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THE INFLUENCE TEACHER CERTIFICATION, TEACHING EXPERIENCE,  
PROFESSIONAL DEVELOPMENT, AND DEGREE AREA HAS ON  
STUDENT ACHIEVEMENT IN HEAD START PROGRAMS

by

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DISSERTATION

Presented to the Faculty of  
The University of Houston-Clear Lake  
In Partial Fulfillment  
Of the Requirements  
For the Degree

DOCTOR OF EDUCATION

in Educational Leadership

THE UNIVERSITY OF HOUSTON-CLEAR LAKE

DECEMBER, 2021

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## **Acknowledgements**

*This dissertation is dedicated to my son, Nakia D. Darrough II.*

The completion of this research could not have been possible without the support of my committee. I would like to give a special thanks to Dr. Antonio Corrales, my committee chair, and my methodologist, Dr. Michelle Peters. They were both GOD sent and have provided unwavering support during my doctoral journey. Thanks to Dr. Preeti Janie for her expertise in the field of Early Childhood Education and my dear friend Dr. Marshall Scott III, whose support and advice predates this doctoral process. An exceptional special thanks to my dear friend, sister, and professor Dr. Christian Stevenson Winn.

I would like to also thank everyone who has supported me, championed for me, and helped in any way possible during this process. I have a village that has encouraged me to continue and forge forward even when times became difficult. Mostly, I offer thanks to the children, staff, and parents in the Early Head Start/Head Program that I lead. This study was derived from the quality educational services that we provide to the community each day. My goal is for this study to have a positive impact on the educational success of children who leave early childhood programs and enter kindergarten.

Finally, thanks to my son. I hope that one day he understands the long nights at the computers, the nights he had to stay with sitters, the sports events when I had my computer on the sideline, the times he was talking and I was typing, and the many nights he attended class with me and became my research assistant. This was the hardest task I have ever encountered in my life. The commitment, dedication, and tenacity it took to make it through this program and complete the research lets me know that I can tackle

anything life hands me. I hope that I can be a role model for all children of color who strive to achieve academic excellence.

*“Your ancestors took the lash, branding iron, humiliations and oppression,  
because one day they believed you would come to flesh out the dream”.*

*Maya Angelou*

ABSTRACT

THE INFLUENCE TEACHER CERTIFICATION, TEACHING EXPERIENCE,  
PROFESSIONAL DEVELOPMENT, AND DEGREE AREA HAS ON  
STUDENT ACHIEVEMENT IN HEAD START PROGRAMS

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This study focused on the influence teacher certification, teacher experience, professional development, and degree area have on student achievement in Head Start Programs. The study determined whether teacher credentials, teacher experience, professional development, and degree area in this Head Start Programs influence low income/minority children and their families and set a foundation for academic success. The study also focused on the difference of a quality early childhood program as opposed to other childcare options where teachers are not credentialed.

Quantitative data were analyzed using percentages, frequencies, two-tailed independent *t*-tests, and regression techniques. The qualitative data, gathered through interviews, were analyzed using an inductive coding process.

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## CHAPTER I:

### INTRODUCTION

Early Childhood Education is the critical foundation for educational success of children when they enter grade school. More importantly, early intervention is a key component to the success of low income/minority children and their families who may not have the necessary educational tools as their counterparts who do not face the same disadvantages (Keilty & Kosaraju, 2018). The significant effects that a quality early childhood education program has on children can be profound (Van Eeden & Van Vuuren, 2017). Children who are exposed to educational resources from birth to 5 years of age are geared for academic success upon entrance into kindergarten (Sabah, 2019). It is important that early childhood programs promote school readiness in a comprehensive context (Improving Head Start, 2007). The difference in a quality early childhood program compared to other childcare options can have a tremendous impact on the life-long educational success of a child (Fish, 2017). The transition into these early school years, preschool to kindergarten, signifies an important developmental milestone; a time in which new expectations, relationships, and competencies are formed, laying the foundation for later success (Rimm-Kaufman & Pianta, 2000).

During recent years, teacher preparation programs have been essential to increase teacher capacity. States have implemented a variety of certifications to validate teacher capacity (Flower, McKenna, & Haring 2017). Factors influencing student performance have been constantly analyzed during recent years, especially with students living in poverty in early childhood education (Combs, Vafa, & Litton, 2017). Unfortunately, evidence suggests that the achievement gap between low-income and high-income students is continually increasing (Reardon, 2013). The childcare workforce is diverse in terms of its education, training, and work settings.

The Child and Family Research Institute-University of Texas at Austin (2013) stated that childcare workforce contains childcare providers who are formally trained in childcare and/or early childhood education as well as providers who do not have formal training. Providers may work in their own homes, homes run by other providers or centers. As such, some providers are business owners with the responsibility of managing a home-based or center-based childcare program while other providers are employees of those programs. The present study was a contribution to former analyses that have been seeking answers to the relationship between teacher credentials and student achievement in early childhood education.

