2024

TEACHER PERCEPTIONS OF THEIR PREPAREDNESS TO TEACH EARLY LITERACY SKILLS USING DEVELOPMENTALLY APPROPRIATE PRACTICES IN UNIVERSAL PREKINDERGARTEN PROGRAMS

Tara A. Sokol

TEACHER PERCEPTIONS OF THEIR PREPAREDNESS TO TEACH EARLY LITERACY SKILLS USING DEVELOPMENTALLY APPROPRIATE PRACTICES IN UNIVERSAL PREKINDERGARTEN PROGRAMS

A dissertation submitted in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

to the faculty of the

DEPARTMENT OF EDUCATION SPECIALTIES

of

THE SCHOOL OF EDUCATION

at

ST. JOHN'S UNIVERSITY
New York
by
Tara A. Sokol

Date Submitted October 18, 2023 Date Approved January 31, 2024

_____	_____
Tara A. Sokol	Evan Ortlieb, Ph.D.

ABSTRACT

TEACHER PERCEPTIONS OF THEIR PREPAREDNESS TO TEACH EARLY LITERACY SKILLS USING DEVELOPMENTALLY APPROPRIATE PRACTICES IN UNIVERSAL PREKINDERGARTEN PROGRAMS

Tara A. Sokol

Early childhood education is a dynamic field, constantly evolving with the introduction of new curriculums, initiatives and programs. The classroom teacher is the constant, providing essential early literacy instruction amidst all of these changes. Universal Pre-Kindergarten is a vital program that provides access to quality early childhood education for New York City residents. According to the Office of Early Childhood Education, there were nearly 68,000 students enrolled in these free, full-day, high-quality programs in the 2018-2019 school year (2022). Universal Pre-Kindergarten is described as using Developmentally Appropriate Practice (DAP) as the basis for its teachings. Educators are responsible for using DAP to teach early literacy skills to this large population of students. Past research on teacher preparedness and the effect it has on teacher performance has shown that a better-prepared teacher is a more effective teacher (Darling-Hammond et al., 2005). Research has shown a correlation between the self-efficacy beliefs of teachers and positive teaching behaviors, which in turn have been linked to improved student outcomes (Henson, 2001). This culmination of factors has made a deeper-investigation of a teacher's feeling of preparedness an essential question that needs further exploration. This research sought to explore teachers' beliefs around

their preparedness to teach early literacy using Developmentally Appropriate Practice in a sequential explanatory mixed methods study, that utilized two types of data collection: the Teacher Belief Scale (Charlesworth et al., 1993) and focus groups. This study's results will offer crucial guidance to the expanding field of early childhood education. With a focus on supporting confident and effective educators who can deliver developmentally appropriate literacy instruction in Universal Pre-Kindergarten programs. The findings suggest supports for early childhood educators teaching DAP such as pre-service teacher training, current teacher workshops, and teacher inter-visitation.

DEDICATION

I dedicate this dissertation in honor of Robert “Bobby” Jacobs and Kelly Winter-Sokol whose love and memory will always be my guiding light.

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation for those who have supported me through this dissertation process. First and foremost, my mentor Dr. Evan Ortlieb, thank you. I simply would not have finished without your guidance and support. There was never a limit to your understanding or willingness to continue this journey with me over the many years it took. I will forever be grateful.

To my committee member Dr. Sampson, thank you for being a source of inspiration and for your work on this project.

To my colleagues and friends that reached out consistently with words of encouragement, thank you. Dr. Jennifer Aguilera, for your daily messages and unofficial deadlines. We began this program together and promised to see it through. Thank you for not letting me break that promise. To Danielle Nisco for dotting my i's and crossing my t's since our undergraduate days. Patricia Carillo, and Jessica Savitt, thank you for never letting me give up on myself.

To my family, you are my world. I would not be here without you. To my father, thank you for always valuing my education and my dreams over societal expectations of women. Thank you to my step-mom who is always there to listen. To my brothers Cory, Keith, and Noah, being your sister has been the unwavering title that has gotten me through the hardest and darkest of days. Thank you for your company when I needed it, a push when I needed it, and a good laugh when I needed that most.

Finally, to my two beautiful nieces, Thyri and Luna. News of your arrival last year was the motivating factor for me to finish this project. My wish for you is to dream with no limits. The world is yours for the taking sweet girls, I cannot wait to see what you do.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

Introduction

Research pertaining to teacher preparedness and the effect it has on teacher performance has shown that a better-prepared teacher is a more effective teacher (Darling-Hammond et al., 2005). The continuous changes in the profession faced by teachers in multiple areas validate the importance of teacher preparation. Teachers are tasked with learning new curriculua, understanding their students' needs, as well as analyzing and focusing on trends in student data and closing achievement gaps (Lauermann, 2014). The range of student needs as they enter the classroom requires a well-prepared teacher that can adjust lessons and implement strategies instantaneously.

A teacher's sense of self-efficacy has also been linked to teacher performance and the use of specific strategies (Pinchevsky & Bogler, 2014). Teacher self-efficacy refers to a teacher's belief in her or his capacity to execute behaviors necessary to produce specific results (Friedman & Kass, 2002). Teacher self-efficacy has been shown to not only predict teachers' use of specific strategies but to also predict student achievement, self-efficacy, and attitudes (Skaalvik & Skaalvik, 2007). The powerful impact teachers' self-efficacy has on their students further supports the importance of establishing prepared and efficacious teachers.

In New York City, a relatively new instated full-day Universal Prekindergarten program through the Board of Education requires teachers to teach beginning literacy skills in a developmentally appropriate method. This method involves teaching through student lead discoveries and activities. Countless studies have shown the importance of a strong foundation in beginning literacy skills (Aarnoutse et al. 2005; Anderson et al.,

1985; Cunningham et al., 2009; Dickinson & Tabors, 2001; Lonigan & Timothy, 2009). Considering the importance of these skills and assuming that a prepared and confident teacher is a more effective teacher, it would be consequential for Universal Prekindergarten teachers to feel prepared to teach literacy skills using developmentally appropriate methods.

Purpose of the Study

The purpose of this sequential explanatory mixed methods study is to ascertain the perceptions of current Universal Pre-Kindergarten Teachers' beliefs on their preparedness to teach early literacy using Developmentally Appropriate Practices (DAP). This study aims to provide the growing field of early childhood education essential guidance on developing confident and effective developmentally appropriate literacy educators in Universal Pre-Kindergarten programs.

Problem and Significance

A strong foundation in beginning literacy skills is integral to future academic success (Dickinson & McCabe, 2001). Lonigan and Shanahan (2009) affirm that literacy skills developed in early childhood have a clear and strong relationship with abilities in subsequent academic years. The variables representing early literacy skills had medium to large predictive relationships with later measures of literacy development. These variables maintained their predictive property even when the role of other variables, such as IQ or socioeconomic status, were taken into account (Lonigan & Shanahan, 2009). The impact of a strong foundation in early literacy skills requires educational systems to focus on the importance of instruction in early childhood programs. Support for early childhood

students and related programs needs to adapt to the ever-changing needs of these students.

In March 2020, the World Health Organization declared COVID-19 a pandemic (Centers for Disease Control and Prevention, 2022). This pandemic affected so many parts of everyday life. One of the biggest changes was the educational experience for youth. “Efforts to contain COVID-19 prompted unscheduled closure of schools in more than 100 countries worldwide. COVID-19 school closures left over one billion learners out of school” (Onyema et al., 2020, p. 108). This unprecedented global crisis created circumstances where parents became the main educators of their children. Some had the assistance of teachers and online programs, but many did not (Onymea et al. 2020). The full impact of the pandemic and the discrepancy in education received by students is only beginning to be seen by educators, parents, and policymakers both academically and socially. Ensuring our current programs will help establish consistent effective instruction is of the utmost importance as the world heals from the pandemic.

Universal Pre-Kindergarten is an important program that allows access to quality early childhood education for New York City residents. Universal Pre-Kindergartens educational ideology purports Developmentally Appropriate Practice (DAP) as the basis for its teachings. Educators are tasked with using DAP to teach early literacy skills. Considering the importance of beginning literacy skills, it is imperative for educators to utilize DAP effectively to teach. Research shows that effective teachers are successful in part because they are prepared teachers (Darling-Hammond et al., 2005). Additionally, research shows that teachers' confidence and preparedness correlate to their effectiveness

(Casey & Childs, 2011). Therefore, it is timely to explore teachers' feelings of preparedness to teach early literacy using Developmentally Appropriate Practice.

Universal Pre-Kindergarten (UPK) is unique in that its effects unfold as the program's students begin to enter upper academic testing grades. The implementation of this program in the largest public school system in the United States can be used as an example. Its effectiveness and presentation of positive student outcomes can become a catalyst for other metropolitan areas to establish similar programs as well as teacher preparation techniques for existing programs. The implications of this study can assist in preparing teachers to teach early literacy in UPK, furthering a case to establish full-day UPK in other locations.

Personal Interest

Early childhood education is the beginning of everyone's academic journey. It is where children are first exposed to formal education, learn how to satisfy curiosities, and answer their deepest questions using scientific methods. It is in early childhood education that a foundation in literacy is built that allows everyone to continue to learn and develop, unlocking words, poems, stories, and a wealth of knowledge that would have otherwise been lost to us. The time spent with educators and peers during this stage of development helps form personalities and confidence. It can help youth discover their strengths, uncover fears and weaknesses, as well as ways to respond and cope with them. The lasting effects of early childhood education, both positive and negative, can continue to present themselves throughout life. It is for these powerful and influential reasons that becoming an educator in early childhood education is of interest to so many.

Developmentally appropriate practice is a pillar of early childhood education. Early childhood educators, specifically Universal Pre-Kindergarten teachers, are tasked with developing lessons and challenging young minds using DAP. This method of teaching can prove difficult if one does not feel properly prepared. It is common to hear educators' express frustration and lack of confidence when attempting to create lessons that deeply engage their students. This led to curiosities such as, "Do all UPK teachers feel this way?" These wonderings led towards further investigating Universal Pre-Kindergarten teachers' perceptions of DAP outside of the scope of the childhood center.

Research Questions

This study will explore the following research questions:

1. What are Universal Prekindergarten teachers' perceptions of their preparedness to teach early literacy skills using the New York City Department of Education's developmentally appropriate guidelines?
2. What constitutes a framework for effective pedagogical development in early literacy using developmentally appropriate guidelines?

Definition of Terms

Developmentally Appropriate Practice is a framework designed to promote young children's optimal learning and development.

Universal Pre-Kindergarten is a publicly funded early childhood pre-kindergarten education program (New York City Department of Education, 2022).

NYCEECs or New York City Early Education Centers are community based organizations that contract with NYC to provide UPK (New York City Department of Education, 2022).

Self-Efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1977, 1986, 1997).

Early Childhood Education is a branch of education theory that relates to the teaching of children from birth up to the age of eight.

COVID-19 is an infectious disease caused by the SARS- CoV-2 virus (Centers for Disease Control and Prevention, 2022).

CHAPTER 2

Introduction

In this chapter, the theoretical framework will first situate this study from which to view considerations of Developmentally Appropriate Practice. The theoretical framework is a structure that supports the theory of the study, which leads to the explanation of why a research question exists. It demonstrates an understanding of the concepts, literature, and definitions related to the broader research topic as well as builds the foundation for the chosen research questions and research method. The review of literature will follow and examine a number of themes related to DAP, teacher preparation, and types of effective early literacy instruction.

Theoretical Framework

While current research exists on the effects of teacher preparedness (Brown et al., 2015; Darling-Hammond et al., 2005; Ingvarson et Al., 2007), as well as the effectiveness of Developmentally Appropriate Practice (Bredekamp, 1987; Bredekamp & Rosegrant, 1992; Jipson, 1991; Parker & Neuharth, 2010), there is little research on teachers' perceptions of these combined factors. A teacher's level of confidence in curricular planning and instruction is often linked to one's effectiveness (Darling-Hammond et al., 2005); moreover, the affective dimension of teaching and learning is less of a focus in cycles of professional development (Sims & Fletcher-Wood, 2021). These circumstances are peculiar when paired with the fact that there is a limited amount of research from which to draw from to establish a framework to guide this study. Teachers' sense of ability is most centrally aligned with this study's research questions, specifically Bandura's (1977) theory of self-efficacy as a lens to guide this study.

Bandura's theory of self-efficacy (1977) has been a core tenant of research across multiple grade settings. Self-efficacy is a facet of Bandura's larger social cognitive theory that includes reciprocal determinism, behavioral capability, observational learning, reinforcements, and expectations (2005). It discusses the impactful role observational learning and social experience have on the development of one's personality (Luszczynska & Schwarzer, 2005). Bandura believed that self-efficacy was derived from four informational sources: "performance accomplishments, vicarious experience, verbal persuasion, and physiological states" (p. 191). Since the inception of this theory, researchers from multiple fields, including education (Shenaar-Golan et al., 2020), business (McCormick, 2001), health (Conn, 1998), and sports (Conolly, 2017; Weinberg et al., 1979) have evaluated Bandura's hypothesis in relation to their fields. Bandura continued his own social-cognitive research examining self-efficacy (1980, 1999, 2006).

Although this theory originated in the realm of social-psychology, it has been extensively researched in the field of education over many years (Soykan & Kanbul, 2018; Velle, 2020; Williams & Sternberg, 1993). Self-efficacy is defined by Bandura as "an individual's belief in his or her own ability to organize and implement action to produce the desired achievements and results" (1997, p. 3). Schuck and DiBenedetto state, "In educational settings, self-efficacy can affect learners' choices of activities, effort expended, persistence, interest, and achievement" (2016, p. 34). Teacher self-efficacy research has focused on classroom management (Jackson & Miller, 2020), teacher burn-out (Öztürk et al., 2021), teacher performance (Yilmaz, 2009), culturally responsive teaching (Siwatu, 2007), teacher use of technology (Kwon et al., 2019), and student achievement (Zysberg & Schwabsky, 2021) among others. The self-efficacy

beliefs of teachers have been correlated with positive teaching behaviors (Mok & Moore, 2019) and, therefore, student outcomes (Henson, 2001). Guo et al. (2012) studied the effects of teacher self-efficacy, education, and years of experience on classroom practices in two dimensions. These dimensions were teacher support for student learning and instructional time, as well as how these factors related to fifth-grade students' literacy skills. The study found that teachers with high self-efficacy showed more support for and provided a more positive classroom environment than their counterparts with low self-efficacy. The teachers with high self-efficacy students showed stronger literacy skills.

Bandura's continued research found, “Teachers' beliefs in their personal efficacy to motivate and promote learning affect the types of learning environments they create and the level of academic progress their students achieve” (2010, p. 117). The theory of self-efficacy allows for the development of the research questions pertaining to teachers’ perceptions of their preparedness to teach early literacy skills as well as provides the framework through which the resulting data will be explored.

