$) and another provider VPK participants ($M = 1248.73$, $SD = 62.21$) as measured by the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts. The mean scale score differential of 10.04 favors VPK participants of another provider. This suggests that another provider VPK participants come to kindergarten with greater emergent literacy skills than their research school district VPK participant peers. The results of these findings cannot determine why another provider VPK participants score higher on average than research school district VPK participants on the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts. This study has not attempted to analyze the difference in variables related to program implementation.

Although this study cannot determine the differences between programs, demographic variables within this study as reported in chapter four are of note. Socioeconomic status varies between research school district VPK participants and

another provider VPK participants. The difference between the percentage of VPK students who qualify for free or reduced lunch benefit from the research school district (60%) was substantially higher than VPK participants from another provider (37%). Hardin, Bergen, & Hung reported that children from more affluent families have greater access to educational resources and parental support than their non-affluent peers (2013). Considering the large difference in students who qualify for free or reduced lunch benefit noted above, one may assume that on average students who participate in VPK from another provider are more likely to come from homes with more resources and support than students who participate in VPK within the research school district. In fact, as will be illustrated in *Implications for the Research School District VPK Program and Beyond*, research school district administration specifically targets at-risk children from families that ultimately qualify for free or reduced lunch benefit.

Research Question Three

How do select stakeholders perceive the research school district VPK program?

To elicit the perceptions of select research school district stakeholders, semi-structured interviews took place with administrators, teachers, and current VPK participant parents. Interview participant responses were summarized and themes were presented in chapter four for each of the three stakeholder groups. Two of the three participants had to address the same topic for it to become a theme. Themes across stakeholder groups were also presented in chapter four. Two of the three stakeholder

groups had to address the same topic for it to become a theme. A discussion of the research school district VPK stakeholder themes will now be presented.

Administrators

Themes emerged that highlight the effective elements of the research school district VPK program. All lessons are developed by certified early education resource teachers based on the Florida Early Learning and Developmental Standards for Four-Year-Olds (2011) then distributed to non-certified classroom instructors who hold a Child Development Associate Credential or higher degree. This structure creates consistency among VPK school sites and ensures lessons are standards based with an academic and social/emotional focus. In addition, content presentation is integrated with science, technology, engineering, and mathematics that emphasizes problem solving. Learning accomplished through play and discovery is measured three times per year with the state mandated Florida Voluntary Prekindergarten Assessment. Based on the results of these assessments, differentiation is provided for students that may require intervention or greater challenge.

A1 discussed the importance of focusing on the whole child as an effective element of the research school district VPK program; “When you’re talking about school readiness, it’s not just about academics... A lot of focus in our program is in social and emotional development.” This perception corresponds with previous research as was discovered under the IEA Preprimary Project which found that internationally, prekindergarten programs by and large focus on social and emotional development as well as early academic skills (Weikert, 1999).

Administrators shared perceived challenges in leading the research school district VPK program as well. High instructor turnover rates due to low pay and high expectations emerged as a theme. Since research school district VPK classroom instructors are non-certified personnel, their pay is substantially lower than certified K-12 teachers. Limited state funding does not allow the research school district to hire certified teachers to lead VPK classrooms. If the research school district hired certified teachers, it would not be able to provide VPK services in all elementary schools as is the current model, therefore limiting reach to children and families in need. As a result of the instructor paraprofessional contract status and logistical challenges that emerge from serving VPK at 36 elementary sites and 1 high school, VPK administrators find it difficult to schedule and provide training for instructors. Finally, student misbehaviors also emerged as a theme.

The challenges that emerged as themes from administrators mostly stem from low funding and the large scale of the research school district VPK program. The challenge of high instructor turnover resulting from low pay and high performance accountability is of no surprise considering the research of Bassok, et al. and the National Institute for Early Education Research. Florida serves over 70% of four-year-olds in prekindergarten, ranking among the top three states in the nation just behind the District of Columbia and Vermont ranking one and two respectively (2014). At \$2,238 per student in the 2013-2014 school year, Florida ranked 36th lowest out of 40 states that provide state funded prekindergarten programs (2015, pp. 45-47).

Instructors

Themes emerged regarding the credentialing and experience that prepared VPK instructors to teach four-year-olds. The most prevalent preparation mentioned by each respondent was their experience teaching four-year-olds. Beyond credentialing or earned degrees, these instructors all said their experience has best prepared them for the challenge of engaging young learners in a meaningful way that leads to learning. Their experiences included but were not limited to service within high risk populations, exceptional student education VPK classes, and early learning through the Head Start program. One of the instructors held a Child Development Associate Credential while the other two held a bachelor's degree in Early Education or related field which qualified them to lead VPK instruction within the research school district and the state of Florida according to the Voluntary Prekindergarten Education Program through § 1002.63.

Another theme that emerged featured best practice curriculum approach for four-year-olds. Research school district instructors believe curriculum must be interactive, hands-on, and engaging therefore meeting the needs of all children in a developmentally and age appropriate manner. I1 said important curriculum is “is interactive, engaging, lots of hands-on materials where they are moving.” This theme connects with previous research reported within phase three of the IEA Preprimary Project. Montie et al. reported greater language and cognitive development among students at age seven where prekindergarten opportunities emphasized child to child interaction and physical movement over whole group instruction (2006).