### **Research Problem**

The discussion about the influence of teacher certifications on student achievement in early childhood education have been researched during recent years (Hagans & Powers, 2015). For example, in 2018, the Head Start Performance Standards changed requiring teachers and staff that worked in the program to have certain credentials. This standard caused a shift in many Head Start programs across the nation. The Head Start program is a federally funded program that provides educational and comprehensive services to low income children ages 0-5years of age and their families. As reported in 2017, Head Start serves approximately 1,070,000 children ages birth to 5 and pregnant women in the United States (Office of Head Start, 2017). The staff providing these services were required to have credentials to provide these services to children and families. This Head Start standard is not the same for privately owned childcare programs. Although the new Performance Standards required certain credentials, these standards are not aligned with the state standards for teachers and administrative staff. Having a state teacher certification is not a requirement (Jeon & Wells 2018).

The Head Start Program has been around for more than 50 years. The program was conceptualized under the Lyndon Baines Johnson administration. He outlined the program during his State of the Union Address titled “War on Poverty” (Office of Head Start, 2019). The Head Start Act stated the program was developed to support early childhood education among children living in poverty by conglomerating a panel of experts from different fields: Medicine, education, sociology, academics, community leaders, and legislatures among others.

In the past years, teacher preparation programs in early childhood education have elevated the level of awareness amongst educators regarding quality educational services for children ages 0-5 (Goble, Horm, Atanasov, Williamson, & Choi 2015). Individualized education plans are commonly used when developing curricula and specific interventions when trying to assist early childhood students in meeting their cognitive milestones. Education preparation programs for educators must consider different components within their structure: student achievements, social and emotional development, parental support, cognitive development, behavior, health, nutrition, and mental health (Weschler, Melnick, Manier, & Bishop 2016). Recent research showed that students exposed to educators with high knowledge levels of child development, self-awareness, clear and tangible academic goals, and compassion for children, tend to show greater improvement in the academic achievement of children in early childhood settings (Goble et al., 2015).

The Head Start Act (Improving Head Start, 2007) improved the focus on school readiness and authorized the National Head Start Program which provides comprehensive services to economically disadvantaged children. Since its inception in 1964, the effectiveness of Head Start in improving the cognitive, relational, and behavioral skills in preschool children has been unclear and even questionable (Cooper & Lanza, 2014).

The National Head Start Impact Study, similarly, found consistent short-term cognitive benefits, with more behavioral results (U.S. Department of Health and Human Services, 2010). The faces of poverty are changing in America. The past year, the United States saw the largest 1-year decrease in its overall poverty rate since 1999; as compared to last year, 3/5 million fewer people live in poverty, and median household incomes have grown more than 5%. However, while millions of Americans found their way out of poverty, significant inequality persists (Kornack 2016).

The Head Start advantage is a lifetime of better outcomes, empowered families and communities, and increased opportunities for children to succeed collectively (Office of Head Start, 2018). The Head Start advantage lasts through high school, college, and even in parenthood. Kornack (2016) also stated that Head Start programs change children's lifetime trajectories; the holistic approach that Head Start encompasses and the service to children and families is the constant commitment to ensure that the children in the program benefit from being in the program.

Research has shown that engaging children in early childhood programs within math subjects can increase achievement in upper grade levels. However, due to lack of preparation in the math content area, early childhood teachers do not understand the potential impact of mastering math during these early developmental stages (Zippert & Johnson, 2019). Math teacher self-efficacy is critical to delivering instruction and to actively engaging students. Innovative professional development strategies have been implemented in early childhood education programs to increase teacher knowledge of effective teacher practices (Pelkowski et al., 2019).

According to the National Center for Education Statistics (2017), from 2011 to 2015, 90% of early childhood students in the US were taught by teachers with state certifications. This percentage changed based on students' demographics. In parallel, at

least 75% percent of early childhood students were instructed by teachers with more than 5 years of experience between 2011 and 2015. When considering years of experience, the number of certified teachers varied according to students' backgrounds. (Rahman, Fox, Ikoma, & Gray, 2017).

During the past years, 48 states in the US have established that early childhood teachers require specialized training and certification to educate young children. However, 34 states in the US permit educators with elementary teacher certifications to instruct kindergarten students. This portrays a disconnect between the necessary skills to instruct early childhood students and the consequential requirements for the state. Recent studies suggested that specific licensing for early childhood education teachers is necessary to increase student achievement (Fowler, 2019).

### **Significance of the Study**

The significance of this study rests in its provision of an outline of the influence teacher certification, teacher experience, professional development, and degree area have on student achievement in Head Start programs. The study strove to determine if teacher credentials, teacher experience, and professional development in Head Start programs influenced low income/minority children and their families and set a foundation for academic success. The study also focused on the difference of a quality early childhood program as opposed to other childcare options, where teachers were not credentialed.