Review of Literature

In this examination of teacher preparedness to teach early literacy skills using Developmentally Appropriate Practice (DAP) in the extant literature, research can be categorized into four major areas, including, the history of Universal Pre-Kindergarten, teacher preparedness, models of literacy instruction, and Developmentally Appropriate Practice. This will develop a foundation to better understand Universal Pre-Kindergarten teachers’ beliefs and confidence about teaching early literacy using DAP.

Universal Pre-Kindergarten

Universal Pre-Kindergarten (UPK) is a current early childhood education program that is funded by New York State and is implemented in New York City through the New York City Department of Education, Division of Instructional Support, Office of Early Childhood Education. According to the Office of Early Childhood Education, there were nearly 68,000 students enrolled in these free, full-day, high-quality programs in the 2018-2019 school year (2022). The UPK programs claim to provide many benefits to students and their families. These benefits include establishing strong collaborations between families and schools and providing high-quality instruction. Thus developing critical vocabulary, oral language, and problem-solving skills as well as raising academic success across all income and racial groups (New York City Department of Education, 2022). Gromley et al. (2005) found that UPK enhanced school readiness for diverse Pre-Kindergarten students. UPK continues to be analyzed and researched as other states begin to implement programs of their own (Shapiro et al., 2019).

The process of implementing a program of this magnitude took multiple steps. It began with an idea that our youngest learners deserved quality early childhood experiences in school regardless of socioeconomic status with the creation of the Head Start Program in 1965 (Rose, 2010). The purpose of Head Start was to prepare preschoolers from low socioeconomic status families to succeed in school as part of President Lyndon B. Johnson's War on Poverty legislation, formerly known as the Economic Opportunity Act (Kleek & Schuele, 2010). The War on Poverty dedicated federal funds to develop programs designed to reverse the impact of poverty in the United

States (Kleek & Schuele, 2010). Other well-known programs developed from this funding include the popular television show Sesame Street (Britannica, 2022).

Over the years, it became apparent that there was insufficient capacity in the Head Start Programs to serve all children whose families were eligible. In fact, only half of the eligible children are served by Head Start (Gormley, 2005). In an effort to help improve the issue of capacity as well as meet the growing demand for preschool enrollment, state funding was provided to public universal preschool programs (Barnett et al., 2006). Beginning in 1998, New York City Universal Pre-Kindergarten half-day programs were open to all children regardless of family income (New York City Department of Education, 2022). In 2014, Mayor Bill DeBlasio launched the Pre-K for All initiative, providing full-day Universal Pre-Kindergarten programs for all children in NYC, utilizing both public schools and community centers (The Office of the Mayor of NYC, 2014). These are the programs that continue to run today and are the focus of this study.

Teacher Preparedness

Teachers are constantly in pursuit of better pedagogies and means to meet their students' ever-evolving needs. As a result, research into teacher preparation and development is essential to better understand how teachers develop professionally, as they hone their craft through the years. The methods used in teacher education or teacher preparation may vary, trends and the overall focus will continue to be altered as further research is done. Teacher preparation is continuously examined because of its constant effects on student learning and its overall importance.

Current research on teacher preparedness and confidence has been linked to teacher effectiveness. Darling-Hammond et al. (2005) found that teachers who were better prepared during their pedagogical course work as well as their field experience prior to certification became more effective teachers. Teacher expertise was highly correlated to student performance. Therefore, a well-prepared teacher is a teacher that will be more prepared in using methods taught in their preparation programs. Similarly, Casey and Childs (2011), found that when studying the relationship between perceived preparedness for teaching, preservice teachers' self-evaluations of their practice sessions of teaching were less positive than that of their instructors. Casey and Childs state the results may, "reflect the teacher candidates' lack of experience and/or confidence" (p. 15). The focus on early childhood teachers' feelings of preparedness provides insight into what research has shown as a very important literacy-building time in student education.

Models of Early Literacy Instruction

Research has shown that a strong foundation in beginning literacy skills is an important factor in later important literacy skills and abilities (Lane et al., 2009). Being a strong factor in later reading abilities promotes the need for strong early literacy instruction to be a main component of current research. Studies have also shown that some skills may have a greater effect in certain areas (Lane et al., 2009). These research findings are important to include in the preparation of early childhood educators. Implications of these findings extend to the current programs instated for teacher preparation along with the current programs being utilized within the school systems.

Pinto et al. (2012) used a longitudinal study to examine the predictive power of emergent literacy models through orthographic errors in three phases. Their findings

show that certain competencies such as notational were a predictor of early orthographic errors, whereas phonological competence alone was not. This research allows for reconsideration of the importance of what beginning literacy skills are being focused on.

Lane et al. (2009) studied the effects of a University of Florida Literacy Initiative (UFLI) tutoring model on promoting early literacy skills of struggling and beginning readers in first grade. The study found that tutoring was effective. The tutoring focused on important beginning literacy skills, phonemic awareness, print awareness, decoding, fluency, and comprehension. While some of these skills are beyond the expectation of a Pre-Kindergarten student, the previous research sets the standard for what current UPK teachers should be prepared to incorporate through their DAP teaching. There is a need for research to examine if early childhood teachers are prepared to do so.

Just as examining how emergent readers learn, it is equally as important to examine the best way teachers learn. Given that teacher preparedness is linked to effective teaching, it is imperative to have effective teaching preparation programs. Otaiba et al. (2010) examined the effects of different perceptions of preparedness to teach based on the different preparation experiences pre-service teachers were assigned to. The results showed that pre-service teachers can benefit from supported, structured, tutorials as well as gaining language and reading instruction knowledge through their coursework and field experiences.

The views of pre-service teachers are an important aspect of teacher preparation and feelings of preparedness. Pre-service teachers are entering the school systems in the midst of the current curriculum. Alternatively, experienced teachers may have taught through several curriculum changes. They may have also developed views of curricular

effectiveness based on their experience. These teachers are expected to maintain effective teaching skills as the district transitions between curriculua. Simrall and Mary (2001) examined teacher views regarding curricular trends for young children. The study also examined their views on teaching practices, and how constraints may affect their teaching. A qualitative analysis of interviews and observations showed that demand for standardized curriculum has pushed out developmental considerations. Simrall and Mary noted, "play was overwhelmingly identified as the vehicle to teach appropriately" (p. 206). Nahal (2010) explored the expectations of new teachers in education programs as far as their expectations of experiences before beginning in a classroom through semi-structured interviews. After entering the classroom, Nahal (2010) then studied the teachers' reactions to the realities of the classroom. Implications of the findings suggest that teacher preparation programs need to provide teachers with "survival skills" to meet the demands of the program (p. 12).

Paulenzuela (2004) measured Pre-Kindergarten teachers' perceptions of high scope Pre-Kindergarten expectations of teaching practices as well as how these perceptions were accumulated in practice and if the age of the teacher or years of experience before teaching in the high-scope program was a factor. The study found that the teachers' perceptions of satisfaction, attitudinal compliance, and behavioral compliance with the expectations of the program did not differ significantly between age groups or between experience groups. The study allows for a deeper analysis of the factors contributing to teachers' feelings and practices around DAP in Pre-Kindergarten classrooms.

Developmentally Appropriate Practice

In current early education programs Developmentally Appropriate Practice (DAP) is a model of teaching that educators are expected to use to develop units and lessons within their classrooms. Developmentally Appropriate Practice is defined by the National Association for the Education of Young Children (NAEYC) guidelines as a method of teaching that meets children on their levels; it is a different approach to early literacy instruction that requires a unique lens to fully understand and master as a teacher (not a skills-based packaged curriculum). It promotes exploration and positive caring relationships. It asks the teacher to look at the individual student's level and to consider needs and culture. Creating activities that follow the DAP guidelines while simultaneously teaching important early literacy skills can be challenging for educators of all experience levels.

Goldstein (2008) studied strategies for teachers to incorporate important aspects of DAP in early childhood teaching. The study observed strategies in kindergarten classrooms, exploring the incorporation of effects of sociopolitical influences on DAP as well as the strategic implementation and decision-making of teachers in these classrooms. The teachers in these classrooms need an understanding of DAP as well as how to incorporate strategies in decisions such as book choice, vocabulary choice, literacy experiences, and exposure for the students.

Many current UPK classrooms are located in childcare centers. These classrooms are held to the same standards as the NYC DOE public school classrooms, including the expectation of the use of DAP. Zambo (2008) explored the knowledge held of brain development and DAP by childcare workers. The childcare workers had more knowledge

of DAP in classroom practice than an understanding of childhood cognitive development; yet, it was not observed if the childcare workers used DAP in practice.

Kim (2011) studied the beliefs of early childhood preservice teachers about DAP and length of academic status and field experiences using the Teacher Belief Scale (TBS) as well as teacher interviews. Kim found that pre-service teachers held strong beliefs about DAP. However, there was an imbalance between pedagogical knowledge and subject knowledge. Kim explained, "although some teachers strongly supported DAP, they might face difficulties in teaching specific subjects in developmentally appropriate ways because their beliefs about DAP were focused on how to teach rather than what to teach" (p. 16).

Current teacher perspectives on DAP have been examined as well. Parker and Neuharth (2010) used surveys, interviews, and observations to examine the beliefs of kindergarten teachers in relation to DAP, along with the roles of other external influences in shaping their beliefs. The findings of the Parker and Neuharth study show "the complexity of developmentally appropriate instruction for early educators" (p. 71). Teachers expressed difficulties in using DAP, including the additional time it takes to create child-centered activities. Teachers also noted the feelings of increased pressure to prepare students for the next grade as they moved from teacher–directed to child-centered activities.

Studies have shown that teachers can approve of conflicting methods of teaching concurrently. Smith and Croom (2000) explored the relationship between teachers' beliefs about DAP and the multi-dimensional self-concepts of the students. The results of the Primary Teacher Questionnaire used to measure teacher beliefs showed that teachers

endorsed both programs. Teachers endorsing both can create a situation where teachers incorporate both in their teaching, even considering that both methods stem from conflicting methodologies. Sound knowledge of one method may prevent teachers from incorporating both.

Teachers' understanding of DAP can affect their practice. Lee (2006) analyzed the effects of an in-service training experience on the scaffolding skills of teachers who identified with either DAP or DIP methods. The findings showed that before the training, there were no significant differences in skills between the teachers. However, after the training, there were significant gains in scaffolding measures of DAP teachers over that of their DIP counterparts. Lee states, "This experimental study supports the notion that DAP guidelines can provide the foundation for concrete teaching skills" (p. 941).

Abu-Jaber et al. (2010) used questionnaires to study the beliefs of kindergarten teachers towards DAP in Jordan. The results of the initial questionnaire found teachers had a high belief in DAP, yet the second questionnaire found teachers' beliefs were actually mixed between both DAP and the Didactic Practices Approach (DIP). According to their responses, teachers used both approaches in their teaching. Al-Dhafir (2015) studied the perceptions of first-grade teachers on teaching reading and writing with DAP or DIP through a questionnaire. The study found that first-grade teachers held a moderate level of agreement with both methods, however, DIP was higher. Al-Dhafir states, "the reason may be due to the fact that the first-grade teachers are not knowledgeable of DAP" (p. 108).

Teachers' feelings of preparation in specific methods are an important factor in the development of their practice as well as what takes place in the classroom.

Developmentally Appropriate Practice is a method that Universal Pre-Kindergarten teachers should be prepared to teach. If teachers do not feel prepared to teach using developmentally appropriate methods, it can hinder the building of a foundation in crucial beginning literacy skills. The research discussed has shown these skills to be influential on later reading abilities and attests to the significance of strong instruction in this area. Future research is necessary to explore teacher perceptions of preparedness in using Developmentally Appropriate Practice. Understanding teachers' self-efficacy is an important step in understanding how to provide assistance to increase preparedness and ensure students receive essential literacy instruction.

CHAPTER 3

Methodology

The research questions that guided this study include:

1. What are Universal Prekindergarten teachers' perceptions of their preparedness to teach early literacy skills using the New York City Department of Education's developmentally appropriate guidelines?
2. What constitutes a framework for effective pedagogical development in early literacy using developmentally appropriate guidelines?

Research Design

This study utilized a sequential explanatory mixed-methods design that involved two types of data collection: the Teacher Belief Scale (Charlesworth et al., 1993) and focus groups. The use of a mixed method design allowed for the triangulation of the results through the examination of both qualitative and quantitative data (Creswell, 2009). The initial phase of the study provided quantitative data through the use of the Teacher Belief Scale (TBS). These data permit a discussion of the results to include percentages representing all of the participants. The second phase of the study provided qualitative data and allowed for a deeper exploration of the thoughts of the teachers in this study. These data can be used to help further generalize the findings (Crabtree & Miller, 1999). There are multiple approaches to a mixed-method design study, as seen in Figure 1, which provides a nuanced representation of their unique elements.

Figure 1
Basic Mixed Methods Designs

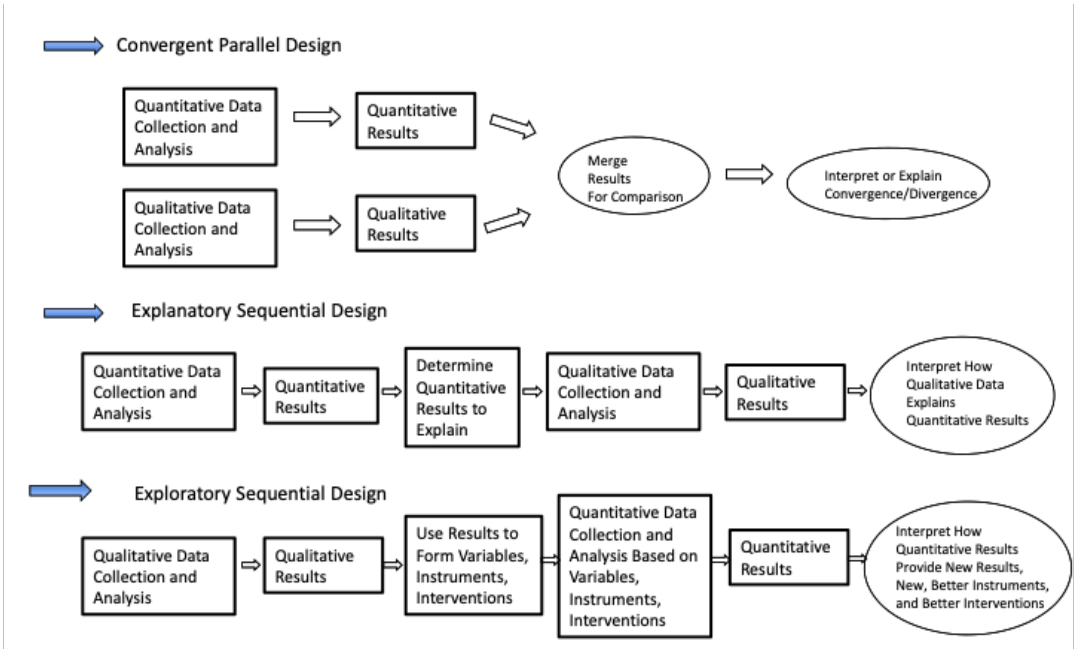


Figure from Creswell 2009 (p. 300).