The instructors discussed their greatest challenges in teaching four-year-olds within the research school district and student misbehaviors emerged as a theme. Instructors said many of their students are not used to hearing no and may be leading their households meaning the students are unaccustomed to expectations and procedures. Keeping students engaged in activities was mentioned as a behavior challenge, especially considering the wide range of student readiness within the same classroom. As a result, the question arises of whether or not the instructional methods are developmentally appropriate for four-year-old students. Nevertheless, the experience these students have in VPK is of vital importance as they learn to respect the authority of their teachers prior to entering kindergarten and beyond.

Parents

Emergent themes from parents of research school district VPK participants include the simple enrollment process aided by helpful staff and kindergarten readiness as a result of VPK participation. Parents described the enrollment process as easy or simple and mentioned the registration staff's helpfulness and understanding. This positive perception of the enrollment process is important for the research school district. Parents have choice when considering the VPK provider for their child considering the state of Florida finances 540 hours of instruction during the school year program or 300 hours of instruction during the summer program regardless of provider (The National Institute for Early Education Research, 2015). A simple enrollment process led by friendly, helpful, and understanding staff serves to establish a vital connection between the research school

district and parents of young children that can be developed over the prekindergarten through grade 12 experience.

All parents answered yes when asked if they felt their child or children would be prepared for kindergarten as a result of participation in the research school district VPK program. P2 and P3 directly attributed kindergarten preparedness to their children's "amazing" research school district VPK instructors. These findings correspond to the previous research of Mashburn et al. who discovered greater student achievement among prekindergarten students when participants are paired with high quality instructors (2008).

Themes Across Stakeholder Groups

In addition to themes within each stakeholder group, participant response were analyzed for themes across stakeholder groups. These previously mentioned themes included kindergarten readiness as a result of participation in the research school district VPK program, the importance of an interactive curriculum, and the challenge of student misbehaviors. Two new themes emerged as a result of responses analyzed across stakeholder group. The new themes are a positive perception and the rapid growth of the research school district VPK program.

Overall, all nine participants expressed their satisfaction with the research school district VPK program. While the qualitative portion of this study did not intend to generalize the perceptions of all research school district VPK stakeholders, it is of note that all nine shared perceptions that can be interpreted as positive.

Both research school district administrators and instructors discussed the recent growth of the VPK program. A2 said “Four years ago, our (school) district had VPK at 22 schools. Now we have VPK at all the 36 elementary schools plus one high school. It has grown by leaps and bounds.” I1 added that “We are reaching all these different areas. They all have challenges, but it is so good we are reaching out to so many people.” Considering the positive academic effects of participation in VPK previously reported (Chapman 2010; Sims 2010; Lipsey et al. 2012; Skibbe et al. 2013; Hilbert and Eis 2014), the positive perceptions of stakeholders concerning student participation in the research school district VPK and the program’s significant growth are worthy of note.

Implications for the Research School District VPK Program and Beyond

Bassok et al. (2014) revealed that enrollment in voluntary prekindergarten (VPK) programs doubled nationally from 14% to 28% between the years of 2002 and 2012 while Florida reached 70% enrollment in 2014. In this time of increased investment and trust in VPK in Florida and the United States, many researchers have determined participation in VPK to positively affect kindergarten reading readiness (Chapman 2010; Sims 2010; Lipsey et al. 2012; Skibbe et al. 2013; Hilbert and Eis 2014). The previously researched effects of VPK participation along with the rapid growth of VPK nationally, within the state of Florida, and the research school district served as the impetus for the current study.

The findings of the quantitative portion of this study support previous research which link participation in voluntary prekindergarten with enhanced kindergarten reading

readiness. Statistically significant differences were found between the means of VPK participants and non-VPK participants, regardless of provider, within the results of both the FAIR-K portion of the Florida Kindergarten Readiness Screener and the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts 1. VPK participants exhibited significantly higher reading readiness than their non-VPK participant peers. In light of these findings, the research school district should continue to invest both human and capital resources in its delivery of the Florida Voluntary Prekindergarten Education Program.

Other school districts in Florida can look to the results of the quantitative portion of this study to assist in evaluation of their own delivery of the Florida Voluntary Prekindergarten Education Program. The positive effects of VPK participation in the research school district are more than likely to be found within other school districts in Florida as well. Since this study determined that VPK participation positively affects kindergarten reading readiness regardless of VPK provider, all school districts in Florida may benefit from carefully considering strategic partnerships between public and private VPK providers to increase the total number of children who participate in the Florida Voluntary Prekindergarten Education Program prior to entering kindergarten.

While collecting and analyzing the perceptions of select stakeholders, the researcher uncovered additional implications of note for the research school district. Administratively, both opportunities and threats have arisen as a result of the VPK program extending services within all elementary schools and one high school. A stakeholder said, “I think we are so lucky to have this program in every school now. We

are reaching all these different areas. They all have challenges, but it is so good we are reaching out to so many people” (I1). While a research school district administrator said the following; “I feel like in the last couple of years I am interviewing all the time. We have teachers that happily accept the job then find out what the salary is and back out right away, or they do it for a while and find out there’s a lot of accountability. We expect good quality and they leave. They say it is easier at a child care center” (A3).