Certain studies have found a fadeout of positive ECE effects for children as they move through the primary grades, suggesting that some elementary environments may not sustain quality early learning experiences (Bogard, Takanishi, & Magnuson, 2007). Many educators have called for an early learning continuum that aligns early childhood education with the K-12 education system, but some feel this would push academic methods that are ill-suited for very young learners (Halpern, 2013). Children whose early

years are characterized by poverty, limited resources, and lack of exposure to learning opportunities typically enter school lacking more than their peers across many areas of functioning (Ridge, 2011).

The early childhood period from preschool through kindergarten marks a major transition for young children and has been identified as a critical period for intervening with those considered at-risk for later school difficulties (McGuire, 2001; National Institute of Mental Health, 2002). School readiness skills that children develop during this period have been shown to have a lasting impact throughout elementary school (Duncan et al., 2007; Rouse & Fantuzzo, 2009). It is well-documented that the early school years play an integral role in the development of the skills, knowledge, and behavior which are critical for school success (Duncan et al., 2007; Ramey & Ramey, 2004; Raver & Knitzer, 2002). Since its inception in 1964, the effectiveness of Head Start in improving the cognitive, relational, and behavioral skills in preschool children has been unclear and even questionable (Cooper & Lanza, 2014).

Other studies using nationally representative longitudinal surveys (the Early Childhood Longitudinal Study, Birth Cohort [ECLS-B] and the Early Childhood Longitudinal Studies, Kindergarten Cohort [ECLS-K]) have compared outcomes between children attending different types of EEC arrangements. For example, Lee and colleagues separated prekindergarten (pre-K) from other types of centers, finding that children who attended pre-K programs had higher reading scores than their peers who attended Head Start, with the latter outperforming children in home EEC or parent care in cognitive skills, but underperforming in teacher-reported behavioral outcomes (Lee, Zhai, Brooks-Gunn, Han, & Waldfogel 2014). Research with the ECLS-K data, in contrast, found benefits of center EEC in comparison to parent care for children's cognitive skills, but no benefits of Head Start (Magnuson, Meyers, Ruhm, & Waldfogel, 2004). Another

important factor to consider regarding kindergarten preparedness amongst preschool children is teacher credentialing. The impact of students who have been taught by highly qualified teachers and those who have not were examined.

### **Research Purpose and Questions**

The purpose of this study was to determine if teacher certification, teaching experience, professional development, and degree influence student achievement in Head Start programs. The following research question guided this study.

1. Does teacher certification influence student achievement during early childhood grades?
2. Do teacher certification and teacher training influence student achievement during early childhood grade levels?
3. Do teacher certification and teaching experience influence student achievement during early childhood grade levels?
4. Do teacher certification, teacher training, and teaching experience influence student achievement during early childhood grade levels?
5. Does an education in early childhood influence student achievement during early childhood grades?
6. What are early childhood teacher perceptions regarding the influence that early childhood training and years of experience may have on student achievement?

### **Definitions of Key Terms**

*ECLK*—The Head Start Early Learning Outcomes Framework: Ages Birth to Five (ELOF) presents five broad areas of early learning, referred to as central domains. The framework is designed to show the continuum of learning for infants, toddlers, and preschoolers. It is grounded in comprehensive research around what young children



should know and be able to do during their early years (Early Childhood Learning and Knowledge Center, 2019).

*Early Childhood Educations (ECE)*—Early childhood education is a branch of education theory that relates to the teaching of children from birth up to the age of 8. ECE emerged as a field of study during the Enlightenment, particularly in European countries with high literacy rates (The Basics Houston, 2021).

*Early Childhood Training: Professional Development*—Early Childhood Education Professional Development is a continuum of learning and support activities designed to prepare individuals for work with and on behalf of young children and their families, as well as ongoing experiences to enhance this work (Early Childhood Education, 2004).

*Head Start Advantage*—The Head Start Advantage Documentary was created to help NHSA members raise awareness of Head Start's impact, recruit new parents in their communities, and raise funds through screening events (Children's Literacy Initiative, 2021).

*Head Start Act 1965*—Project Head Start, launched as an 8-week summer program by the Office of Economic Opportunity in 1965, was designed to help break the cycle of poverty by providing preschool children of low-income families with a comprehensive program to meet their emotional, social, health, nutritional, and psychological needs (Head Start Act, 2019).

*Head Start Act 2007*—The Improving Head Start for School Readiness Act of 2007 authorized the national Head Start program, which provides comprehensive developmental services, including health, nutritional, educational, and social and other services, to economically disadvantaged preschool children and their families (Improving Head Start, 2007).