The explanatory mixed method approach allows for a deep analysis of teachers' feelings of preparedness by using qualitative data to further explore and support the initial quantitative data from Phase 1 through the use of the TBS.

When studying teacher perceptions, these methods of data collection are best suited to answer the research questions, as well as establish other areas for future research as seen from a chart derived from Creswell, 2009 (see Table 1). Exhibiting the relationship between research questions, data sources, and analysis.

Table 1
Correspondence of Research Questions, Analysis Procedures and Phases, and Data Sources

Research Question	Analysis Procedure and Phases	Data Collection
1. What are Universal Prekindergarten teachers' perceptions of their preparedness to teach early literacy skills using the New York City Board of Education's developmentally appropriate guidelines?	Quantitative (phase 1) Qualitative (phase 2) Mixed Methods: exploration of integrated findings	TBS Scale Focus Group Interview
2. What constitutes a framework for effective pedagogical development in early literacy using developmentally appropriate guidelines?	Mixed Methods: exploration of integrated findings	Interpretation

Note: Table from Creswell 2009 (p. 297)

Setting and Participants

The focus of this study is on the Universal Pre- Kindergarten program in New York City. This study includes any of the current programs in all 32 districts, including district schools, Pre-Kindergarten Centers, and NYC Early Education Centers (NYCEECs). Participants include current Universal Pre-Kindergarten teachers in all five boroughs of New York City as well as surrounding suburban areas that are also participating in the Universal Pre-Kindergarten Program. UPK teachers are required to hold a Bachelor's degree in Early Childhood Education or a related field of study. They

must hold a teaching license or certificate valid for services in early childhood or childhood grades, meeting New York State Universal Pre-Kindergarten regulations. It is expected that the level of experience and training across participants will vary. This will be considered by the researcher when analyzing the data from this phase.

Phase 1: Quantitative Data Collection

Procedures

A participant letter of explanation (Appendix A), as well as the Teacher Beliefs Scale (Appendix C), was made available to current Universal Pre-Kindergarten teachers through the use of UPK online social media group platforms that met the criteria for this study. The scale was administered with the use of Google Forms. In the letter, the researcher explained the purpose of the study as well as the approximate time it would take to complete it. The Google Form also included questions about the participants' demographics, including levels of education and work experience. The Google Form took the participants approximately 15 to 20 minutes to complete. Additionally, the form also included a question asking if the participant would be willing to take part in a virtual focus group discussing similar topics at a later date. The participant responses were downloaded and analyzed upon obtaining at least 50 completions. All participant information was kept confidential and was only available to the researcher.

Instrumentation

The Teacher Belief Scale being used in this study is a known scale that has previously been used to assess teachers' beliefs (Charlesworth et al., 1993). Cronbach's coefficient alpha is a measure used to evaluate the internal consistency of an instrument and the reliability of the data collected (Dean, 2021). The coefficient alpha for the initial

Teacher Belief Scale was reported as Activities & Materials a = .84, Social a = .77, Individualization a = .70, Literacy a = .60, Integrated Curriculum Beliefs a = .66, Structure a = .58 (Charlesworth et al., 1993). The questions on this scale were edited to gain further insight into UPK teacher perceptions. The scale was sent to experts in the field to ensure quality and accuracy; see Appendix C. The TBS is a Likert scale. A Likert-type scale involves a series of statements in which participants rate their responses in order to evaluate questions (Vogt, 1999). This scale has a 1 to 5 rating; 1 being not at all, to 5 being extremely. Additional questions were added to support the researcher in analyzing participants by demographics such as program location, years of experience, and type of training in DAP.

Data Collection

The survey data was collected electronically via Google Forms. Once participants submitted their responses, the responses were collected and subsequently downloaded as a comprehensive .xls file. It was sorted in three ways to review the results; by summary, by question, and individually. The summary presented the results as a whole, the individual results presented each participant's answers, and the results presented by question gave insight into each question's results.

Data Analysis

The researcher analyzed these data using the SPSS program. Pearson R analysis was used to investigate the strength of a relationship between two variables measured quantitatively. In this case, comparisons were made between various sections of questioning and discussed in the results section.

Phase 2: Qualitative Data Collection

Procedures

The semi structured interview protocol was used for this study with two small focus groups. Each group included four participants. The questions were determined by the quantitative form given in the first phase as well as guided by the overall aims of the study. Specific interview questions were chosen so as to capture teacher perception of their ability to teach early literacy using DAP. Follow-up questions were added based on participant responses. The questions can be found in Appendix D. An email invitation was sent to each small focus group to schedule a time using the online platform Zoom to conduct the interview. At the start of the Zoom sessions, the researcher explained the purpose of the interview in addition to the interview being recorded for research purposes. Participants had the option to remain anonymous from other participants in their group.

Interviews

Teachers were encouraged to speak about their perceptions and experiences teaching early literacy with DAP. This semi-structured focus group interview process provided deeper insight into the thoughts and feelings of teachers, adding a meaningful narrative to the world of data and percentages. Each group had different participants. This allowed all participants to express their voices and perspectives without constraint. Each focus group was approximately one hour, which allowed the researcher time to ask clarifying questions to gain a more in-depth understanding and enriching description of the participants thoughts and experiences.

Participants

Participants were selected based on the feedback provided by the Google Form as well as availability. The eight participants chosen from the pool of respondents were willing and able to attend the focus group. The researcher was able to vary service years, program location, and teacher training, for a heterogeneous group in each session. This allowed for discussion with insight into the feelings of teachers from various teaching places in the UPK field. [DD6]

Data Collection

The focus group discussions were recorded using the record feature on the online platform Zoom. Bogdan and Biklen (2007) provide suggested guidelines to follow while transcribing interviews. The researcher adhered to these suggestions, including using pseudonyms for participants as well as typing responses immediately after each question. Only the researcher had access to these recordings and transcriptions.

Data Analysis

Thematic deductive coding (Crabtree & Miller, 1999) was used to analyze the transcriptions of the focus group question responses. Thematic deductive coding requires the researcher to begin with themed categories or predetermined codes. The qualitative data is then categorized by these emergent codes. These themes or codes can be developed from previous research or based on areas of interest to analyze (Creswell, 2013). In this study, the codes were determined by the overarching themes of the responses to the TBS scale as well as the research questions.

CHAPTER 4

Results and Findings

This investigation used a sequential explanatory mixed-methods design by collecting data from educators using the Teacher Belief Scale (Charlesworth et al., 1993) and focus groups. As a reminder, the initial phase of the study provided quantitative data through the use of the Teacher Belief Scale (TBS). These data allow for a discussion of the results to include percentages representing all of the participants. The second phase of the study provided qualitative data and allowed for a deeper exploration of the thoughts of the teachers in this study. The data can be used to help further generalize the findings (Crabtree & Miller, 1999).

Participant Demographics

The following tables represent the demographics of the participants of phase 1 of this study. There were 51 participants in phase 1. Table 2 displays the years of teaching experience as reported by the participants. The mean teaching experience is 9.93 years. The range is 1- 30 years of experience. The largest number of participants have 6-10 years of teaching experience at 37%, followed by 1-5 years of experience at 29%.

Table 2
Years of Teaching Experience

Years	N	Percent
1 – 5	15	29
6 – 10	19	37
11 – 15	8	16
16 – 20	3	6
21 – 25	4	8
26 – 30	2	4
Total	51	100

Table 3 displays the years of UPK service as reported by the participants. Years of UPK service are the years that the participants are actively teaching UPK. The mean UPK service is 4.22 years. The range is 1-14 years of UPK service. The largest number of participants have 1-5 years of UPK teaching experience at 75%.

Table 3
Years of UPK Service

Years	N	Percent
1 – 5	38	75
6 – 15	13	25
Total	51	100

Table 4 displays the locations in which the New York City area that the participants are teaching UPK. The largest number of participants are teaching in Queens at 82%, followed by Brooklyn at 10%. The smallest number of participants are currently teaching in the Bronx at 2%, and Manhattan at 2%.

Table 4
Participant UPK Teacher Center Location

Borough	N	Percent
Bronx	1	2
Brooklyn	5	10
Long Island	2	4
Manhattan	1	2
Queens	42	82
Total	51	100

Table 5 displays the participants' education level as reported by the participants. The largest number of participants hold Master's Degrees at 78%. The NYC DOE requires public school teachers to have a Master's Degree within 5 years of being hired.

Table 5
Education Level of Participants

Education Level	N	Percent
Associate Degree	1	2
Bachelor's Degree	6	12
Master's Degree	40	78
Postgraduate Degree	4	8
Total	51	100

Table 6 displays the participants' ethnicities as reported by the participants. The largest number of participants identified as Caucasian at 60.78%. The lowest number of participants identified as Pacific Islander at 3.92%. One participant chose not to answer this question.

Table 6
Participants' Ethnicity

Ethnicity	N	Percent
African American	3	5.88
Asian	5	9.8
Caucasian	31	60.78
Hispanic	8	15.70
Native American	1	1.96
Pacific Islander	2	3.92
Blank	1	1.96
Total	51	100

Table 7 displays the age of the participants as reported by the participants. The average age of the participants is 34.22 years old. The range is 22- 58 years old. The largest number of participants are 31-35 years old at 33.3%. One participant chose not to answer this question.

Table 7
Participants' Age

Age	N	Percent
20 – 25	8	15.7
26 – 30	9	17.6
31 – 35	17	33.3
36 – 40	5	9.8
41 – 45	5	9.8
46 – 50	4	7.8
51 – 55	1	2.0
56 – 60	1	2.0
Blank	1	2.0
Total	51	100

Table 8 displays gender as reported by the participants. The largest number of participants identified as female at 90.2 %.

Table 8
Participants' Gender

Gender	N	Percent
Female	46	90.2
Male	5	9.8
Total	51	100

Findings from Quantitative Data (Phase 1)

Ranking of Influence on Planning and Implementation of Instruction

Table 9 displays the ranking of the level of influence of each factor made on the participants planning and implementation of instruction in UPK. The factors include influence of parents, school system policy, teacher education and training, the teacher themselves, state regulation, and other. The participants were asked to rank these factors from 1- 6. One being the most influential, 6 being the least. The largest number of participants reported themselves (Teacher/Yourself) as the most influential factor in planning and implementing instruction at 33.3%. It is important to note that education

and training was ranked the most influential by 27.5% of participants. School system and policy was ranked as the second most influential by the most number of participants at 25.5% for this factor. Parents and Other were ranked by the most number of participants as least influential at 17.6% each.

Table 9

Overall Rankings of Influence on Planning and Implementation of Instruction

Ranking	Parents	School System Policy	Education Training	Teacher/Yourself	State Regulation	Other
1	5 (9.8%)	11 (21.6%)	14 (27.5%)	17 (33.3%)	7 (13.7%)	3 (5.9%)
2	8 (15.7%)	13 (25.5%)	7 (13.7%)	8 (15.7%)	9 (17.6%)	11 (21.6%)
3	17 (33.3%)	6 (11.8%)	9 (17.7%)	3 (6.0%)	9 (17.6%)	14 (27.5%)
4	6 (11.8%)	4 (7.7%)	7 (13.7%)	9 (17.6%)	4 (7.9%)	7 (13.7%)
5	6 (11.8%)	11 (21.6%)	10 (19.6%)	7 (13.7%)	16 (31.4%)	7 (13.7%)
6	9 (17.6%)	6 (11.8)	4 (7.8%)	7 (13.7%)	6 (11.8%)	9 (17.6%)
Total	51 (100%)	51 (100%)	51 (100%)	51 (100%)	51 (100%)	51 (100%

Teacher Belief Scale

The following figures display the participants' responses to specific questions on the TBS scale. As a reminder the TBS scale is a Likert scale with a 1 to 5 rating; 1 being not at all, to 5 being extremely. Figure 2 displays the participants' responses to Question 6. Question 6 stated, "It is _____ important for UPK activities to be responsive to individual differences in development." 49% of participants felt that it is extremely important for UPK activities to be responsive to individual differences in development.

Figure 2

Responsive to Individual Differences of Development

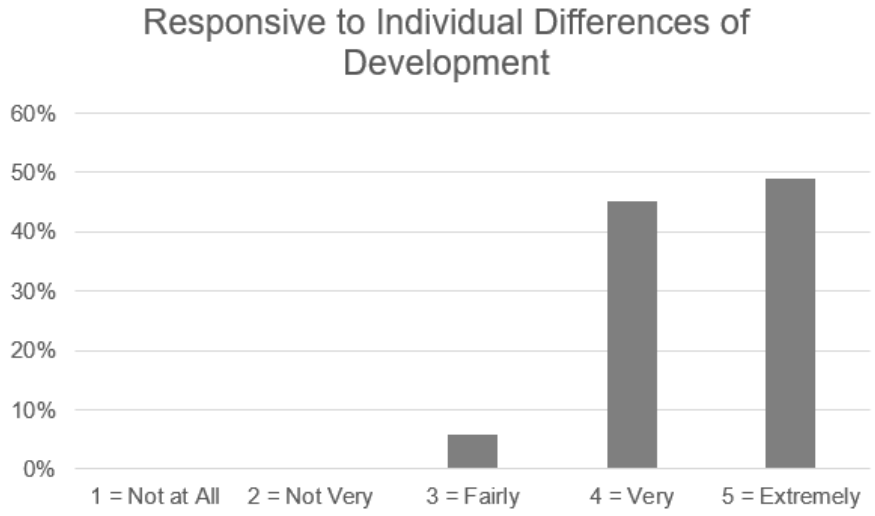


Figure 3 displays the participants' responses to Question 19. Question 19 stated, "I feel prepared to teach students letters of the alphabet using Developmentally Appropriate lessons and activities." 24% of participants felt prepared to teach the letters of the alphabet using developmentally appropriate lessons. 21% felt not very prepared and 21% felt not at all prepared to teach students letters of the alphabet using developmentally appropriate lessons.

Figure 3
Use of Developmentally Appropriate Lessons and Activities

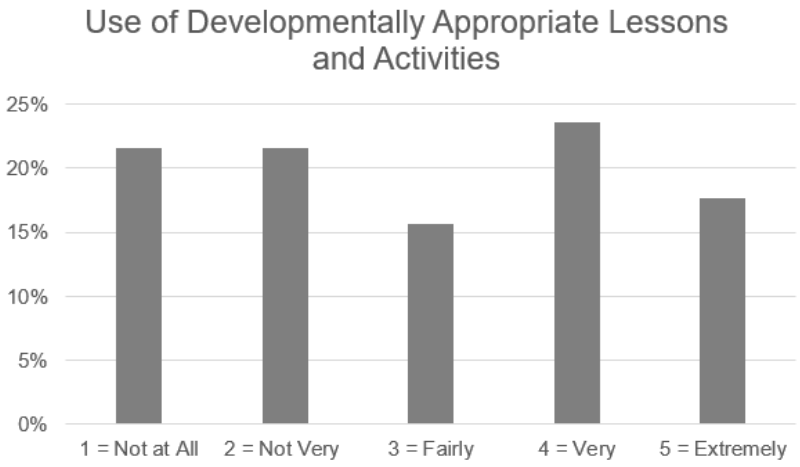


Figure 4 displays the participants' responses to Question 26. Question 26 stated, "I have a deep understanding of Developmentally Appropriate Practice." 24% of participants felt that they had a deep understanding of developmentally appropriate practice. 21% of participants felt that they fairly had an understanding. 21% of participants responded not very, and 18% responded not at all.