Funding the VPK program is a primary challenge for research school district administration and executive leadership. Finding the balance between serving four-year-old students in all elementary schools and one high school while staffing each of those VPK classrooms with qualified instructors is of critical importance for the stability and success of the research school district VPK program. Hiring and retaining quality VPK instructors should continue to be an integral focus. Investigating possible reallocation of capital resources and uncovering additional revenue streams to increase VPK instructor pay could serve to increase extrinsic motivation of current staff and attract more talented future employees as well.

Beyond the research school district, other school districts in Florida may benefit from a review of the qualitative portion of this study’s results. Based on the results of VPK enrollment growth in Florida as published by Bassok et al. (2014), it is understood that the other school districts in Florida have experienced a range of growth in the delivery of the Florida Voluntary Prekindergarten Education Program. Analyzing the effective elements and challenges of the research school district VPK program presented in this study, will assist other school districts as their VPK programs continue to grow.

As other school districts seek to expand VPK services to all elementary school sites and beyond, reviewing the funding challenges of the research school district as they especially relate to hiring and retaining quality VPK instructors would be worthy of consideration.

As Hardin, Bergen, & Hung (2013) reported, children from affluent families typically have greater access to educational resources than their socioeconomically disadvantaged peers. Therefore, it is of critical importance for the research school district to establish meaningful partnerships with at-risk families and children. One of the participant administrators interviewed for this study discussed the research school district's intention to attract at-risk families to participate in VPK as can be seen below:

“We are getting the lowest possible scoring children we can find (Lollipop Test: A Diagnostic Screening Test of School Readiness Revised Edition), which is different from private providers. We want those at-risk kids, so we give them the full day for free and even extended care up to 5:00 pm if the parent is able to show they are working with a letter from their employer. The challenge with that is there is a cultural disconnect somewhere, because our perceived value of that is amazing. You're getting a free scholarship that equates to \$6,000.00 per year, but for some of the parents, they have to get their children up. They have to get them dressed. They have to be

accountable... That's the challenge. How do we get more buy in from at-risk families?" (A1).

While analyzing stakeholder responses from instructors and parents, one member from each of these participant groups expressed excitement regarding the research school district's Great Start/Pathways to Success initiative (I2, P1). The parent participant expressed the need for heightened promotion of the Great Start/Pathways to Success program to reach families in need. Designed for newborn infants to children three years of age, this program specifically targets at-risk families and children within the research school district's geographical boundaries. Great Start/Pathways to Success not only provides resources to parents such as a developmental milestone calendar, local resource directory, and early childhood literary materials, but just as critically, the program creates significant connections between socioeconomically families in need and the research school district.

The quantitative results of this study reveal the positive effects of participation in VPK on kindergarten reading readiness, while the qualitative perceptions of select research school district VPK stakeholders reveal both the program's perceived quality as well as the challenges in maintaining that quality following rapid growth. Simply put, VPK participation positively affects kindergarten reading readiness and takes advantage of the short period of life when the human brain's executive functioning develops the most (Weintraub et al., 2011). Therefore, the research school district executive leadership should continue every effort to support the VPK program with human and capital resources while further reaching to partner with at-risk families and children.

Beyond the research school district and the state of Florida, 39 other states serve four-year-old students in publicly funded voluntary prekindergarten education programs (The National Institute for Early Education Research, 2015). Both the states that do publicly fund prekindergarten as well as those states that do not fund prekindergarten programs can look to the results of this study as they consider state investment in early education opportunities. These results indicate that participation in prekindergarten does positively affect kindergarten readiness. These results also indicate that appropriately funding prekindergarten programs is of vital importance for stability and potential educational benefit to students.

Recommendations for Future Research

Based on the findings of this study, the researcher offers the following recommendations for future research to build on the body of research for VPK within the research school district and beyond.

1. Replicate the current study to further discern student performance subdivided by gender, race and ethnicity, Exceptional Student Education status, English Language Learner status, and socioeconomic status.
2. Conduct an analysis of the current cohort student performance using the FAIR-K and Discovery Education Early Skills Assessment for Kindergarten English/Language Arts to discover how student performance varies among VPK entities within the research school district.

3. Conduct an analysis of the current cohort student performance on the Discovery Education Early Skills Assessment for Kindergarten English/Language Arts 2 and 3 to discover whether or not the current findings persist throughout the kindergarten year.
4. Conduct a longitudinal analysis of the current cohort student performance in the 2016-2017 school year using the results of the Florida Standards Assessment for 3rd Grade English/Language Arts to discover whether or not the current findings persist beyond entry to kindergarten.
5. Conduct an analysis of student performance from research school district participants, another provider VPK participants, and non-VPK participants using the five domains of the 2015-2016 Florida Kindergarten Readiness Screener Work Sampling System (Pearson, 2013) to include; Personal and Social Development; Language and Literacy; Mathematical Thinking; Scientific Thinking; and Physical Development, Health, and Safety to discover whether or not the current findings apply to other assessments beyond reading readiness.
6. Conduct a qualitative study to discover how the research school district is currently communicating with at-risk children and families in order to encourage participation in programs such as Great Start and the Florida Voluntary Prekindergarten Education Program.
7. Conduct a longitudinal analysis of research school district employment records to determine VPK instructor retention rates over the course of the Florida Voluntary Prekindergarten Education Program to determine how rates have changed during

the expansion of the program to offer VPK access in each of the research school district's elementary schools.