*Head Start*—A federally funded program that serves low-income children and families by providing comprehensive services to achieve student success. Head Start is a program of the United States Department of Health and Human Services that provides comprehensive early childhood education, health, nutrition, and parent involvement services to low-income children and families (Administration for Children and Families, 2020).

*Health and Human Services Administration for Families & Children*—The Administration for Children and Families (ACF) is a division of the Department of Health & Human Services. They promote the economic and social well-being of children, families, individuals, and communities with leadership and resources for compassionate, effective delivery of human services (National Head Start Association, 2021).

*Longitudinal Study*—A longitudinal study, like a cross-sectional one, is observational. So, once again, researchers do not interfere with their subjects. However, in a longitudinal study, researchers conduct several observations of the same subjects over a period, sometimes lasting many years (Wikipedia, 2021).

*Low Income/Economically Disadvantaged*—An economically disadvantaged student is defined as one who is eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program (Texas Education Agency, n.d.).

*NAECY*—The National Association for the Education of Young Children is a large nonprofit association in the United States representing early childhood education teachers, para-educators, center directors, trainers, college educators, families of young children, policy makers, and advocates (NAEYC, n.d.).

*SBEC certification*—The State Board for Educator Certification (SBEC) was created by the Texas Legislature in 1995 to recognize public school educators as

professionals and grant educators the authority to govern the standards of their profession (Texas Education Agency, n.d.).

*Student Achievement: GOLD®*—Teaching Strategies GOLD® is an authentic observation-based assessment system for children from birth through kindergarten. It blends ongoing observational assessment for all areas of development and learning with performance tasks for selected predictors of school success in the areas of literacy and numeracy (*GOLD® Teaching Strategies*, 2017).

*Teacher Certification*—To become an elementary teacher in Texas, you must earn a bachelor's degree. You must also complete an approved teacher preparation program. Certification requires a bachelor's degree, completion of an educator preparation program, and passing scores on the required certification exams (Teacher Certification Degrees, 2021).

*Texas School Ready (TSR)*—A comprehensive preschool teacher training program that combines a research-based, state-adopted curriculum with ongoing professional development and progress monitoring tools to help children be more prepared for kindergarten and beyond. School readiness is foundational across early childhood systems and programs. It means children are ready for school, families are ready to support their children's learning, and schools are ready for children. Physical, cognitive, social, and emotional development are all essential ingredients of school readiness (Children's Learning Institute, 2021).

### **Conclusion**

This chapter identified the need to examine the relationship between teacher certification and student achievement in early child education. The research problem and significance of the study were reviewed, and research questions were presented. In the

next chapter, early childhood foundations, teacher certifications, years of experience, and andragogy will be discussed further.

## CHAPTER II: REVIEW OF LITERATURE

The significant effects that a quality early childhood education program has on children can be profound. Children who are exposed to educational resources from birth to 5 years of age are geared for academic success upon entrance into kindergarten. It is important that early childhood programs promote school readiness in a comprehensive context (Improving Head Start, 2007). The difference between a quality early childhood program compared to other childcare options can have a tremendous impact on the life-long educational success of a child.

Studies found that low-income at-risk children in full-day early childhood programs had long-term higher academic achievement than their counterparts in half-day programs (Nowak, Nichols, & Coutts, 2009). Since the 1980s, there has been rigorous and sophisticated longitudinal methodology that has shown high quality early childhood education improves a child's overall development (Ishimine & Tayler, 2013). Teacher certification, the process by which individuals become fully qualified to teach, is the responsibility of each state and territory resulting in different certification requirements across states and territories (Stayton et al., 2009).

Teacher certification requirements are decided by laws that have been put into legislation, but the implementation and oversight will be the responsibility of the state or governing program. Never has so much attention been paid to the early childhood workforce. There are multiple reasons for this attention, including demographic changes in work and family patterns, national early childhood initiatives, and research findings on the importance of high-quality early childhood programs (Winton, McCollum, & Catlett, 2007). Winton et al. (2007) also pointed out that state and national policy makers are increasingly aware that there is a wide discrepancy between what the research says about

the important role of early childhood educators and the set of existing policies and practices that do not support an adequately compensated professional workforce. To address these areas, this literature review will focus on (a) teacher certification, (b) student achievement, (c) years of teaching experience, and (d) professional development.

### **Early Childhood Education**

Since the 1980s, there has been rigorous and sophisticated longitudinal methodology that has shown high quality early childhood education improves a child's overall development (Ishimine & Tayler, 2013). In order to keep good teachers in the classroom, the key decision makers and those who create policies should take an in-depth look to find ways to create environments where teachers can build collaborative relationships with their peers and continue to explore personal growth, increase student achievement, and learn about the communities in which their students live (Neito, 2009). There were several other studies that looked at the correlation between cognitive, language, psychomotor, and social emotional domains on the impact of student academic performance. High quality early childhood education has especially long-term positive effects on the primary school years as it promotes children's social and academic skills (Broekhuizen, van Akena, Dubasa, Mulder, & Lesemand, 2015; Broekhuizen, Mokrova, Burchinal, & Garrett-Peters, 2016). The results showed that receiving a high-quality early childhood education appeared to promote achievement indirectly via early school readiness skills. Programs should aim to improve quality and quantity to achieve higher.