Figure 4
Understanding of Developmentally Appropriate Practice

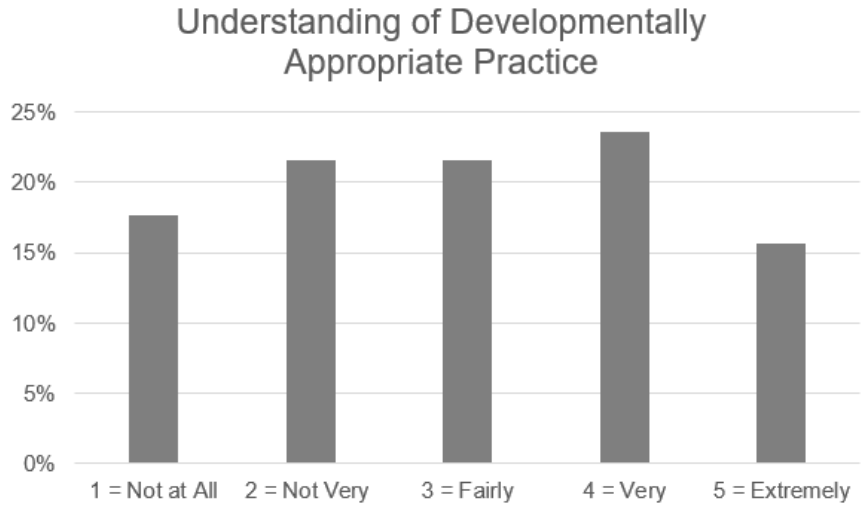


Figure 5 displays the participants' responses to Question 27. Question 27 stated, "I feel prepared to teach early literacy." 24% of participants felt fairly prepared to teach early literacy. 24% of participants felt very prepared to teach early literacy. 21% of participants felt not at all prepared to teach early literacy.

Figure 5

Preparation to Teach Early Literacy

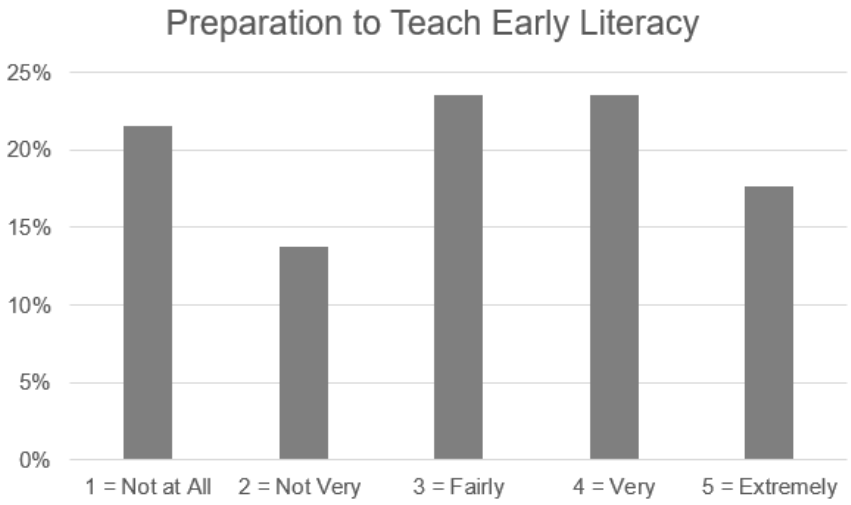


Figure 6 displays the participants' responses to Question 28. Question 28 stated, "I feel prepared to teach early literacy using Developmentally Appropriate Practice." 33% of participants feel not at all prepared to teach early literacy using Developmentally Appropriate Practice. 19% feel fairly prepared and 17% feel not very prepared.

Figure 6
Preparation to Teach Early Literacy Using Developmentally Appropriate Practice

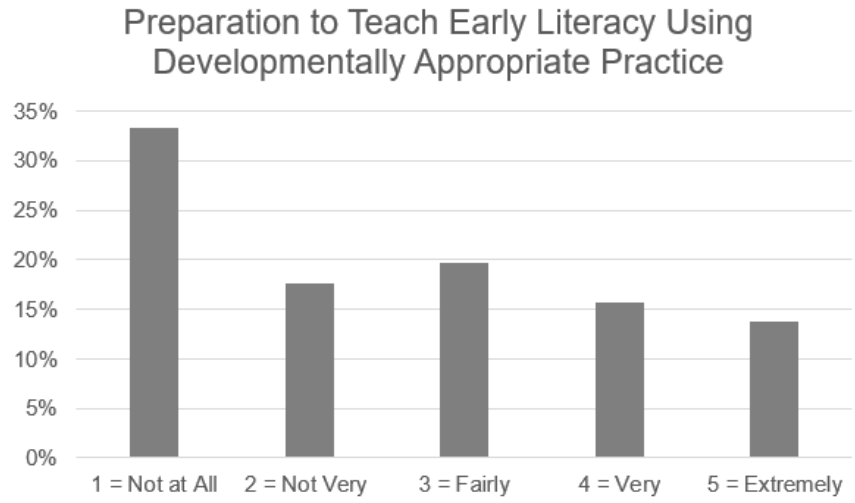


Figure 7 displays the participants' responses to Question 29. Question 29 stated, "I feel an emphasis was put on ensuring I was prepared to use Developmentally Appropriate Practice in my pre-service training." 51% of participants reported that they felt their pre-service training did not at all put an emphasis on ensuring they were prepared to teach using Developmentally Appropriate Practice.

Figure 7
Pre-Service Training of Developmentally Appropriate Practice

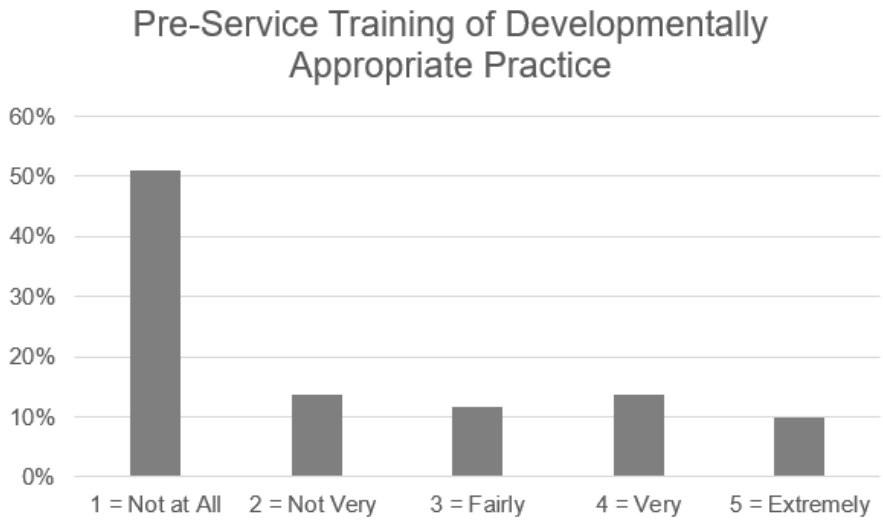
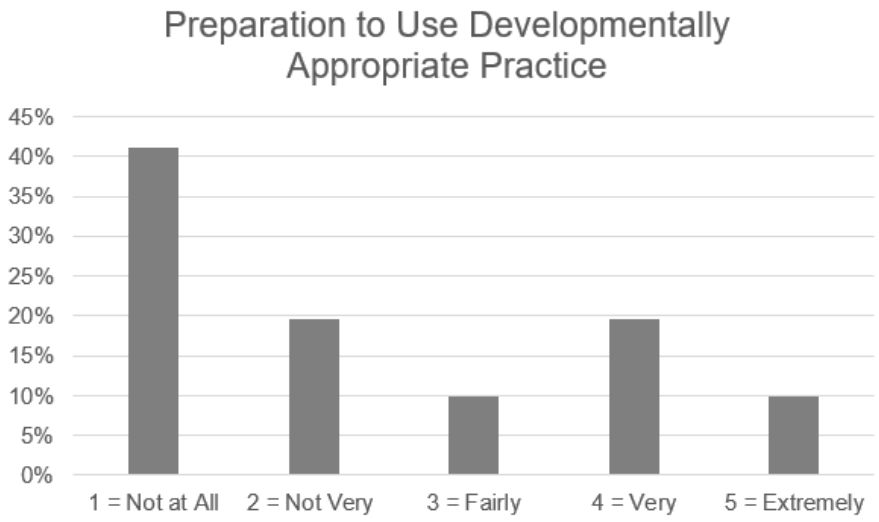


Figure 8 displays the participants' responses to Question 30. Question 30 stated, "I feel an emphasis is put on ensuring I am prepared to use Developmentally Appropriate Practice in my current UPK program." 41% of participants felt that an emphasis was not at all put on ensuring that they are prepared to teach using Developmentally Appropriate Practice in their current programs.

Figure 8

Preparation to Use Developmentally Appropriate Practice in Current Program



Reliability

Cronbach's coefficient alpha (a) is a common method to test for internal consistency. The acceptable limit is usually a minimum of .70; however, a score as low as .60 is acceptable for exploratory research, according to Hair et al. (2014). Table 10 below shows the coefficient alpha for the Teacher Belief Scale.

Table 10
Teacher's Belief Scale

Subscale	a
Inappropriate Activities & Materials	.67
Appropriate Social	.66
Appropriate Individualization	.83
Appropriate Literacy Activities	.57

Correlations

The individual survey questions were analyzed along with demographic variables to determine if there was a relationship between two variables. Below are the details for years of service or experience, years of UPK service or UPK experience, education, and age. Only significant relationships are discussed below. The Pearson correlation coefficient scores can range from +/- 0.00 to 1.00. When scores are within the 0.00 to 0.29 range it is considered to be a small correlation or relationship. Scores falling within the 0.30 to 0.49 range indicate a moderate relationship. Scores between 0.50 and 1.00 designate a strong relationship.

Years of Service

A Pearson correlation coefficient was computed to assess the linear relationship between Years of Service or Experience and UPK Years of Service or UPK Experience. There was a moderate positive correlation between the two variables, $r(49) = .385$, $p = .005$. A Pearson correlation coefficient was computed to assess the linear relationship between Experience and Age. There was a strong positive correlation between the two variables, $r(49) = .100$, $p = .000$. A Pearson correlation coefficient was computed to assess the linear relationship between Experience and Responsive to Individual Differences in Development. There was a moderate positive correlation between the two

variables, r(49) = .304, p = .030. A Pearson correlation coefficient was computed to assess the linear relationship between Experience and Allow Children's Selection of Activities. There was a moderate positive correlation between the two variables, r(49) = .407, p = .003. A Pearson correlation coefficient was computed to assess the linear relationship between Experience and Learn Through Active Exploration. There was a moderate positive correlation between the two variables, r(49) = .379, p = .006. A Pearson correlation coefficient was computed to assess the linear relationship between Experience and Reading Stories Aloud. There was a small positive correlation between the two variables, r(49) = .296, p = .037.

UPK Years of Service

A Pearson product-moment correlation coefficient was computed to assess the relationship between UPK Years of Service or UPK Experience and Age. There was a moderate positive correlation between the two variables, r(49) = .385, p = .005

Education

A Pearson correlation coefficient was computed to assess the linear relationship between Education and Responsive to Individual Differences in Development. There was a small positive correlation between the two variables, r(49) = .286, p = .042. A Pearson correlation coefficient was computed to assess the linear relationship between Education and Development of Self-Esteem and Positive Feelings Towards Learning. There was a moderate positive correlation between the two variables, r(49) = .400, p = .004. A Pearson correlation coefficient was computed to assess the linear relationship between Education and Learn Through Active Exploration. There was a small positive correlation between the two variables, r(49) = .279, p = .048. A Pearson correlation coefficient was computed to assess the linear relationship between Education and Developmentally

Appropriate Lessons and Activities. There was a moderate positive correlation between the two variables, r(49) = .345, p = .013. A Pearson correlation coefficient was computed to assess the linear relationship between Education and Reading Stories Aloud. There was a moderate positive correlation between the two variables, r(49) = .343, p = .015. A Pearson correlation coefficient was computed to assess the linear relationship between Education and Understanding of Developmentally Appropriate Practice. There was a small positive correlation between the two variables, r(49) = .293, p = .037. A Pearson correlation coefficient was computed to assess the linear relationship between Education and Preparation to Teach Early Literacy. There was a small positive correlation between the two variables, r(49) = .292, p = .038. A Pearson correlation coefficient was computed to assess the linear relationship between Education and Preparation to Teach Early Literacy Using Developmentally Appropriate Practice. There was a moderate positive correlation between the two variables, r(49) = .323, p = .021.

Age

A Pearson product-moment correlation coefficient was computed to assess the relationship between Age and Responsive to Individual Differences in Development. There was a moderate correlation between the two variables, r(49) = .304, p = .030. A Pearson product-moment correlation coefficient was computed to assess the relationship between Age and Allow Children's Selection of Activities. There was a moderate correlation between the two variables, r(49) = .407, p = .003. A Pearson product-moment correlation coefficient was computed to assess the relationship between Age and Learn Through Active Exploration. There was a moderate correlation between the two variables, r(49) = .379, p = .006. A Pearson product-moment correlation coefficient was computed to assess the relationship between Age and Reading Stories Aloud. There was a

small correlation between the two variables, $r(49) = .296$, $p = .037$. Table 11 below displays the Pearson Correlations among the TBS scale questions and participants demographics.

Table 11

Pearson Correlation: Demographics

Variable		*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1.	Experience	2.373	1.3851	-											
2.	UPK Experience	1.294	.5402	.385**	-										
3.	Education	1.863	.3475	.233	.219	-									
4.	Age	2.373	1.3851	1.000**	.385**	.233	-								
5.	Responsive to Individual Differences in Development	4.43	.608	.304*	.093	.286*	.304*	-							
6.	Development of Self-Esteem and Positive Feelings Towards Learning	4.69	.547	.184	.115	.400**	.184	.595**	-						
7.	Allow Children's Selection of Activities	4.06	.705	.407**	.164	.034	.407**	.313*	.256	-					
8.	Learn Through Active Exploration	4.65	.522	.379**	.163	.279*	.379**	.677**	.654**	.329*	-				
9.	Developmentally Appropriate Lessons and Activities	2.94	1.434	.233	.178	.345*	.233	.351*	.256	.142	.586**	-			
10.	Reading Stories Aloud	4.62	.567	.296*	.223	.343*	.296*	.648**	.582**	.159	.627**	.446**	-		
11.	Understanding of Developmentally Appropriate Practice	2.98	1.349	.111	.145	.293*	.111	.425**	.371**	.085	.671**	.827**	.523**	-	
12.	Preparation to Teach Early Literacy	3.02	1.407	.160	.150	.292*	.160	.481**	.320*	.120	.581**	.803**	.598**	.875**	-
13.	Preparation to Teach Early Literacy Using Developmentally Appropriate Practice	2.59	1.445	.198	.133	.323*	.198	.388**	.365**	.142	.572**	.789**	.494**	.889**	.880**

*$p < .05$. **$p < .01$

When focused on questions 26 – 28, several demographics emerged with a significant relationship. As shown in Table 12, Experience and UPK Experience were significantly correlated, as were Experience and Age. UPK Experience was also significantly related to age. Education was significantly related to Understanding Developmentally Appropriate Practice (DAP), r(49) = .293, p = .037. Education was also significantly related to Preparation to Teach Early Literacy, r(49) = .292, p = .038. Additionally, Education was significantly related to Preparation to Teach Early Literacy Developmentally Appropriate Practice (DAP), r(49) = .323, p = .021.