8. Conduct a qualitative analysis to determine what causes VPK instructors to leave the research school district within the first year of service and what motivates VPK instructors to continue employment within the research school district beyond three years of service.
9. Replicate the current study using local performance measurements for kindergarten reading readiness across multiple school districts in Florida and in other states that fund voluntary prekindergarten.
10. Conduct a quantitative study to discern VPK instructor contract type and retention rates in other states to see if correlations may exist between these variables and kindergarten reading readiness.

APPENDIX A: IRB APPROVAL



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA00000351, IRB00001138

To: Brandon M. Hanshaw

Date: April 10, 2015

Dear Researcher:

On 04/10/2015, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: THE IMPACT OF VOLUNTARY PRE-KINDERGARTEN ON
THE ACADEMIC ACHIEVEMENT OF STUDENTS IN A
LARGE SUBURBAN SCHOOL DISTRICT IN 2009-2014
Investigator: Brandon M Hanshaw
IRB Number: SBE-15-11195
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

On behalf of Sophia Dziegielewska, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

A handwritten signature in black ink that reads "Joanne Muratori".

Signature applied by Joanne Muratori on 04/10/2015 03:59:02 PM EDT

IRB Coordinator

APPENDIX B: HRP-508: SUMMARY EXPLANATION OF EXEMPT RESEARCH



EXPLANATION OF RESEARCH

Title of Project: THE IMPACT OF VOLUNTARY PRE-KINDERGARTEN ON THE ACADEMIC ACHIEVEMENT OF STUDENTS IN A LARGE SUBURBAN SCHOOL DISTRICT IN 2012-2014

Principal Investigator: Brandon Hanshaw

Faculty Supervisor: Rosemarye Taylor, Ph. D

You are being invited to take part in a research study. Whether you take part is up to you.

- The purpose of the study is to analyze select stakeholder perceptions to determine Seminole County Public Schools (SCPS) VPK quality and analyze academic effects of VPK participation in kindergarten.
- Interview participants will include SCPS district administrators, SCPS VPK instructors, and SCPS VPK parents. Participants will be asked a series of questions to determine overall quality perceptions of SCPS VPK. Responses will be voice recorded. Interviews will take place at select SCPS schools and the SCPS Educational Support Center.
- Expected participant participation will include an interview lasting 10-20 minutes.

You must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints Brandon Hanshaw, Graduate Student, Educational Leadership, College of Education and Human Performance, (407) 227-0776 or Dr. Rosemarye Taylor, Faculty Supervisor, Department of Educational Leadership at (407) 823-2016 or by email at rosemarye.taylor@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

APPENDIX C: INTERVIEW QUESTIONS



INTERVIEW QUESTIONS

Title of Project: THE IMPACT OF VOLUNTARY PRE-KINDERGARTEN ON THE ACADEMIC ACHIEVEMENT OF STUDENTS IN A LARGE SUBURBAN SCHOOL DISTRICT IN 2012-2014

Questions for SCPS District Administrators

1. Explain the history and current elements of the SCPS VPK program.
2. Explain the elements of the SCPS VPK program that you believe are effective. How do you know?
3. What challenges do you experience?
4. What else would you like me to know?

Questions for SCPS VPK Instructors

1. How long have you been teaching VPK?
2. How long have you been teaching in SCPS VPK?
3. Tell me how you were prepared to teach VPK?
4. What curriculum do you believe is important for four-year-olds?
 - a. How do you teach this curriculum?
5. What curriculum do you believe is least important for four-year-olds?
6. What are the greatest challenges in instruction of four-year-olds in Seminole County do you face?
7. What else would you like me to know?

Questions for SCPS VPK Parents

1. How did your family first hear about opportunities to participate in the SCPS VPK program?
2. Tell me about your decision to participate in the SCPS VPK program instead of other VPK options available?
3. Explain your overall feelings regarding the enrollment process in the SCPS VPK program.
4. Do you feel as if your child will be prepared to begin kindergarten as a result of participation in the SCPS VPK program?
 - a. Why or why not?
5. What else would you like me to know?

APPENDIX D: INTERVIEW TRANSCRIPTS

Research School District Administrators

District Administrator 1:

1. Explain the history and current elements of the SCPS VPK program.

Answer: It started back in the early 1990's as early intervention, and it was federally funded. I came to pre k in 2003, and VPK was just starting two years after I came.

When I first came it was based on school readiness funding and parents paid for the services. Then the state started to pay for three hours per day, and they cut the funding and increased our ratio. It used to be 18-2 students per instructors, now its 20-2, which isn't what we want, but we take what we can get. The state now pays for three hours. Some parents pay for additional hours per day or receive school readiness funding.

2. Explain the elements of the SCPS VPK program that you believe are effective.

How do you know?

Answer: When you're talking about school readiness, it's not just about academics and letter naming. A lot of focus in our program is in social and emotional development. I think that's a big piece of it that's missing from kids that enter kindergarten without an early learning experience. We do a lot of learning through play, and a lot of learning by doing. The teachers are trained how to interact through play. A lot of people will say learning through play means the teacher is sitting at their desk and the kids are having a free for all. That's not the way our program is run. They are trained from the high scope philosophy and the High Scope framework on the adult/child interaction, questioning techniques. We even include STEM in pre k, because a lot of that is questioning, problem solving, and critical thinking that is adult led. The adult is the facilitator, and they guide

the children's play. That's what we focus on and of course the letters and print knowledge that goes with our state VPK standards, but if they are not ready emotionally or socially to do what we are asking them to do, it doesn't matter. You have to get that piece first.