It is commonly accepted that a high-quality early education is one in which a curriculum and reaching practices are developmentally appropriate (Charlesworth, 2018). There was an additional study referenced that found low-income at-risk children in full-day early childhood programs had long-term higher academic achievement than their counterparts in half-day programs. (Nowak et al., 2009). It is noted than an exemplary

program is one in which educators use their knowledge and patterns of growth in the early years, along with an understanding of individual children, their interests, and cultural backgrounds, to set up the environment and deliver leading experiences (Cohen, 2008). The starting point for most early childhood curriculum making is a professional understanding of young children. Curriculum encompasses all aspects of teaching and learning that are outlined based on objectives, related goals, and what your expected outcome for the students is for any subject area. Wiles and Bondi (2015) stated that the curriculum represents a set of desired goals or values that are activated through a development process and culminate in successful experiences for students.

According to Ovens (2017), like many other areas of modern life, learning to teach has been conceptualized as mastery of a set of knowledge and skills that are relevant to all contexts at any point in time. This a postmodernism view of early childhood teacher education in the classroom. It is now widely recognized that qualified teachers are an essential component of preschool programs that result in improved outcomes for young children (Whitebook, 2000). Beavers (2009) stated that teachers are required to attend mandatory teacher professional development, among other tasks, to ensure their “highly qualified” teacher status that often provides job security. It is an overwhelming undertaking even for the most skilled teacher.

### **Teacher Certification**

Teaching credentials in early childhood education across the country are not unified. Hyson, Tomlinson, and Morrison (2009) stated that having a degree in early childhood education can be a factor in a teacher’s effectiveness, but a degree alone does not guarantee teacher competence. The quality of the higher education program that prepared these teachers and the knowledge it provides are also critical factors in how the teacher can influence the child’s development. According to data collected in 2004

(Maxwell, Lim, & Early, 2006), more than 1,200 institutions of higher education offer degree programs in early childhood education. Although this may be the case, many programs do not mandate that teachers have a bachelor's degree or a state teacher certification to instruct children under the age of 5. Home daycares of course do not require that teachers are certified or have degrees, but instead focus on the logistical aspects that are outlined by Child Care licensing standards that focus on management and safety of children while in care. Requirement for teachers in privately owned daycare vary based on the entity; Head Start programs do require teachers to have associate degrees based on the Head Start Performance Standards but do not require a state certification. However, the Education Manager of a Head Start program is required to hold a bachelor's degree and have 12 hours of college courses in early childhood education.

The lack of the basic pedagogical models of teaching often are left up to yearly preservice and in-service events that must be consistently defined to reach a multitude of teachers with varying educational backgrounds. Hyson et al. (2009) stated that out of about 450 early childhood baccalaureate and graduate degree programs, fewer than half (about 200 programs) in 2007 had been accredited by NAEYC (National Association for the Education of Young Children) as part of the NCATE (National Council for the Accreditation of Teacher Certification) accreditation process. The potential for improvement is something that should be the goal of all programs as well as the professional development system that is needed to assist teachers with obtaining credentials that will ultimately impact the academic success of a student.

One way to view teacher certification is how having one can enhance the quality of the profession and place teachers in a status of credentialled educators with a solid educational foundation. Early childhood teachers are charged with laying the early



foundation for children's education and their impact on society. Highly trained, competent teachers who can successfully teach children in developmentally appropriate ways yet resist societal pressures placed on children for early academic achievement are required (Gallenstein, 2005). Bakhtiar and Famelia (2017) outlined three factors that limit the improvement of early childhood education for teachers: (a) the multidisciplinary nature of the field, (b) diverse types of programs within early childhood education, and (c) the definition of early childhood as from birth through age 8. This is very accurate as when focusing on the education of young children you must take into consideration their health, safety, and physical care as well. There are many programs that offer this needed service to parents including private daycares, home daycares, public school systems, and Head Start programs. Many programs like Head Start offer "wholistic" services that provide early intervention to help children succeed. Services are provided directly to the entire family and delivered by content area experts that focus on education, nutrition, health and wellness, disabilities, mental health, and family and community engagement.