Table 12
Pearson Correlation among Variables

Variable	*M*	*SD*	1	2	3	4	5	6
1. Experience	2.373	1.3851	-					
2. UPK Experience	1.294	.5402	.385**	-				
3. Education	1.863	.3475	.233	.219	-			
4. Age	2.373	1.3851	1.000**	.385**	.233	-		
5. Understanding DAP (Q26)	2.98	1.349	.111	.145	.293*	.111	-	
6. Preparation to Teach Early Literacy (Q27)	3.02	1.407	.160	.150	.292*	.160	.875**	-
7. Preparation to Teach Early Literacy Using DAP (Q28)	2.59	1.445	.198	.133	.323*	.198	.889**	.880**

*$p < .05$. **$p < .01$

Questions or items 26 – 28 are important questions to analyze in this dissertation because they aim to explore the main themes of the research questions. Item 26 stated, "I have a deep understanding of developmental practice." Item 27 stated, "I feel prepared to teach early literacy." Item 28 stated, "I feel prepared to teach early literacy using Developmentally Appropriate Practice." Determining the correlations between these variables will further the researchers understanding of some of the contributing factors to teachers' perceptions of their preparedness. Several correlations were found when analyzing items 26, 27, and 28 with the remaining survey items.

Understanding Developmentally Appropriate Practices

Understanding Developmentally Appropriate Practices was item 26 on the TBS. It correlated significantly with Preparation to Teach Early Literacy (Q 27) and Preparation to Teach Early Literacy Using Developmentally Appropriate Practices (Q 28). It also correlated significantly at the <.01 level with Importance of Teacher Observation (Q 3), Responsive to Individual Differences in Interest (Q 5), Responsive to Individual Differences in Development (Q 6), Development of Self-Esteem and Positive Feelings Towards Learning (Q 7), Allow Children to Plan Activities (Q 9), Learn Through Active Exploration (Q 11), Learn Through Interaction with Other Children (Q 12), Importance of Teacher Movement During Small Groups (Q 17), Developmentally Appropriate Lessons and Activities (Q 19), Reading Stories Aloud (Q 22), Use of Functional Print (Q 23), Incorporating Functional Print (Q 24), Experiment with Inventive Spelling (Q 25), Preparation to Use DAP in Pre-Service Training (Q 29), and Preparation to Use DAP in current program (Q 30). There were significant correlations at the .05 level between Understanding Developmentally Appropriate Practices (Q 26) and Whole Group Same Activity (Q 16) and Teaching Using Flashcards (Q 20). The significant relationships between items 26 and Students Work Silently Alone (Q10), Whole Group Same Activity (Q 16), and Single Letter Instruction (Q 18) were negative. All other significant relationships were positive.

Preparation to Teach Early Literacy

Preparation to Teach Early Literacy was item 27 on the TBS. It correlated significantly with items Understanding DAP (Q 26) and Preparation to Teach Early Literacy Using Developmentally Appropriate Practices (Q 28) on the teacher survey. Additionally, there were significant correlations at the <.01 level between Preparation to

Teach Early Literacy (Q 27). There were significant correlations at the .05 level between Preparation to Teach Early Literacy (Q 27) and Development of Self-Esteem and Positive Feelings Towards Learning (Q 7) and Whole Group Same Activity (Q 16). The significant relationships between items 27 and Students Work Silently Alone (Q 10) and Whole Group Same Activity (Q 16) were negative. All other significant relationships were positive.

Preparation to Teach Early Literacy Using Developmentally Appropriate Practices

Preparation to Teach Early Literacy Using Developmentally Appropriate Practices was item 28 and correlated significantly with items Understanding DAP (Q 26) and Preparation to Teach Early Literacy (Q 27). Additionally, this analysis of this item with the other TBS items showed a significant relationship at the <.01 level with Importance of Teacher Observation (Q 3), Responsive to Individual Differences in Interest (Q 5), Responsive to Individual Differences in Development (Q 6), Development of Self-Esteem and Positive Feelings Towards Learning (Q 7), Allow Children to Plan Activities (Q 9), Learn Through Active Exploration (Q 11), Learn Through Interaction with Other Children (Q 12), Whole Group Same Activity (Q 16), Importance of Teacher Movement During Small Groups (Q 17), Developmentally Appropriate Lessons and Activities (Q 19), Reading Stories Aloud (Q 22), Use of Functional Print (Q 23), Incorporating Functional Print (Q 24), Experiment with Inventive Spelling (Q 25), Preparation to Use DAP in Pre-Service Training (Q 29), and Preparation to Use DAP in current program (Q 30). Significant negative relationships were shown between item 28 and Importance of Worksheets (Q 13), Importance of Flashcards (Q 14), and Whole Group Same Activity (Q 16). All other significant relationships were positive. Table 13 documents the Pearson Correlation Coefficient for each combination.

Table 13

Pearson Correlation among Variables

Variable	*M*	*SD*	Q26	Q27	Q28
Q26. Understanding DAP	2.98	1.349	-		
Q27. Preparation to Teach Early Literacy	3.02	1.407	.875**	-	
Q28. Preparation to Teach Early Literacy Using DAP	2.59	1.445	.889**	.880**	-
Q2. Importance of Standardized Group Tests	2.04	.894	0.034	-0.001	-0.003
Q3. Importance of Teacher Observation	3.61	1.097	.441**	.446**	.439**
Q4. Performance on Worksheets and Work Books	2.57	.878	0.162	0.120	0.094
Q5. Responsive to Individual Differences in Interest	4.31	.678	.379**	.413**	.400**
Q6. Responsive to Individual Differences in Development	4.43	.608	.425**	.481**	.388**
Q7. Development of Self-Esteem and Positive Feelings Towards Learning	4.69	.547	.371**	.320*	.365**
Q8. Allow Children's Selection of Activities	4.06	.705	0.085	0.120	0.142
Q9. Allow Children to Plan Activities	4.12	.887	.504**	.415**	.382**
Q10. Students Work Silently Alone	2.25	.868	-0.115	-0.086	-0.250
Q11. Learn Through Active Exploration	4.65	.522	.671**	.581**	.572**
Q12. Learn Through Interaction with Other Children	4.49	.579	.602**	.479**	.533**
Q13. Importance of Worksheets	1.98	.836	0.017	0.102	-0.090
Q14. Importance of Flashcards	2.84	.987	0.013	0.146	-0.060
Q15. Importance of the Basal Reader	2.10	.944	0.206	0.209	0.030
Q16. Whole Group Same Activity	3.24	.981	-.322*	-.311*	-.468**
Q17. Importance of Teacher Movement During Small Groups	4.41	.606	.573**	.600**	.586**
Q18. Single Letter Instruction	3.53	.946	-0.023	0.007	-0.159
Q19. Developmentally Appropriate Lessons and Activities	2.94	1.434	.827**	.803**	.789**
Q20. Teaching Using Flashcards	2.78	1.222	.301*	.433**	0.187
Q21. Forming Letters Correctly	2.57	.944	0.040	0.127	-0.045
Q22. Reading Stories Aloud	4.62	.567	.523**	.598**	.494**
Q23. Use of Functional Print	4.02	.883	.605**	.563**	.555**
Q24. Incorporating Functional Print	3.37	1.264	.755**	.805**	.765**
Q25. Experiment with Inventive Spelling	3.73	1.078	.670**	.742**	.722**
Q29. Preparation to Use DAP in Pre-Service Training	2.18	1.438	.713**	.670**	.729**
Q30. Preparation to Use DAP in current program	2.37	1.442	.806**	.746**	.843**

*$p < .05$. **$p < .01$

Findings from Qualitative Data (Phase 2)

Phase 2 of this study consisted of two focus groups that provided the qualitative data that allows for more insight into the thoughts and feelings of the participants. As a reminder, this is a sequential explanatory mixed-methods study collecting data from educators using the Teacher Belief Scale (Charlesworth et al., 1993) and focus groups. Participants of the focus group were chosen based on their willingness to participate as indicated on the TBS. Eight teachers indicated they were willing to participate in a focus group. There were two separate focus groups. Each focus group had four participants. Focus group 1 had participants 1-4. Focus group 2 had participants 5-8. All participants were female. For the purpose of sharing the findings of this study, the data from focus group 1 and 2 will be presented together. Table 14 displays the demographics shared by the focus group participants.

Table 14
Participants Demographics Phase 2

Participant	Years of Service	UPK Years of Service
P1	3	5
P2	5	5
P3	6	15
P4	5	5
P5	1	1
P6	1	3
P7	6	10
P8	5	30

According to Creswell (2013), there are multiple strategies or procedures researchers can use for qualitative validity. For this study triangulation was used as the procedure. “This process involves corroborating evidence from different sources to shed light on a theme or perspective” (p. 251). Triangulation of the qualitative research was

done through the use of a researcher's notebook, a recording of the researcher's initial thoughts after the focus groups, and transcription of the focus group discussions. The focus group discussions were recorded with permission from the participants. The recordings were transcribed for analysis as one transcript. The transcript contained 10,717 words. The most commonly used words were developmentally (27), school (27), classroom (25), practice (23), early (21), and prepared (21).

As a reminder, thematic deductive coding (Crabtree & Miller, 1999) was used to analyze the transcriptions of the focus group question responses. This requires the researcher to begin with themed categories or predetermined codes. The themed categories for this study are based on the aims of the research questions, the TBS data, and the focus group semi-structured questions (See Appendix D). The predetermined themed categories are: Teacher Beliefs on Developmentally Appropriate Practice, Teacher Beliefs on Preparedness, Teacher Beliefs on Training, and Teachers Insight on Improvement. Sub themes emerged through the analysis of the larger themes. The data is presented through an exploration of each of these themes and sub themes.

Teacher Beliefs on Developmentally Appropriate Practice

Understanding of DAP

Participants began their conversation responding to the question, "What is your definition of Developmentally Appropriate Practice (DAP)." Although participants initially answered that they were able to define DAP, there was no clear or consistent definition given. The participants all used phrases that imply uncertainty, such as "I think maybe…" (P1), or "I kind of want to say…"(P3). Furthermore some of their definitions contained parts of DAP but not all of the components. "I think it means where the

students can learn in like their safest space, like what makes them feel comfortable, and like ready to be part of the conversation, rather than like forcing them to learn something kind of more just what they're ready to learn" (P4). Teachers were able to have discourse around DAP being based in a child's developmental stages. They were also discussing knowing the term but not being able to answer the question fully. As the conversation continued the participants began to state that they could not define the term. They came to the realization that although they originally thought they were able to, they could no longer say with certainty that they had a deep understanding of what DAP is. Teachers discussed learning the term and hearing it used in pre-service classes and professional development, but not developing enough of an understanding to apply this knowledge in their classroom settings.

Importance of DAP

Although DAP is a word teachers hear often, there was a spectrum of answers as far as how important DAP is in teaching early literacy in UPK. Three participants felt that although DAP should guide the curriculum it can be limiting to how they teach their students early literacy skills. They believed that certain techniques such as rote memorization of letters and ditto practice sheets were needed to prepare their students for Kindergarten. Teachers cited the disparity between the expectation of Pre-K and Kindergarten as the reason. "Yeah, I'm sorry it's a no for me. I'm currently teaching in Pre-K and I've taught in Kindergarten. It came as a shock to me that we're technically not supposed to teach sight words or letters, because when I'm comparing it to the curriculum for a kindergarten class, they're only a year apart. But yet they're expected to write like full sentences and be able to sound each word out and tap it out" (P6). One participant

responded that DAP still includes exposure to letters and letter sounds, but in a way that is appropriate for 4-year-old students (P2). The teachers responded that this had never been their understanding of DAP, therefore they felt that it was not important to stay within its parameters.

Other teachers felt that DAP was incredibly important and an effective tool for having conversations with school administration around curriculums and assessments. These teachers felt pressured by their school administration to teach using developmentally inappropriate methods. Using DAP guidelines, they were able to have discourse around a different way for the administration to evaluate them as well as assess the students. Teachers also felt that DAP held them accountable as far as remembering their students are young children and developing lessons with that in mind.

Teachers also felt that their individual journey to discover more about DAP led them to connect with other teachers. This being an integral part of developing their feelings of preparedness to teach DAP and will be discussed further later in this chapter.

Use of DAP in the Classroom

A common occurrence during the focus group discussions were teachers learning from their peers' responses. Teachers with a general understanding of DAP would respond to questions providing new information or ideas to the other participants. This happened multiple times when the conversation centered around classroom use applications of DAP. Participant 2 shared how she fosters early literacy skills in her classroom using DAP, “So in my classroom daily read alouds are one way, a print-rich classroom, and exposing them to letter sounds through play in the different centers. Also just by modeling. How to blend sounds together, you know, to demonstrate very early

reading concepts." Participant 7 shared learning center ideas and explained in detail how she creates puzzle games with the letters of the students' names. This supports letter identification skills during their "All About Me" unit. Participants wrote down these ideas and expressed appreciation for them.

Unclear or uncommunicated guidelines were also mentioned. Five of the participants discussed the different expectations administration has had for their program. The consensus being a lack of consistency. This led to participants stating feelings of uncertainty or being overwhelmed at using DAP correctly. These feelings lead participants to revert back to "inappropriate" methods as per their upper grade training where they felt they were effective. Teachers expressed feelings of doubt in their ability to effectively use DAP in the classroom. "I was very worried, like am I doing what I'm supposed to be doing? Am I doing the right thing? And is it? Are the kids responding well to it?" (P6).

Teacher Beliefs on Preparedness

Feelings of Preparedness

As the topic of feeling prepared became the focal point of the conversation, the participants varied in their current feelings of preparedness to use DAP to teach early literacy. However, all of the participants expressed feeling unprepared in their first year of teaching UPK.