3. What challenges do you experience?

Answer: There are lots of challenges. It's the first experience in school for the children and a lot of times for the parents as well. It's their first introduction to the public school system, so we are taking the whole family under our wing, not just the child. You are setting the groundwork for the next several years. We have a lot of challenges with behaviors, kids that have not been parented for four years or culturally it's different. We have challenges with getting our teachers trained. Our teachers are non-instructional. They have a different contract than regular teachers do, and they are all over the district at every school. It's not like we can call a meeting at three-o'clock and everyone comes, so the logistics are a challenge. You are basically running a school of over a thousand students at a remote location and everyone is out and about.

4. What else would you like me to know?

Answer: We have scholarships, and we give a full free day to our Sanford schools. A lot of our parents did not qualify for school readiness funding, so they could not afford the \$300 per month. The state pays us the regular funding (3 hours per day) then we give them the rest of the full day for free, so we reinvest whatever we make back into our program. The challenge there is when we screen them they cannot score too high. We are getting the lowest possible scoring children we can find, which is different from

private providers. We want those at-risk kids, so we give them the full day for free and even extended care up to 5:00 pm if the parent is able to show they are working with a letter from their employer. The challenge with that is there is a cultural disconnect somewhere, because our perceived value of that is amazing. You're getting a free scholarship that equates to \$6,000.00 per year, but for some of the parents, they have to get their children up. They have to get them dressed. They have to be accountable, which they're not probably going to do much at home with them anyway. The kids we really want are raising themselves. That's the challenge. How do we get more buy in from at-risk families?

The way we make sure we have a quality program is we have resource teachers that visit the schools and model lessons for teachers. The way we ensure we follow the standards is one of our resource teachers writes all the lesson plans, and it takes her a long time. She is very thorough, because we are handing these lessons over to non-instructional employees and saying you have to teach this. We want to make sure that no matter which one of our schools your child attends, they are getting the same thing following the standards. We are very strict that, you have to follow the plan. It may be a little different how you implement it, but when we go out to visit, you better be doing the same thing. That's the only way we can ensure that the experience is uniform.

District Administrator 2:

1. Explain the history and current elements of the SCPS VPK program.

Answer: VPK includes three hours of instruction during the school year program totaling 540 hours and 10 hours of instruction during the summer program totaling 300 hours.

The instructors hold CDA certificates or higher degree with at least six college credits of early childhood course work during the school year program. During the summer program, instructors must be certified teachers or degreed early childhood educators.

There are several VPK models throughout the district. Full day pre-k includes three hours of VPK and the rest is considered school readiness and requires a parent fee. There is half-day only which is either three hours VPK in the morning or three hours VPK in the afternoon. Our VPK inclusion class consists of 11 children and 9 ESE children totaling 20. This class includes a VPK instructor, ESE pre-k teacher, and an ESE assistant. We have full day programs at our Title 1 schools which includes three hours VPK paid by the state and the rest is considered school readiness and is paid for by Title 1 based on student need. Children are tested before school begins; if they live in the specific Title 1 school attendance zone and score low on a school readiness test, they are eligible for a full day of free preschool. The school readiness test used for screening is the Lollipop Test of School Readiness.

2. Explain the elements of the SCPS VPK program that you believe are effective. How do you know?

Answer: Certified early childhood resource teachers support, guide, and mentor the VPK instructors and assistants. Lesson plans are written by the resource teachers, and all materials are provided by the resource team. After each round of VPK assessment which occurs three times per year, teachers are provided with a color coded tracking sheet,

showing which children are below, meeting, or exceeding expectations. This helps to know which students need more interventions and which students need more challenges.

3. What challenges do you experience?

Answer: Finding qualified VPK instructors has been difficult now that there is at least one VPK in every elementary school as well as one high school. Turnover is high due to low pay and high expectations which include preparing lessons, implementing lessons, assessing students, classroom management, parent conferences, and more. Resource teachers have more teachers to visit, mentor, and train. They are not always able to get to all schools as much as is needed. Another challenge is developing trainings that all instructors and assistants can attend. Finding the time and money to pay teachers to attend after-hours training or to pay for subs during hours is difficult.

4. What else would you like me to know?

Answer: The new assessment just introduced by the Office of Early Learning called Teaching Strategies Gold is an ongoing, authentic assessment requiring much note-taking and portfolio building for each student. 36 objectives for each student must be rated twice per year while note-taking is ongoing. This adds much work to their already full plate.

District Administrator 3:

1. Explain the history and current elements of the SCPS VPK program.

Answer: The VPK program has been in existence since 2005. In 2004, the voters of Florida voted to have a free voluntary prekindergarten. The program has been in

existence since then and has definitely evolved. Every year it has grown more and more. Four years ago, our district had VPK at 22 schools. Now we have VPK at all the 36 elementary schools plus one high school. It has grown by leaps and bounds. We revolve all our lessons and curriculum around the state VPK standards developed in 2011 which prepares a child for success in kindergarten.