Diversity in the educational settings and the lack of a unified teaching credentialing program that is standard are also factors. Home daycares, church nurseries, private daycares, preschools, Head Start Programs, and even school districts provide PK programs for 3- and 4-year-olds. Many Head Start programs partner with local school districts to provide services to children in early childhood programs. Working to collaborate on state and federal mandates along with local governmental requirements can be a hindrance. There are also early childhood programs that are controlled by charitable foundations and non-profits. Piaget (Inhelder & Piaget, 1964/2013) believed that the younger the child, the more training and education the teacher must possess. Children who are educated by teachers with both a bachelor's degree and specialized training in child development and early education have been found to be more sociable,

exhibit a more developed use of language, and perform at a higher level of cognitive tasks than children who are cared for by less-qualified adults (Bowman, Donnavan, & Burns, 2001; Dwyer, Chait, & McKee, 2000; Howes, 1997). Lobman, Ryan, and McLaughlin (2000) pointed out that despite the demand, the wide variation in state regulations regarding the baseline of education needed to be a preschool teacher, this has resulted in a potential shortage of such teachers. Ackerman (2004) studied teacher perceptions in their research and found that half of the 689 teachers they interviewed felt they were skilled to work with children with special education needs or who were English Language learners. The current standards for early childhood teacher preparation advocated by the NAECY recommend that teachers participate in field experiences (observations, practica, and student teaching) where they can practice what they are learning (Hyson, 2003).

Professional standards of teachers can be traced back to the 1946 formation of the National Commission on Teacher Education and Professional Standards in the US. The primary objective of this organization was to upgrade the status of teaching to a profession (Cochran-Smith & Zeichner, 2009). Many feel that this body may have started the professional standards movement among teachers that continues to be a debate 70 years later (Call, 2018). Most state teacher certification statutes require public school teachers to pass tests in the subject area taught (Harris & Sass, 2009). Also, many states mandate that public school teachers have a degree from a university-based college of education that includes certain coursework and a minimum grade point average (Harris & Sass, 2009).

The National Board for Professional Teaching Standards (NBPT) created a form of certification that is more involved than the state certification systems. There are three components of the process that include a screening, portfolio, and an assessment exercise.

This organization was formed after a report by the Carnegie Task Force on Teaching and as a Professional (Carnegie Corp. of New York, 1986) from a report that called for the formation of a nonprofit, private organization to create a new form of teacher certification separate from the state certification systems (Koppich, Humphrey, & Hough, 2007).

There are studies that provide evidence on the impact of NBPTS-certified teachers on student achievement. Clotfelter, Ladd, and Vigdor (2007) presented a trio of analysis study of the relationship between certified teachers and the contribution to student achievement and found that the contribution of certified teachers to student achievements added value and exceeded that of the average teacher who was not certified.

Bourke, Ryan, and Ould (2018) stated that internationally, many governments and regulatory bodies seek to ensure the consistent preparation, readiness, and performance of teachers through accreditation policies and associated professional standards implementation. In a study done by Darling-Hammond, Berry, and Thoreson (2001), strong evidence was found that supported and was consistent that, as compared with students whose teachers are uncertified, students achieve at a higher level in mathematics when they have teachers who hold standard certification in mathematics; the same finding held to a lesser extent in science. The National Association of State Directors of Teacher Education and Certification (NASDTEC) has worked with states to develop greater commonality in licensing categories and to create reciprocity arrangements that now apply across most states. NASDTEC publishes annually the description of state licensing systems, provides clarification on the kinds of teaching credentials that are needed to obtain and for obtaining a temporary, emergency, and provisional certificate. Darling-Hammond and Ball (1998) expressed that standards are not a magic bullet to solving educational issues and Hargreaves (2000) warned that outlining certain professional standards that teachers must adhere too often focus on the scientific and

technical knowledge of the teaching profession. This can often downgrade or alleviate the equally important emotional dimension of educational work regarding being compassionate about teaching and caring for students learning and lives. Goldhaber and Brewer (2000) found some further support for the notion that strengthening of certification requirements, like the testing efforts that many states have undertaken since the 1980s, may have a positive effect on teachers' competence.

### **Student Achievement**

Cortázar (2015) stated there is an ever-growing emphasis worldwide on increasing access to early childhood care and education programs and generating high-quality educational experiences for children, especially those from low-income families. Several advances in the early childhood field have led those who make policies aware that access to these programs is important, especially for children in low-income families. Over the past 2 decades, research and policy in the field of early childhood education have become increasingly visible due to several factors including (a) neuroscience advances showing early childhood is a critical stage in brain development (Shonkoff & Phillips, 2000), (b) studies that show the positive impact early childhood programs have on students' future development (Barnett, 2008), (c) the cost effectiveness of early childhood programs (Belfield, 2006; Heckman, 2000), and (d) the potential of exposure to early childhood programs as a tool to reduce educational inequalities (Leventhal & Brooks-Gunn, 2003).