"But like you, for my first year in UPK, I was like I never taught Pre-K. I was like, oh my God! I don't know how to do this. Even though I've been teaching for almost 20 years. At that point I created something, and then every year you modify it. You reflect to see what works and what didn't work. So I didn't feel prepared starting. I don't think I'm ever

going to be one hundred percent. So I'll try to keep on learning" (P8). Participants' experience level teaching UPK varied in the focus groups. The more experienced teachers felt that at this point in their career, they had a general understanding of incorporating DAP into their lessons and activities. They felt that this came with time and support from other teachers. "The more I plan and have another teacher look it over, I'm really becoming, you know, well versed. I'm reading it over and over and over. And that's how I personally learned how to do it like I understand. Then the teacher across the hall from me will tell me their opinion on, you know the spectrum of the development and where my lesson falls" (P8).

Participants shared feelings of frustration and how challenging it is to develop DAP activities for their students. Experienced teachers discussed the difficulty of changing the way they approached teaching after so many years of teaching older students. New teachers shared the challenges of developing lessons in a manner that they were not taught to do in their schooling. An additional challenge was the rate at which teachers received feedback. "I think one of the biggest problems is, you think you found something. You think it's working, and then someone comes to say that it's not allowed, and then you have to change your whole plan again. By the time you really get it set up and running. It's like January, and you've lost all these months in your classroom because you're just trying to learn from what other people are doing. It's trial and error in the classroom without an actual plan" (P1).

Teachers discussed receiving low scoring evaluations and struggling through unclear expectations and guidelines of what lessons should be like, until they determined what their administration was asking for. There was a lengthy discussion on the effects of

the uncertainty on the mental health of the teachers. “I feel the pressure on myself to get them to where they should be for the following year” (P5). The teachers shared sentiments of feeling deeply responsible for their students and noted how their confusion may be hindering their effectiveness.

Methods of Preparation

Teachers that expressed confidence in using DAP shared the methods they utilized to better prepare themselves throughout the conversation. As mentioned earlier in this chapter participants felt the support of an experienced teacher was a significant contributing factor towards their current feeling of preparedness. Participants shared that having an experienced UPK teacher to model from was immensely helpful in their learning of how to use DAP. “But, like I said this, my eleventh year, so I do feel prepared now, even though every year I'm learning new things because it's always changing. But the only thing that really prepared me was, I was lucky enough to be a para for 3 years before I was a teacher. So I got to watch an amazing teacher, and I learned from her. And now I feel prepared” (P7). Participants discussed in depth what the support of an experienced teacher was for them. This varied from inter-visitation, to the sharing of materials, to simply having time for conversations around curriculum planning. Participant 1 stated, “I was going to say. I think most of my learning for my classroom planning has come from talking with other teachers, not from what they give me, more conversation with my grade team or from other schools”. Participants noted the challenges in finding the time to visit or have discussions with other teachers. There are also locations that only have one UPK classroom on site. Participants expressed difficulties in planning visits to other schools at other locations.

Social media groups were mentioned as another tool that inspired the development of new lessons or activities in the classroom. Teachers felt that having access to visuals from other centers or classrooms helped them decide on what printed vocabulary to add to their own centers. Teachers are able to write questions in these groups as well as seek advice on how to incorporate DAP. Other participants expressed caution at using these groups as the only source of guidance. It is hard to determine if members of these groups are at a level where they can provide accurate information. It was also mentioned that their location may interpret DAP differently. Therefore what is allowed in one school may not be allowed in another.

Ultimately guesswork or trial and error was the most common method shared of developing an understanding of DAP. Teachers would develop lessons and activities and receive feedback from their administration, instructional coaches, or other teachers. They reflect on this feedback and adapt their lessons accordingly. Experienced teachers stated their increased understanding and feelings of confidence developed with the passage of time and with trial and error. Guilt was expressed at the students assigned to their classrooms in the beginning years of their UPK teaching. New teachers expressed feelings of guilt and sadness at the thought of how their lack of knowledge is impacting their current students.

Teacher Beliefs on Training

Pre- Service Training

Participants repeatedly expressed their dissatisfaction with their pre-service training. There were a few main issues that were addressed at different points in the participants' conversation. The first issue put forth was the focus of classes being on

theorists but lacking in practical applications for the classroom. “I feel like in my program, in school I learned a lot of foundations and theories, and then, when I became a teacher, it was like a smack in the face, and like I didn't feel prepared for what they taught me” (P4).

In addition, participants felt that their pre-service classes focused on an “ideal” classroom setting with “ideal” students. There was a lack of preparation for situations common in early childhood classrooms such as ENL students, or students with disabilities. Teachers felt unprepared to address emotional outbursts or children that were not typically developing. This made it increasingly hard for them to develop early literacy lessons. “In school you learn a lot of acronyms and things that you don't actually use in the classroom. It's like that's almost teaching you a fake child. Like you have to get into your classroom and kind of see what kids you have and not learn it from your textbook” (P7).

New teachers had more insight into pre-service training as they have more recently completed their programs. They discussed how their specific degree program only had one or two classes on teaching in Pre-K classrooms. Their Early Childhood degree qualifies them to teach from birth to second grade. They felt that most of their coursework focused heavily on kindergarten, first, and second grade. The class that focused on students aged four and under was focused on the stages of development. Teachers discussed mentions of DAP and Pre-K curriculums when learning about these stages. The participants remember professors adding comments about differentiating first grade literacy activities to be appropriate for Pre-K without showing examples. “I think I had one teacher in all of my schooling that was trying to make things more fun and less

sit down for early childhood. And even at that it was a math lesson. And so it wasn't, really, it was like a multiplication lesson. So it wasn't even really, for early childhood. I feel like they were more just this is how the kids come in versus the upper grades, and this is where they do more differentiating" (P1). The participants all expressed the feeling that their classes did not prepare them to develop lessons with DAP guidelines in mind.

Current UPK Location Training

Discussion around the participants current UPK training differed immensely depending upon their location. All but one of the participants had attended a professional development (PD) designed for UPK. Participant 5 is in the 7th month of her first year of teaching as well as her first year of UPK. She has not received professional development yet. She stated, "I don't think I was offered any PDs yet at my school. That's been a little hard, because I feel like since I came from more of a theory based background. I didn't get to. I was kind of like thrown into it. So it was a lot harder." What differed drastically for the participants who attended PD was the discussion surrounding DAP at these sessions. Participants discussed again hearing the term with no real definition of what it is. "They went through the literacy standards, and then they mentioned how site, word, exposure is not developmentally appropriate. So I feel like it is

that terminology was part of the conversation, but it was never explained as to why" (P8). They also shared being reminded of the stages of development without lessons that matched these stages.

An additional issue was teachers feeling professional developments were focused on setting teachers up to score highly on the Early Childhood Environment Rating Scale (ECERS). ECERS is an evaluation tool used by the NYC Department of Education to

rate the health, safety, and learning environment of UPK locations. Participants felt that the provided rules were not deeply explained. They did not help to build an understanding of the UPK curriculum. In some cases the rules provided created fear and uncertainty in the teachers.

Professional development sessions were also discussed as providing support for participants in two ways. Teachers felt that the breaks and lunches at these sessions allowed them to connect with other UPK teachers. These conversations and connections were important in the sharing of ideas and building the confidence of participants. Participant 5 discussed a PD she attended that had time allotted specifically for practical applications of DAP in early literacy. It was the only PD she had been to that had this, and it took place in her third year of teaching UPK. She shared how impactful that time was. She also shared she had not had another PD with this component since then.

Participants mentioned an online platform available to them, ProTraxx. According to participants this online training platform had courses available on DAP. Three participants were allowed to use ProTraxx as optional training during their schools required professional development time. Two participants had never heard of the platform. The remaining participants were familiar with ProTraxx but were not given time to use it. Participant 8 shared feelings of disappointment with the ProTraxx training, "I remember on ProTraxx there was assigned reading that they sent us to just read one year. Just read it together every Monday, and it was the most pointless thing I think I've ever done. There was no one who gave us the actual ideas in it. It was just. I don't know. We read it every Monday. One chapter, and that was like our PD for the year. There was no putting it into the classroom. Just read it, summarize it."

Teachers Insight on Improvement

The participants in this study all agreed that the major issues preventing them from feeling prepared to teach early literacy was inconsistency, a lack of information, and ultimately practice. Participants shared feedback on ways to improve training for using DAP to teach early childhood literacy.

Pre-Service Ideas for Improvement

Participants suggested ideas for improving pre-service training. One suggestion was to create a class at the university level that focused specifically on UPK and DAP using the current units of study. Teachers wished that they had been able to deeply explore DAP. They discussed the benefit of being able to practice developing lessons with the guidance of an experienced professor. They also wished that they had been able to see examples of UPK classrooms and activities in their classes. “You know how we know that kids come to us at all different levels. You know, regardless of what grade you teach, I feel like there's scaffolds. That maybe could be better defined for our age group for 4-year-olds. How to determine what the child is ready for in terms of literacy. Then maybe even defining the better strategies and tools to use to move those kids along. You know, like when I taught in the other grades, we knew what to do to move your child levels. You know ‘m’ to an ‘n.’ What do you do to move from non-reading to pre reading, or you know, maybe even just better define what the expectations are, and clearer terms for the Pre-K child” (P3).

Participants discussed the importance of requiring hours of observation or student teaching in a UPK classroom to complete their early childhood degrees. They expressed that this kind of firsthand experience would have better prepared them to teach UPK. “I

don't know if this is realistic, but I feel like, maybe a more hands on approach with more experience, like more actual real-life experience. Less sitting and listening to acronyms and different things that they're going to change next year. Like, you know, getting a real experience with a real child. Or you know, having these kids that aren't like textbook children" (P7).

Current Program Ideas for Improvement

Participants shared ideas for improving their professional development and current program training. Participants discussed UPK programs having a training or orientation before teachers begin the school year. They discussed being able to see examples of DAP and possibly ask administration questions about it. Some teachers expressed having an early childhood expert run the training and require the program's administration to attend as well. This would ensure all parties had the same knowledge base at the beginning of the year.

Participants also shared the common desire for clear and consistent guidelines in using DAP. This is something they believe should be provided before they begin teaching in the classroom.

Another suggestion for improvement was to allow time in the teachers' schedules for classroom inter-visitation as well as common planning time with other UPK teachers. "I remember when I first started, I wanted inter-visitations. I think there's value in that because when I look or research online, I'm on Facebook groups and all the pictures are worth 1,000 words. And when you go into someone's class, we always take a picture. That's a great idea. That's a great idea. So inter-visitations in-house, and also in a school where it's like a model school. I think there's value in that. Unfortunately, when I started,

we went to the pandemic, so I never actually got to do that" (P1). Teachers felt that the sharing of ideas and activities consistently and frequently throughout the school year would allow them to build their understanding and adapt lessons more quickly and effectively.

CHAPTER 5

Discussion

Early childhood education is an ever changing world with new curriculums, initiatives, and programs continuously being introduced. The classroom teacher who is providing essential early literacy instruction is the constant that navigates through it all. This study aimed to explore these teachers beliefs around their preparedness to teach early literacy using Developmentally Appropriate Practice. This sequential explanatory mixed-methods study utilizing the Teacher Belief Scale (Charlesworth et al., 1993) and focus groups was used to explore the following research questions:

1. What are Universal Prekindergarten teachers' perceptions of their preparedness to teach early literacy skills using the New York City Department of Education's developmentally appropriate guidelines?
2. What constitutes a framework for effective pedagogical development in early literacy using developmentally appropriate guidelines?

A number of findings were expressed through this work. Larger themes emerged through both the quantitative and qualitative data. These themes include Beliefs Around DAP, Preparedness to Teach Early Literacy, and A Way Forward (Suggestions for Improvement). This chapter aims to interrogate these findings and themes by exploring their connections to the extant literature and related theory.

Beliefs Around DAP

As previously stated, Developmentally Appropriate Practice is defined by the National Association for the Education of Young Children (NAEYC) as a method of teaching that meets children on their levels; it is a different approach to early literacy

instruction that requires a unique lens to fully understand and master as a teacher (not a skills-based packaged curriculum). It is a framework designed to promote young children's optimal learning and development. It promotes exploration and positive caring relationships. It asks the educator to look at the individual student's level and to consider needs and culture. Teachers create large group explorations, activities, and small group center based activities to support Pre-K students in the building of their early literacy skills. These activities are also aligned with the classroom's current investigation or unit theme.

Teachers held many beliefs around DAP. Results from the TBS showed that teachers' understanding of DAP varied almost equally across the spectrum of a deep understanding to no understanding at all. The varied responses of their level of understanding in itself is a cause for concern. DAP is essentially the core tenant from which UPK instruction is based on. The data from this study shows that only a small percentage (24%) of the participating teachers feel that they have a deep understanding of DAP.

The results from the TBS scale in this study were similar to the results Kim found in 2011. Kim found that pre-service teachers held strong beliefs about DAP. However, there was an imbalance between pedagogical knowledge and subject knowledge. Kim explained, "although some teachers strongly supported DAP, they might face difficulties in teaching specific subjects in developmentally appropriate ways because their beliefs about DAP were focused on how to teach rather than what to teach" (p. 16). In this study teachers expressed their belief that DAP is important. The TBS results also showed that the majority of teachers rated the correct components of DAP as important. However,

they did not feel prepared in the practical applications of DAP in the classroom impacting pedagogy.

These findings were further explained by the conversations that took place during the focus groups of this study. Teachers are aware of the importance of DAP and its components but do not feel that they have a deep enough understanding of DAP to effectively create lessons and activities for students. Teachers expressed feelings of confusion and conflicting information of guidelines. There was discussion around hearing the term Developmentally Appropriate Practice without a deep explanation of what that would look like in the classroom throughout teacher training. The focus group participants similarly to the TBS scale data varied in their perceived understandings of DAP. At the beginning of the focus group conversations some teachers expressed confidence in having an understanding of DAP. As the conversation progressed into topics such as practical applications and classroom instruction, teachers' confidence wavered. Some of the teachers that had previously expressed confidence now felt that they lacked a true mastery of DAP. Teachers were able to voice that although they knew the stages of development and the general ideas of what DAP should be, they lacked the understanding, ability, and confidence to effectively implement DAP to the best of their ability as educators. Furthermore, they would have rated their understanding differently on the TBS scale if they were to take it again.

Preparedness to Teach Early Literacy

The findings pertaining to teacher's feelings and understanding of DAP followed with further investigation into teacher feelings of preparedness. Previous research demonstrated the importance of teacher preparation. Teachers who were better prepared

during their pedagogical course work as well as their field experience became more effective teachers (Darling-Hammond et al., 2005). Teachers' levels of confidence and feelings of preparedness have been shown as indicators for effectiveness (Henson, 2001). As previously discussed, perceptions of preparedness are rooted in Bandura's theory of self-efficacy. As a reminder, teacher self-efficacy refers to a teacher's belief in her or his capacity to execute behaviors necessary to produce specific results (Friedman & Kass, 2002). Henson (2001) found that the self-efficacy beliefs of teachers have been correlated with positive teaching behaviors and, therefore, student outcomes. Bandura's (2010) own research found that teacher's beliefs of their efficacy to create learning environments affected the environments they did create. This study aimed to take this research a step further by exploring if teachers feel prepared to teach using DAP in UPK.