2. Explain the elements of the SCPS VPK program that you believe are effective. How do you know?

Answer: I think one of the things that makes it effective is our resource teacher writes all lesson plans, and that creates a uniformity amongst the district. We have two different curriculums, and she writes the plans for both of them. Both of the curriculums are on the state approved list, and they are comprehensive. The curriculums cover everything to include literacy and social/emotional development. Based from these lesson plans, the instruction and routines are consistent across the district. Everything revolves around hands on discovery learning.

We track students' growth through three VPK assessments that are given each year. We use these assessments as a progress monitoring tool to track where students have weaknesses and strengths, so that our resource teachers can work with our classroom teachers individually to say these three kids are low here. What can we do in small group? What can we do individually? What can we do to bring them up? Two years ago, 96% of our kids demonstrated readiness for kindergarten in both literacy and math as measured by the third VPK assessment. It's working. The state also publishes a list each year of low VPK providers based on the FLKRS in kindergarten. We have no

low providers this year or last year. We do well with our readiness rates, and I believe that shows that we are doing a good job. I can also tell you that kindergarten teachers are commenting. They say they can tell within 10 minutes if a child was in VPK or not. VPK kids are ready to go when they walk in the door of kindergarten.

3. What challenges do you experience?

Answer: Some of the challenges are funding. The state does not pay enough funding per child. Currently it is slightly under \$2,500.00 per child, so because of that we can't afford to have certified teachers. If we had certified teachers, we would be under water all the time. A challenge we have is teacher pay. We are trying now to work with Human resources to increase the salaries, because we have to be competitive with child care centers. They are making more money in the child care centers. It used to be that we may have paid lower, but at least we gave benefits. Now they receive benefits at child care centers, too. With that, how do we retain teachers? How do we recruit teachers? I feel like in the last couple of years I am interviewing all the time. We have teachers that happily accept the job then find out what the salary is and back out right away, or they do it for a while and find out there's a lot of accountability. We expect good quality, and they leave. They say it is easier at a child care center.

Another challenge experienced everywhere is behaviors have gotten really out of control. There's a lot of four-year-olds running their households. They have a real hard time when they come into the schools and are told no. They don't have the socialization skills that they could have had, so those are just some of the challenges.

4. What else would you like me to know?

Answer: One of the things that makes our program really successful is that the staff we have are really passionate. We are all really passionate about early childhood. This is our lives. When I went from the classroom to an administrative role, I remember being in an interview with an associate superintendent, and she asked me if I felt I would really miss being with the kids. I thought for a minute and said, now instead of working with the kids, I'm working for them. We have to advocate to ensure things are done well, to ensure kids have critical thinking and access to technology. More than anything it is the passion we all have here. There's nothing more important than these little guys.

Research School District VPK Instructors

Instructor 1:

1. How long have you been teaching VPK?

Answer: Since it started in 2005

2. How long have you been teaching in SCPS VPK?

Answer: That's when I started. I've only been with Seminole County Public Schools.

3. Tell me how you were prepared to teach VPK?

Answer: I taught early intervention pre-k for five years in Sanford for SCPS, and that was a huge eye-opener for me. I was just with at risk four-year-old students and their families, and I never worked with that population before. I came from New Jersey, and it was a half day kindergarten program. The parents walked to school, so it was a very suburban. When I got to the at-risk schools, I learned all over again a whole different way of teaching. I just loved it. I also learned I was sent by my administrator to learn how to

become a High Scope trainer. High Scope is a curriculum that was developed specifically for the at-risk preschooler in Head Start. I became a trainer, because it really works with at-risk kids. Even though we haven't officially adopted High Scope, the Office of Early Learning gives us an approved list of curriculum we can choose from, so we are always proactive and pick one of those, but I infuse the High Scope philosophy within the curriculum because it works with at-risk students, and if it works with at-risk it's really great for the middle and upper level kids.

4. What curriculum do you believe is important for four-year-olds?

Answer: One that is interactive, engaging, lots of hands-on materials where they are moving. They need to change activities about every 20 minutes, because if they stay in one spot for too long behavior problems happen. Four-year-olds can't do that. They can't stay in one spot. Sitting at tables and writing, that is just something that's not expected, and it's not best practice. We try to meet every child where they're at, and I know that sounds cliché, but for instance for writing we encourage inventive spelling. Where children are given a piece of paper and might have a sentence frame for them to finish like, today I feel blank, and they are going to try to write how they feel by the sounds they hear. Somebody might try to write HPE for happy, because that's what they are hearing. That's really good. That means they're listening. Their phonological awareness is being developed. Then they draw a picture to go with that sentence. Then you'll have the child that is just scribbling, because that's where he is at. But he's still successful. He's making a picture, maybe with a happy face or not, and we can still say to him, can you read this for me, and he can still touch the words, today I feel and whatever. We

have to get them through the writing process, because it is a process. This type of activity helps them get through the writing process rather than tracing papers, because tracing papers doesn't do it. That's a fine motor skill, but it isn't literacy based.

I try to integrate all subjects. Like if we were doing a literacy lesson, we will ask kids to make a prediction for what will happen. Like we just discussed with the letter P. A pepper experiment, where they had to sprinkle pepper into a cup of water, and then the teacher brought in some soap and asked, what do you think will happen. So they made a prediction. They're talking about the letter P and pepper and counting how many p's there are in the word pepper. They counted how many syllables there are in the word pepper, and then they did a T chart about their predictions of what was going to happen. Then we put the soap in the pepper water, and then they tested their predictions. Each child did so with an eye dropper full of soap, and then the pepper just repelled. And then we went to the word repel and asked, can you hear the P in repel? Where is it, in the beginning, in the end? That's the type of thing we do. We take little experiments. We have them solve problems and let them know its okay when it doesn't work out right. Were all our predictions, right? No, but that's how doctors learn. That's how scientists learn.

a. How do you teach this curriculum? (Skipped this question as it was thoroughly discussed above.)