It may be fair to assume that quality assurance would improve quality teaching and a student outcome, but this may not be the case as these types of standards, according to Sachs (2003), merely focus on accountability to the public. A responsible research and policy agenda that builds on the evidence currently available about teacher education and certification should aim to illuminate more fully the specific aspects of teachers'

knowledge and skills that make a difference for student learning and the ways in which the features of different teacher education models—how they organize the acquisition of content and teaching knowledge and build knowledge about practice as it is applied—are related to different teaching outcomes. There is growing evidence the teacher quality plays a major role in student achievement but measuring teacher quality has been proven to be difficult (Hanushek, Kain, & Rivkin, 2005; Rockoff, 2004).

### **Teacher Experience**

It is important to factor in teacher experience when looking at certification and student achievement since many certified teachers have more experience (Harris & Sass 2011). Highly qualified teachers that are trained to work effectively with diverse populations of children are essential in early childhood education programs that help children succeed in school (Ray, Bowman, & Robbins, 2010). Tick box professionals conforming to quality assurance procedures do not make graduates who are classroom ready, but collaborative preparation in critical and reflective thinking and research-based activities does. Bourke et al. (2018), Olsen and Anderson (2007), Berliner (2014), and Sammons et al. (2007) brought another concern to the forefront and that is in the designs of PD activities, teachers' experience is hardly considered. Teachers at the beginning of their career have different aims for learning than a mid- and late-career teacher, due to differences in expertise and professional life phases. Teachers should have an essential knowledge base, but educators as professionals need to develop general and specialized knowledge applicable to their practice (Taylor & Tyler, 2012).

Recent improvements in state and district's longitudinal data systems have made the way for researchers to match student data with individual teacher data and track the effectiveness of teachers through the years (Podolsky, Kini, & Darling-Hammond, 2019). These advanced data systems have researchers to look at the effect that teaching

experience has on student achievement over time as they gain experience. It had been extremely difficult in the past to track a specific teacher and compare groups over time. Longitudinal studies allow for differences between groups of teachers to be controlled allowing the researcher to closely look at teacher development and improvement over time. When exploring theories of experience and effectiveness, Ben-Prath's model suggested that workers learn by spending time investing in their skills and knowledge, which does not occur simultaneously with their production (Podolsky et al., 2019). Hargraves and Fullen (2012) took the ideas that Ben-Praths suggested and built on established theories of human capital development with the concept of professional capital in teaching, comprised of three elements: human capital—individual investment in a teacher's knowledge and skills; social capital—relationships among educators and the quality and quantity of interactions that allow teachers to collaborate; and decisional capital—the wisdom and experience and expertise to make decisions built on years of experience.

Studies have also found that teachers who left the teaching workforce earlier in their careers appeared to have higher “innate teaching quality” than those who remained in teaching for a longer period (Wiswall, 2013). Effective teachers often leave the profession early (Harris & Sass, 2011). Teachers with more experience often teach with higher ability and work in schools with advantaged students (Clotfelter, Hemelt, & Ladd, 2016; Loeb, Kalogrides & Béteille, 2012). Podolsky et al. (2019) suggested that students in a poorly resourced school with substantial teacher turnover may see a string of relatively inexperienced teachers, so that the students' potential learning gains with more experienced teachers may be impossible to estimate. Kraft and Papay (2014) brought attention to the fact that teachers with prior experience in the same grade level, subject area, or district show greater returns to experience than those with less relevant prior

experience. Another study in North Carolina, that spanned over an 11-year period, found that teachers whose peer teachers had more experience tended to have improved student outcomes (Jackson & Bruegmann, 2009). This same study found that novice teachers benefit from having more experienced teachers as peers and this created a ripple effect for student achievement. Schools that had more inexperienced teachers had limited numbers of experienced mentor teachers to support the development of new teachers (Loeb, 2005). Investments in building experienced, highly collaborative, professional learning communities most likely result in greater student learning, while also reducing teacher attrition (Donohoo, 2017). Educational theorist Piaget described types of knowledge that are relevant to the educational practice. Educators can guide learners by questioning, examining during instruction. This methodology is described as constructivism (Taylor & Tyler, 2012).

### **Teacher Training**

When discussing the term andragogy, it is important that a clear understanding is outlined. Andragogy is the method and practice of teaching adult learners as outlined by the dictionary. This concept is centered on adult education, and the motivational factors that contribute to individuals pursuing or engaging in learning as adults. Loeng (2017) stated that Malcom Knowles made the term andragogy generally known in the English-speaking world in the 1970s, and many still see it as synonymous with Knowles's andragogy. European andragogy, however, existed long before Northern American andragogy. The views of andragogy are different in European and North America. Alexander Kapp was a German educator and editor who represented a different approach. His theory was not how adults learn nor how teaching adults should take place. He focused on the importance of developing skills to enhance selected occupations. This created a modern platform for Professional Development and Credentials in the field of

education. ASCD (2020) stated that professional development can be defined as a career-long process in which educators fine tune their teaching to meet student needs. The Teachers Academy of Texas (2019) stated that each teacher in the state of Texas needs 150 clock hours every 5 years to renew their Texas teachers' licenses. The Office of Head Start (2018) outlined that teachers who provide instruction in the Early Head Start and Head Start Program need 24 hours of preservice professional development and an additional 24 hours throughout the program year. Professional development practices have changed over the years, but the focus is still to yield positive outcomes for student achievement (Brion, 2020).