The TBS scale in this study asked teachers to rate their level of preparedness to teach early literacy and then to rate their level of preparedness to teach early literacy using DAP. The data showed that teachers understanding of DAP, feelings of preparedness to teach early literacy, and feelings of preparedness to teach early literacy using DAP varied proportionately from very prepared to not at all. Considering the value of early literacy these findings are of paramount importance. They imply that large numbers of teachers are not confident and therefore less effective in such a foundational time for young readers. There were several factors that correlated to a teacher's feelings of preparedness. There was a significant correlation with years of experience teaching UPK. The participants in the focus group conversations expressed the idea of becoming more confident with years as they struggled through the process of trial and error to learn how be effective with DAP. Many mentioned the effects this may have had on their

students at the beginning of this cycle. Participants' education was also correlated to their understanding of DAP. Focus group discussions shed light on these findings. Teachers remembered hearing the term Developmentally Appropriate Practice but felt their training lacked practical classroom skills and that they did not develop a deep understanding of DAP.

This study also examined teacher's perceptions around their feelings on their preservice learning and current UPK programs or professional developments ability to prepare them for this work. Fifty-one percent of teachers in this study felt that their preservice training did not at all prepare them to teach early literacy using DAP. Forty-one percent of teachers felt that their current program training did not at all prepare them to teach early literacy using DAP. The lack of systematic and quality training has led to the necessitation of trial and error as the method through which teachers are preparing themselves to teach. Thus leaving the effective instruction of the most foundational literacy skills up to chance.

A Way Forward (Suggestions for Improvement)

A major theme of the focus group discussion of this study revolved around "an ideal world." A world where teachers felt prepared to teach. The participants of the focus group became very animated when they were asked how they think teachers should be prepared. The terms "in an ideal world" and "this would never happen but" were often used to preface the idea that teachers should be properly trained. The hopes of these teachers have many similarities to previous research. Otaiba et al. (2010) found that pre-service teachers can benefit from supported, structured, tutorials as well as gaining

language and reading instructional knowledge through their coursework and field experiences.

Teachers suggestions largely focused on practical experience before finishing their teaching degree. They felt that their instruction should go beyond theory and allow them to explore DAP firsthand. They expressed wanting to be able to design lessons using DAP with feedback. In addition to feedback, teachers wanted exemplar lessons and activities. Having found classroom inter-visitation to be helpful in preparation, teachers felt that examples in their pre-service training would have given them a better understanding of how to create their own. This also includes the amount of time student teaching. Teachers expressed a desire to have student taught through more of their schooling. Simply put, they felt half of one semester in a UPK setting was not enough, assuming they were placed in a UPK setting at all.

The conversations shifted from pre-service learning to the training teachers would like to receive in their current programs. The timing of professional development was a key factor. Teachers expressed the want for training on DAP to take place before their school year begins. This was true for new teachers beginning their teaching career and veteran teachers beginning their UPK journey. When training takes place in the middle of the year, teachers have already begun the trial and error cycle, sometimes feeling more lost than when they started.

Other ideas for methods of preparation mirrored those of pre-service training. Teachers wanted models, concrete examples, and consistent and expedient feedback from their supervisors and administration. Teachers expressed that feedback given inconsistently or towards the end of the academic year was not helpful in developing their

practice. Often times feedback teachers received from administration was based on a unit that had already been completed. Without consistent and expedient feedback teachers expressed the fear of making repeated unknown errors.

Strengths and Limitations

In this study the qualitative data extensively leveraged the existing quantitative data set. The powerful conversations that took place during the focus groups added depth to the statistics that would not have been available otherwise. The TBS scale results showed that teachers feelings of confidence in their understanding of DAP varied. However, the items on the TBS scale that measured DAP in the classroom showed teachers had an understanding of best practices such as having a print rich environment. It also showed teachers felt similarly about items that are not considered best practices such as the use of flash cards to learn letters. This data on its own implies conflicting results. Through further investigation using the focus groups, teachers explained that what they thought they understood as DAP was not clearly defined. They ultimately discussed using practices that they were unsure were correct as they moved through a process of trial and error. They felt that if they took the TBS scale again they would report feeling less confident overall in DAP. The addition of the qualitative data gave meaning to its numeric counterpart. In this way the mixed method design of the study was its strength.

This study had limitations as well. Participant demographics is one of the limitations. Participants did not represent the demographic makeup of teachers in the district, with respondents being predominantly Caucasian(61%). They were predominantly female, at 90%, and were mostly located in Queens, at 82%. The

participants have a very specific lens through which they view DAP and early childhood literacy education as white women. The addition of more participants from other races and locations may have offered even more insight as to how teachers feel as well as insight into ways teacher would like to see training improved.

The number of participants was also a limitation. Recruitment through social media UPK teacher groups garnered the responses of 51 educators. This is a small number in comparison to the thousands of educators in New York City.

Implications and Suggestions

In May of 2023 the mayor of New York City announced changes to public school curriculums. One major change was the new curriculum for UPK called The Creative Curriculum (The Office of the Mayor of NYC, 2023). While this curriculum purports itself to be based on best practices, it will again be the classroom teacher that will have to navigate incorporating DAP, learning a new curriculum, and caring for their young students in tandem.

Previous research has shown the difficulty, time, pressure, and complexity of incorporating DAP for early educators (Parker & Neuharth- Pritchett, 2006). With optional training and no clear path for preparation, the cycle of trial and error seems destined to continue. The results of this study with the support of previous research discussed can be used as a starting point for both universities and school buildings to ensure their teachers feel prepared to teach early literacy using DAP with the following suggestions.

Pre- Service Programs

Early childhood degree programs should feature coursework directly connected to curricula and early literacy instruction. This class can specifically focus on early intervention strategies and UPK skills. Delving into the theories of development and instruction, these types of classes can go further by asking its students to practice creating lessons and activities. Students can be provided with clear definitions and guidelines of DAP as well as model examples of how it is used effectively.

Pre-Service training ought to include time spent in a UPK setting. This allows new educators to see DAP in use. Pre-service teachers can be given the opportunity to practice teaching early literacy using DAP with clear and consistent feedback from a supervisor. After entering the classroom, Nahal (2010) studied teachers' reactions to the realities of the classroom. The findings suggest that teacher preparation programs need to provide teachers with skills to meet the demands of the program. Participants in this study expressed a similar need of having experience with the use of DAP to meet the demands of the UPK program.

Current Teaching Programs

As seen in the demographic data of this study, not all teachers entering UPK are new to teaching. Educators with varying levels of teaching experience are expressing difficulty in using DAP to teach early literacy. Current UPK programs in public schools and in NYCEECs can provide teachers with ongoing professional development to better prepare them to teach and therefore support them in being effective teachers, as they transition to UPK and/or new curricula within their schools.

Teachers can be provided with some of the training before the start of the academic year. This training contains similar components to that of a pre-service course

on DAP. This training can include clear definitions and guidelines of DAP as well as models and examples of what this work would look like in a classroom. Teachers can explore hands on examples in this training and can practice creating their own activities based on a UPK unit. Teachers can also be given the opportunity to make connections with other educators creating a network to support them outside of their school building.

As the academic year progresses schedules can allow for time for teachers to visit model UPK classrooms. Teachers can ask questions as they observe best practices. Inter-visitations can begin at the beginning of the year and can be scheduled for pre-determined intervals throughout the year. This will also promote the sharing of ideas and sense of community.

Recommendations for Future Research

To help better prepare UPK educators this research can be expanded in multiple ways. Exploring the perceptions of educators using DAP in different locations can add to the depth of knowledge around ways to better prepare them. This would be beneficial in other areas of New York City where participation in this study was low as well as in other cities where programs similar to UPK are beginning.

Future research can explore a more diverse demographic representation of educators and investigate their perceptions of DAP. Educators with different cultural experiences and different lenses through which they view the world can offer a different view on teacher preparation. This insight can affirm or be a welcome addition to the suggestions for preparation that emerged through the analysis of this study.

Finally, putting this studies suggestions into practice by piloting a professional development series on DAP using UPK that included the above suggestions would allow

for the expansion and future development of this consequential work. Prepared teachers are effective teachers. Ongoing research provides insight that can continue to support these educators in ensuring they have a strong foundation and supportive contexts in pedagogy development to teach young learners.

Appendix A Participant Letter

January 2023

Hello Universal Pre-Kindergarten Educators,

My name is Tara A. Sokol. I am a doctoral student at St. John's University in the Literacy Program. I am kindly asking for your participation in my research project titled: Teacher Perceptions of Their Preparation to Teach Early Literacy Skills Using Developmentally Appropriate Practices in Universal Pre-Kindergarten Programs. The goal of this study is to better understand teachers' feelings and perceptions surrounding early literacy and Developmentally Appropriate Practice.

The first phase of the study involves completing an online survey about teachers' perceptions of Developmentally Appropriate Practice. The survey should take approximately 15- 20 minutes. Participation is completely voluntary. Identifying information will only be seen by the researcher. Responses will be kept anonymous. You will have an option to volunteer for the second phase of the study. This will be a virtual small group interview that will deepen the researcher's understanding of your perceptions. Not all participants will be asked to participate in the interview. If you are asked to participate, the interview should take approximately 1 hour. Identifying information will only be seen by the researcher and responses will be kept anonymous.

If you would like to participate, please read the letter of consent attached before beginning the survey.

Here is the link to the survey: https://forms.gle/iGsVm2QHxEjj8FFA9
Please email me directly with any questions at Tara.Sokol11@stjohns.edu
Thank you in advance for your time.

Best wishes,
Tara A. Sokol
PhD Candidate
St. John's University

Appendix B Letter of Consent

You are invited to take part in a research study to gain insight on your thoughts on using Developmentally Appropriate Practice and early literacy. This study will be conducted by Tara A. Sokol as part of her doctoral dissertation at St. John's University. Her faculty sponsor is Dr. Evan Ortlieb, Ph.D, St. John's University School of Education.

If you agree to be in this study, you will be asked to complete one survey about your perceptions on using Developmentally Appropriate Practice. In addition, you will be asked if you are interested in taking part in a small group virtual interview. This will be at a later date via Zoom. The interview aims to deepen the researchers understanding of your perceptions on Developmentally Appropriate Practice. Not all participants that volunteer for the interview will be asked to participate in the interview. If you are asked to do an interview, know that it will be audio recorded. You may review these tapes and request that all or any portion of the tapes be destroyed that includes your participation. Participation in this study will involve 15 minutes of your time to complete the survey and approximately one hour for the interview. There are no known risks associated with your participation in this research beyond those of everyday life. Although you will receive no direct benefits, this research may help the investigator better understand the growing field of early childhood education and provide essential guidance on developing confident and effective developmentally appropriate literacy educators in Universal Pre-Kindergarten programs. Confidentiality of your research records will be strictly maintained by keeping identifying information private using a password protected form to collect survey responses. The audio recordings from the interview will also be password protected. Research data will only be seen and heard by the researcher. The researcher will code participant names as well as use pseudonyms to ensure confidentiality and anonymity in written transcripts.

This study is completely voluntary. You may refuse to participate or withdraw at any time without penalty. For interviews, questionnaires or surveys, you have the right to skip or not answer any questions you prefer not to answer.

If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you

may contact,Tara A. Sokol at tara.sokol11@stjohns.edu (email) or Dr. Evan Ortlieb at eortlieb@citadel.edu (email).

For questions about your rights as a research participant, you may contact the University's Institutional Review Board, St. John's University, Dr. Raymond DiGiuseppe, Chair digiuser@stjohns.edu 718-990-1955 or Marie Nitopi, IRB Coordinator, nitopim@stjohns.edu 718-990-1440. You have received a copy of this consent document to keep.

Agreement to Participate

Subjects Signature _____ Date_____

Appendix C Teacher Belief Scale

Please fill out the following information:
Years of Service _____
Years of UPK Service_____
Borough _____
Type of School_____
Education Level_____

Ethnicity_____
Age Range_____
Gender_____

1. Rank the following (1-6) by the amount of influence you feel that each has on the way you plan and implement instruction. 1 being the most influential, 6 being the least. (Please be sure to use each number only once.)

Parents _____
School system policy _____
Education/ Training (Yours) _____
Teacher (yourself) _____
State regulation _____
Other teachers _____

Directions: please respond to the following items by circling the number that most nearly represents YOUR PERSONAL BELIEFS about the importance of that item in a Universal Pre- Kindergarten program.

	Item	1- Not at all	2 - Not Very	**3 - Fairly**	**4 - Very**	**5 - Extremely**
2	As an evaluation technique in the UPKprogram, standardized group tests are_____ important.	1	2	3	4	5
3	As an evaluation technique in the UPK program, teacher observation is _____ important.	1	2	3	4	5
4	As an evaluation technique in the kindergarten program, performance on worksheets and workbooks is_____ important.					

5	It is for _____ important for UPK activities to be responsive to individual differences in interest.					
6	It is for _____ important for UPK activities to be responsive to individual differences in development.					
7	It is_____ important for teacher-pupil interactions in UPK to help develop children's self-esteem and positive feelings toward learning.					
8	It is _____ important for children to be allowed to select many of their own activities from a variety of learning areas that the teacher has prepared (blocks, science center, etc.)					
9	It is _____ important for children to be allowed to cut their own shapes, perform their own steps in an experiment, and plan their own creative drama, art, and writing activities					
10	It is _____ important for students to work silently and alone on seatwork.					
11	It is_____ important for UPK students to learn through active exploration.					
12	It is_____ important for UPK students to learn through interaction with other children.					
13	Workbooks and/or ditto sheets are _____ important to the UPK program.					

14	Flashcards (numbers, letters, and/or words) are_____ important to the UPK program for instructional purposes					
15	The basal reader is_____ important to the UPK reading program.					
16	In terms of effectiveness, it is_____ important for the teacher to talk to the whole group and make sure everyone participates in the same activity.					
17	In terms of effectiveness, it is_____ important for the teacher to move among groups and individuals, offering suggestions, asking questions, and facilitating children's involvement with materials and activities.					
18	It is_____ important for children to be instructed in recognizing the single letters of the alphabet, isolated from words					
19	I feel prepared to teach students letters of the alphabet using Developmentally Appropriate lessons and activities.					
20	I feel prepared to teach students letters of the alphabet using flashcards.					
21	It is_____ important for children in UPK to form letters correctly on a printed line.					
22	It is_____ important for children to have stories read to them individually and/or on a group basis.					

23	It is_____ important for children to see and use functional print (telephone books, magazines, etc.) and environmental print (cereal boxes, potato chip bags, etc.) in the UPK classroom.					
24	I feel prepared to incorporate functional print into my UPK classroom.					
25	It is_____ important for children to experiment with writing by inventing their own spelling.					
26	I have a deep understanding of Developmentally Appropriate Practice.					
27	I feel prepared to teach early literacy.					
28	I feel prepared to teach early literacy using Developmentally Appropriate Practice.					
29	I feel an emphasis was put on ensuring I was prepared to use Developmentally Appropriate Practice in my pre-service training.					
30	I feel an emphasis is put on ensuring I am prepared to use Developmentally Appropriate Practice in my current UPK program.					