5. What curriculum do you believe is important for four-year-olds?

Answer: The kind where they have to sit and copy and trace. Parents can buy those books at Wal-Mart, so why would they need us? Anything that has too much sitting and

copying. I know that turns off little boys while little girls may be okay with that, so that's the kind of thing you put in the writing center.

6. What are the greatest challenges in instruction of four-year-olds in Seminole County do you face?

Answer: Anywhere, keeping kids engaged is a challenge. If you ever been in a group of 20 four-year-olds, they're really busy. Not only are they really busy, but they're very smart. If you are not in control, they will take over, and it's really hard to get them back once that happens. They have their leaders. They know who the leaders are, and they're going to follow their leaders. You have to have your ducks in a row. You have to have interesting transitions. You can't just say, let's all walk to the table. It just isn't going to happen. It has to be fun. It has to keep their interest.

One challenge we have, children come in reading in some schools, so we have to keep them interested and challenged. Then on the other hand, we have children who've never been read to, so we have the whole opposites. Meeting all the needs of all the levels of learners and hoping we have them all prepared.

Behaviors are always a challenge. Socioeconomic status doesn't matter. Children misbehave no matter how much money mommy and daddy have. Some children are used to never hearing no. Some parents will say their child never behaved this way in a day care, and I say let me explain day care. Day care is a business. They don't want to lose business, so if you're child doesn't want to hear the story right now, it's okay. Go play with whatever you want. And that's all well and good for the day care. They're keeping your child safe and happy, but our job is to prepare them for the rigors of kindergarten.

When its story time, you're expected to stay for the story. You can stay in your chair rather than the floor, but you're going to stay attending to the story. That's a hard transition for a lot of children who've been in day care or have been at home.

7. What else would you like me to know?

Answer: I think we are so lucky to have this program in every school now. We are reaching all these different areas. They all have challenges, but it is so good we are reaching out to so many people.

Instructor 2:

1. How long have you been teaching VPK?

Answer: Eight Years

2. How long have you been teaching in SCPS VPK?

Answer: This is my first year.

3. Tell me how you were prepared to teach VPK?

Answer: I attended college courses at Seminole State and Bethune Cookman University where I earned a bachelor's degree in Educational Studies. Mostly from experience in early education.

4. What curriculum do you believe is important for four-year-olds?

Answer: A curriculum that is developmentally and age appropriate. A curriculum that allows children to be themselves and explore.

a. How do you teach this curriculum?

Answer: I teach it based from my experience and what children know and are interested in. In our district, we are given the curriculum to follow verbatim, but if the children express an interest in another direction, we will go that way and try and incorporate their interests.

5. What curriculum do you believe is least important for four-year-olds?

Answer: Academics. Children learn when they are ready to learn. We can't pound it into them. When they are ready to learn, they will let us know. We can't base everything on academics. We have to let them explore. We have to let them be themselves, and that's the best way to learn.

6. What are the greatest challenges in instruction of four-year-olds in Seminole County do you face?

Answer: The behavior. Getting the children to self-regulate. That's the biggest challenge right now. In this area, I'm finding the lack of parent involvement is a concern for me. Getting the parents involved in the children's learning.

7. What else would you like me to know?

Answer: It's great that our district picked up the early learning division. That's awesome. I came from a Head Start background as well, and this, I'm loving it aside from the curriculum being given to us without enough flexibility to implement lessons differentiated for our children.

Instructor 3:

1. How long have you been teaching VPK?

Answer: 10 years. Down south, for 20 years, but it wasn't called VPK back then. I've been teaching four-year-olds for 30 years.

2. How long have you been teaching in SCPS VPK?

Answer: This is my eleventh year.

3. Tell me how you were prepared to teach VPK?

Answer: I got my CDA, but I got a lot of practice and training in Palm Beach County where I taught ESE prekindergarten. It's the experience that truly prepares you. The CDA is just a piece of paper.

4. What curriculum do you believe is important for four-year-olds?

Answer: The curriculum we had before this one was Breakthrough to Literacy. That was right on. It was awesome. The computer hooked right into it. It carried on the lesson throughout the day. Every kid got it, and they were excited to get on. The book was also there with extended activities, and it was on the computer. What four-year-old doesn't want to get on the computer? That became extinct. We couldn't get the consumables for it anymore. What we are now doing here is DLM. No one really knows what DLM stands for. I've decided it is Developmental Learning Materials, but nobody seems to know what it stands for. It's not bad. I would prefer to focus more in depth and not go as fast, but in order to cover everything, I guess administration feel we need to go this fast. Sometimes you really want to hang on. Something may really spark the kids, but we will have to move on. We have to stop and move on to the next thing. It goes a little fast I think, but it's not a bad curriculum. I've done this one, and the other one our district uses is Frogstreet. DLM is much better than Frogstreet.

- a. How do you teach this curriculum?

Answer: Crazy. You are on stage. You have to be as crazy as you have to be to get the kids excited about learning. Whether it's crawling under a table and growling or today my assistant was laughing because I turned around and did the hiney shake. The kids were then right with me. What four-year-old isn't going to go for some bathroom humor? You have to play the part.

5. What curriculum do you believe is least important for four-year-olds?

Answer: Part of the curriculum is key to character. I have a hard time with that. The kids don't really get it. We try to bring it down to something they can understand. For example, generosity is the key this month, and that's tough. To a four-year-old being generous is...we try.

6. What are the greatest challenges in instruction of four-year-olds in Seminole County do you face?

Answer: When you come in to a classroom and you get that one kid that needs so much, and it takes so long to get them the extra services they need. You can waste half a year before the kid is identified to get those extra services, meanwhile all the extra you've tried to implement for this one, everyone else is getting a little less. That makes me feel guilty.

7. What else would you like me to know?

Answer: Prekindergarten is usually a lot of fun. Any grade has its days, but prekindergarten is a lot of fun. Anytime you want to come back and dance for a while, you're welcome. We have a good time. We get messy but happy

Parents of Research School District VPK Participants

Parent 1:

1. How did your family first hear about opportunities to participate in the SCPS VPK program?

Answer: I heard about it eight years ago when I was ready to enroll my daughter in getting the certificate for the 4C. I heard a mom talking about wanting to put her daughter in a school setting where you don't have to actually pay, because that was one of my main issues. Once I had her in the school district VPK, I called her teacher the children whisperer, because she had some abilities. After that, I stuck with it for all my kids, because I've seen their improvement.

2. Tell me about your decision to participate in the SCPS VPK program instead of other VPK options available?

Answer: I had my first child in the school district VPK, so I kind of stuck to what I knew was best. Why mess with something that is good? If it's not broken, don't fix it.

3. Explain your overall feelings regarding the enrollment process in the SCPS VPK program.

Answer: It's simple. I don't find it that difficult. You have your papers and stuff, and that's it. I didn't find it difficult or annoying. I like to go ahead of time to find out when is the registration, so I can have all my papers in order. If you call, the ladies are very helpful. They are very understanding about the physical, too. Most of my kids were born in the summer, so they can only have their physical in the summer. They were very understanding about that. I didn't find it a difficult process at all.

4. Do you feel as if your child will be prepared to begin kindergarten as a result of participation in the SCPS VPK program?

Answer: Yes.

- a. Why or why not?

Answer: My daughter is not only in school. We do activities at home, so we are always learning and writing. I encourage all of that in my house. I don't mind a little art on the wall.

5. What else would you like me to know?

Answer: I love that the school district connected me with the Great Start program. There are some ladies that give us books. I love the best part about it is they have given us over 50 books out of it. We talk about what things we need to be doing at appropriate times for your baby to read. It's like early readiness but at a very very young age. I found out about it when I was at the WIC office, and they were there doing a class. We started with Great Start when my baby was 11 days old. It would be great if more people knew about Great Start. You know, if the word was out there more.

Parent 2:

1. How did your family first hear about opportunities to participate in the SCPS VPK program?

Answer: at day care. My kids go to (a local day care), and they said VPK was coming up. I didn't know what it was. Someone explained it to me that it was voluntary and gets them prepared for kindergarten, so I said of course I want to do that.

2. Tell me about your decision to participate in the SCPS VPK program instead of other VPK options available?

Answer: We chose SCPS VPK because we knew he was going to go to school at the (zoned SCPS elementary school), and we wanted it to be a good transition.

3. Explain your overall feelings regarding the enrollment process in the SCPS VPK program.

Answer: We got it done. I'm not a good paperwork person. You have to make sure they have all their shots. For me it was a lot of paperwork only because I don't like doing that stuff. I did it early, because I know I am bad about it and wanted to just get it done. He ended up being the second kid enrolled.

4. Do you feel as if your child will be prepared to begin kindergarten as a result of participation in the SCPS VPK program?

Answer: I really do.

- a. Why or why not?

Answer: His teachers are amazing. He knows quadruple what he knew before. I wasn't great about helping him with the ABCs. We do dance party more than we do letters, so he didn't know as much as he should have going in there. Now he is caught up because his teachers are wonderful

5. What else would you like me to know?

Answer: I think VPK is awesome. We are so appreciative. We found out from the first VPK assessment that our child was not recognizing letters. I thought he was doing fine before that because he could draw, color and sing his ABC's. I never thought about

helping him recognize the letters in print. With the help of his VPK teachers, I believe he is already caught up. This has been a great opportunity for our family

Parent 3:

1. How did your family first hear about opportunities to participate in the SCPS VPK program?

Answer: I heard through word of mouth and other parents who successfully went through the school district VPK program and had great things to say about it.

2. Tell me about your decision to participate in the SCPS VPK program instead of other VPK options available?

Answer: I looked up the district school ratings and also the ones closest to me. The school ratings were a big factor.

3. Explain your overall feelings regarding the enrollment process in the SCPS VPK program.

Answer: It was easy. They talk you through it.

4. Do you feel as if your child will be prepared to begin kindergarten as a result of participation in the SCPS VPK program?

Answer: Definitely

- a. Why or why not?

Answer: The teachers are amazing. I'm so amazed about how much they (twins) have learned.

5. What else would you like me to know?

Answer: It's just awesome. I'm so happy with the program overall.

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