If you are interested in participating in a group discussion on this topic, please enter your email here: _____

Appendix D Interview Questions

1. Introductions: Where do you work? What is your level of experience?
2. What is your definition of Developmentally Appropriate Practice?
3. Did you learn about Developmentally Appropriate Practice in your schooling?
4. Do you have Professional Development opportunities from your current UPK program? If so, did you learn about Developmentally Appropriate Practice during these PDs?
5. How do you currently teach early literacy skills in your classroom?
6. Is there an expectation or requirement to teach early literacy?
7. Is there an expectation of using Developmentally Appropriate Practice to teach early literacy?
8. Are you provided with resources to develop appropriate lessons or activities?
9. Do you feel prepared to teach early literacy using Developmentally Appropriate Practice?
10. If you could improve teacher training in this area how would you?
11. Any additional comments on the subject.

REFERENCES

Aarnoutse, J. C., & Verhoeven, L. (2005). Early literacy from a longitudinal perspective. *Educational Research and Evaluation, 11(3),253-275.*

Abu-jaber, M., Al-shawareb, A., & Gheith, E. (2010). Kindergarten teachers' beliefs toward developmentally appropriate practice in jordan. *Early Childhood Education Journal*, *38*(1), 65-74.

Al-Dhafiri, D. M. (2015). Teachers' perceptions of developmentally appropriate practices in teaching reading and writing for first grade students in Kuwait. *Reading Improvement*, *52*(3), 100-111.

Anderson, R.C., Hiebert, E.H., Scott, J.A., & Wilkinson, I.A.G. (1985). Becoming a nation of readers: *The report of the Commission on Reading.* Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1978). Reflections on self-efficacy. *Advances in Behaviour Research and Therapy* (Vol. 1). Oxford: Pergamon Press

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, *28*(2), 117-148.

Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York, NY: Freeman.

Bandura, A. (2005). The evolution of social cognitive theory. *Great Minds in Management*, 9-35.

Barnett, W. S., Hustedt, J. T., Hawkinson, L. E., & Robin, K. B. (2006). *The state of Preschool 2006: State preschool yearbook*. New Brunswick

Baumgartner, J. J., Buchanan, T. K., & Casbergue, R. M. (2011). Developmentally

appropriate teacher education. *Childhood Education*, *87*(5), 332-336.

Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods.* Pearson Education, Inc.

Bredekamp, S. (1987). *Developmentally appropriate practice in early childhood Programs serving children from birth through age 8*. Washington, DC: National Association for the Education of Young Children.

Bredekamp, S., & Rosegrant, T. (1992). *Reaching potentials: Appropriate curriculum And assessment for young children*. Washington, DC: National Association for the Education of Young Children.

Britannica, T. Editors of Encyclopaedia (2021, May 28). *Sesame Street*. *Encyclopedia Britannica*. https://www.britannica.com/topic/Sesame-Street

Brown, A.L., Lee, J., & Collins, D. (2015). Does student teaching matter? Investigating pre-service teachers' sense of efficacy and preparedness, *Teaching Education*, *26*(1), 77-93, DOI: 10.1080/10476210.2014.957666

Centers for Disease Control and Prevention. (2022, August 16). *CDC Museum Covid-19 Timeline*. Centers for Disease Control and Prevention. Retrieved March 12, 2023, from https://www.cdc.gov/museum/timeline/covid19.html#:~:text=January%2010%2C%2020,Coronavirus%20(2019%2DnCoV).

Charlesworth, R., Hart, C., Burts, D., Thomasson R., Mosley, J., & Fleege, P. (1993). Measuring the developmentally appropriateness of kindergarten teachers' beliefs And practices. *Early Childhood Research Quarterly*, *8*, 255-276.

Conn, V. S. (1998). Older women: Social cognitive theory correlates of health behavior. *Women & Health*, *26*(3), 71-85.

Connolly, G. J. (2017). Applying social cognitive theory in coaching athletes: The power Of positive role models. *Strategies*, *30*(3), 23-29.

Crabtree, B. F., & Miller, W. F. (1992). *A template approach to text analysis: Developing andusing codebooks*. Newbury Park, CA, Sage Publications.

Creswell, J.W. (2009). Research design: *Qualitative, quantitative, and mixed Methods approaches* (4th ed.). SAGE Publications.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). SAGE Publications.

Cunningham, A.E., Zibulsky, J. & Callahan, M.D. (2009). Starting small: Building preschool teacher knowledge that supports early literacy development. *Reading and Writing An Interdisciplinary Joournal, 22*, 487–510. DOI:10.1007/s11145-009-9164-z

Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives*, *13*(42), 1-51.

Dean, D. (2021). Clearly Communicating Conceptions of Validity and Reliability. M. Bocarnea, B.Winston, & D. Dean (Eds.), *In Advancements in organizational data collection and measurements: Strategies for addressing attitudes, beliefs, and behaviorism* (pp. 27-55). IGI Global.

Dickinson, D. K., & McCabe, A. (2001). Bringing it all together: The multiple origins, skills, and environmental supports of early literacy. *Learning Disabilities Research &Practice*, *16*(4), 186-202.

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language:*

Young children learning at home and school. Paul H Brookes Publishing.

Friedman, I., Kass, E. (2002). Teacher self-efficacy: a classroom-organization conceptualization, *Teaching and Teacher Education*, *18*(6), 675-686, DOI:10.1016/S0742-051X(02)00027-6.

Gardner, S. (2006). Producing well-prepared teachers. *Education Digest*, *71*(6), 42-46.

Goldstein, L. (2008). Teaching the standards is developmentally appropriate practice: strategies for incorporating the sociopolitical dimension of DAP in early childhood teaching. *Early Childhood Education Journal*, *36*(3), 253-260.

Gormley, W. T., Jr., Gayer, T., Phillips, D., & Dawson, B. (2005). The Effects of Universal Pre-K on Cognitive Development. *Developmental Psychology, 41*(6), 872-884.Hair, J., Black, W., Babin, B., & Anderson, R. (2014). *Multivariate data analysis*. Upper Saddle River, NJ: Pearson Education.

Guo, Y., McDonald, C., Yang, Y., Roehrig, A., & Morrison, F. (2012). The Effects of Teacher Qualification, Teacher Self- Efficacy, and Classroom Practices on Fifth Graders' Literacy Outcomes. *The Elementary School Journal*, 113 (1), 3-24.

Henson, R. K. (2001, January 26). *Teacher self-efficacy: Substantive implications and measurement dilemmas.* [Paper presentation]. Annual Meeting of the Educational Research Exchange. Texas A&M University, TX, United States.

Ingvarson, L., Beavis, A., & Kleinhenz, E. (2007) Factors affecting the impact of teacher education programmes on teacher preparedness: implications for accreditation policy, *European Journal of Teacher Education*, 30(4), 351-381. DOI:10.1080/02619760701664151

Jackson, N., & Miller, R. (2020). Teacher candidates' sense of self-efficacy toward

Classroom management. *Journal of Education*, *200*(3), 153–163.

Jipson, J. (1991). Developmentally appropriate practice: Culture, curriculum, and connections. *Early Education and Development, 2*(2), 120–136.

Kim, H. K. (2011). Developmentally appropriate practice (DAP) as defined and interpreted by early childhood preservice teachers: beliefs about DAP and influences of teacher education and field experience. *SRATE Journal*, *20*(2), 12-22.

Kwon, K., Ottenbreit-Leftwich, A. T., Sari, A. R., Khlaif, Z., Zhu, M., Nadir, H., & Gok, F. (2019). Teachers' Self-efficacy Matters: Exploring the Integration of Mobile Computing Device in Middle Schools. *TechTrends: Linking Research & Practice to Improve Learning*, *63*(6), 682–692. DOI:10.1007/s11528-019-00402-5

Kleeck, A.V., & Schuele, C. M. (2010). Historical Perspectives on Literacy in Early Childhood. *American Journal of Speech-Language Pathology*, *19*(4), 341–355. DOI:10.1044/1058-0360(2010/09-0038)

Lauermann, F., (2014). Teacher responsibility from the teacher's perspective, *International Journal of Educational Research*, *65*, 75-89. DOI:10.1016/j.ijer.2013.09.005.

Lonigan, C. J., & Shanahan, T. (2009). Developing early literacy: Report of the National Early Literacy Panel. Executive Summary. A Scientific Synthesis of Early Literacy Development and Implications for Intervention. *National Institute for Literacy*

McCormick, M. J. (2001). Self-efficacy and leadership effectiveness: Applying social

Cognitive theory to leadership. *Journal of Leadership Studies*, *8*(1), 22-33.

New York City Department of Education (2022). All About 3K for All and PreK for all. http://teachnyc.net/pathways-to-teaching/early-childhood-education/all-about

Mok M.M.C. & Moore P.J. (2019). Teachers & self-efficacy, *Educational Psychology*, 39(1), 1-3. DOI: 10.1080/01443410.2019.1567070

Office of the Mayor of New York City (2014, Sept 4). New York City launches historic expansion of Pre-K to more than 51,000 children. https://www1.nyc.gov/office-of-the-mayor/news/425-14/new-york-city-launches-historic-expansion-pre-k-more-51-000-children#/0

Office of the Mayor of New York City (2023, May 9). Mayor Adams and Chancellor Banks launch major new citywide campaign to dramatically strengthen liter. https://www.nyc.gov/office-of-the-mayor/news/325-23/mayor-adams-chancellor-banks-launch-major-new-citywide-campaign-dramatically-strengthen#/0

Onyema, E. M., Eucheria, N. C., Obafemi, F. A., Sen, S., Atonye, F. G., Sharma, A., & Alsayed, A. O. (2020). Impact of Coronavirus pandemic on education. *Journal of Education and Practice*, *11*(13), 108-121.

Otaiba, S. A., Lake, V. E., Greulich, L., Folsom, J. S., & Guidry, L. (2012). Preparing beginning reading teachers: An experimental comparison of initial early literacy field experiences. *Reading and Writing*, *25*(1), 109-129.

Öztürk, M., Bulut, M. B., & Yildiz, M. (2021). Predictors of teacher burnout in middle education: School culture and self-efficacy. *Studia Psychologica*, *63*(1), 5–23. DOI: 10.31577/sp.2021.01.811

Palenzuela, S. M. (2004). Measuring pre-kindergarten teachers' perceptions: Compliance with the High/Scope program. *Journal of Research in Childhood Education*, *18*(4), 321-333.

Parker, A., & Neuharth-Pritchett, S. (2006). Developmentally appropriate practice in kindergarten: Factors shaping teacher beliefs and practice. *Journal of Research in Childhood Education*, *21*(1), 65-78.

Parker, A., & Neuharth-Pritchett, S. (2006). Developmentally appropriate practice in kindergarten: Factors shaping teacher beliefs and practice. *Journal of Research in Childhood Education*, *21*(1), 65-78.

Pinchevsky, N., & Bogler, R. (2014). The influence of teachers' perceived self-efficacy and role impact on their preferences in adopting strategies to resolve conflict situations with students. *International Studies In Educational Administration (Commonwealth Council For Educational Administration & Management (CCEAM)), 42*(2), 111-125.

Pinto, G., Bigozzi, L., Accorti Gamannossi, B., & Vezzani, C. (2009). Emergent literacy and learning to write: A predictive model for Italian language. *European Journal of Psychology of Education*, *24*(1), 61–78.

Shapiro, A., Martin, E., Weiland, C., & Unterman, R. (2019). If you offer it, will they come? Patterns of application and enrollment behavior in a universal prekindergarten context. *AERA Open*, *5*(2).

Shenaar-Golan, V., Walter, O., Greenberg, Z., & Zibenberg, A. (2020). Emotional Intelligence in higher education: Exploring its effects on academic self-efficacy and coping with stress. *College Student Journal*, *54*(4), 443–459.

Simrall, G. A., & Mary, M. P. (2001). Views of effective early childhood educators regarding systemic constraints that affect their teaching. *Journal of Research in Childhood Education*, *15*(2), 194-208.

Sims, S., & Fletcher-Wood, H. (2021). Identifying the characteristics of effective teacher professional development: a critical review. *School effectiveness and school improvement*, *32*(1), 47-63.

Siwatu, K. O. (2007). Preservice teachers' culturally responsive teaching self-efficacy And outcome expectancy beliefs. *Teaching & Teacher Education*, *23*(7), 1086–1101. DOI: 10.1016/j.tate.2006.07.011

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology, 99*(3), 611–625. DOI:10.1037/0022-0663.99.3.611

Smith, K. E., & Croom, L. (2000). Multidimensional self-concepts of children and teacher beliefs about developmentally appropriate practices. *Journal of Educational Research*, *93*(5), 312.

Soykan, F., & Kanbul, S. (2018). Analysing K12 Students' Self-Efficacy Regarding Coding Education. *TEM Journal*, *7*(1), 182–187. DOI:10.18421/TEM71-22

Suk Lee, Y., Baik, J., & Charlesworth, R. (2006). Differential effects of kindergarten teacher's beliefs about developmentally appropriate practice on their use of scaffolding following inservice training. *Teaching & Teacher Education*, *22*(7), 935-945.

Velle, L.L. (2020). Professional knowledge communities of practice: building teacher

self-efficacy. *Journal of Education for Teaching*, *46*(5), 613–615.

Vogt, W.P., (1999). Dictionary of statistics & methodology: A nontechnical guide for the Social sciences (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Williams, W. M., & Sternberg, R. J. (1993). Seven lessons for helping children make themost of their abilities. *Educational Psychology*, *13*(3/4), 317. DOI: 10.1080/0144341930130309

Weinberg, R. S., Gould, D., & Jackson, A. (1979). Expectations and performance: An Empirical test of Bandura's self-efficacy theory. *Journal of Sport Psychology, 1*(4), 320–331.

Yilmaz, A. (2009). Self-efficacy perceptions of prospective social studies teachers in relation to history teaching. *Education*, *129*(3), 506–520.

Zambo, D. (2008). Childcare workers' knowledge about the brain and developmentally appropriate practice. *Early Childhood Education Journal*, *35*(6), 571.

Zysberg, L., & Schwabsky, N. (2021). School climate, academic self-efficacy and Student achievement. *Educational Psychology*, *41*(4), 467–482.

Vita

Name	Tara A. Sokol
Baccalaureate Degree	Bachelor of Arts, State University of New York at Stony Brook, Stony Brook, New York, Major: Psychology, Womens Studies
Date Graduated	August, 2010
Other Degrees and Certificates	Master of Science, St. John's University, Jamaica, New York, Major: Early Childhood Education, Teaching Students with Disabilities
Date Graduated	May, 2013
	Advanced Certificate in Literacy, St. John's University, Jamaica, New York, Major: Early Childhood Education, Teaching Students with Disabilities
Date Graduated	May, 2014