As educators, especially those of us who teach in the Early Childhood through Higher Education, we focus on the education of our students. Professional development for us centers on the requirements of state- or district-mandated professional development that we either like or we do not. This leads me to the understanding of motivation and how it impacts adult learning. Adults are motivated to learn in different ways and sometimes have different reasons for learning. Loeng (2013) stated that andragogy is the name under which we can group all school-like education for adults. The rise of andragogy is turning away from mere pedagogy and demagoguery. Many teacher preparation programs across the United States report that one of their biggest challenges is responding to "the competing work and family responsibilities" of their students (Winton et al., 2007).

Adults are motivated to learn for different reasons. Motivation is a key force in understanding student learning. There are best practices to approach adult learning. What motivates an adult to learn? Humans are not motivated in identical ways. Some people are motivated by intrinsic factors, while others are motivated by extrinsic factors. Either way, each factor plays an important role (Gom, 2009). To grow and improve in the



educational system, professional development is key. Teachers become life-long learners as professional development is a continuum for career progression (U.S. Department of Education, 2008).

There are theories that have been developed to outline motivation. One is the expectancy x value theory. The theory was developed by Feather in 1982. He advocated effort investment. The theory outlines the value people put on goals and the effort and behavior they use to achieve the goals. The second theory outlined in the article was the force-field analysis model, developed by Kurt Lewin (Juneja, 2015). He is called the “grandfather of behavioral sciences” because of his insights on how people make changes in their lives.

The explanation of the types of motivation caused me to look at my own personal experiences involving my learning. Extrinsically, we look for a reward for completing learning. The reward can be a higher mark, commendation by the teacher, or recognition from peers. This includes getting promotions, higher salary, and venturing into a new domain. Intrinsically, students love to learn and want to gather knowledge and skills. There are no external factors and the motivation is based on rewards that might create a better condition.

To better understand adult learning, andragogy, we must discuss the theory of adult learning that was created by Malcom Knowles in 1984 (Tough & Knowles, 1985). Knowles outlined five premises for adult learning:

1. **Self-Concept:** As people mature, their self-concept moves from one of being a dependent personality toward one of being a self-directed human being.
2. **Experience:** As people mature, they accumulate a growing reservoir of experience that becomes an increasing resource for learning.

3. **Readiness to Learn:** As people mature their readiness to learn becomes oriented increasingly to the developmental tasks of their social skills.
4. **Orientation to Learning:** As people mature, their perspective changes from one of postponed application of knowledge to immediacy of application and, accordingly, their orientation toward learning shifts from one of subject-centeredness to one of problem-centeredness.
5. **Motivation to Learn:** As people mature, the motivation to learn is internal.

Brookfield (1995) stated that although teachers of adults maybe well-versed in working with adult learners in their setting, rarely do we see them reflecting on their own learning and using that reflection to understand their learning needs and motivations. Adult learners can be diverse because they come with different backgrounds, life experiences, personalities, age differences. For those of us pursuing higher education degrees, we come with varied experiences in the education field and experiences that shape who we are and our philosophy on education.

States have licensing requirements that outline professional development activities that teachers must engage in before they enter the profession and during their tenure in the profession (Heikka, Pitkäniemi, Kettukangas, & Hyttinen, 2019). Despite such requirements, too often teachers find their professional development is both inadequate and irrelevant. Each year, teachers and staff will return to work and participate in professional development training. This annual training event is designed by the educational entity to prepare teachers and staff for the school year. Each state, program, and district have local, state, and federal requirements for these preservice training days for teachers. The planning and development of this goes on a year in advance. A standard design with a collaborative approach, bringing in field experts, involving a committee to plan, and focusing on teacher's mental health and well-being,

would be beneficial across districts, states, and programs. Professional development trainings should be strategically planned to meet guidelines/requirements and provide training that the teachers can use directly in their classroom to impact student achievement. Many teachers leave the profession because the ideals that motivated them to start teaching disappear. The status of teaching has eroded over the last decade and work environments are often difficult (Neito, 2009). There has been a limited amount of research given to how to prepare teachers in early childhood programs to work effectively and efficiently with students from diverse backgrounds and prepare them for grade school.

Jacobs (2010) stated that most teachers want to improve their professional practice in the classroom. Little attention has been paid to research about teacher educators and how they enact their professional practice (Kelchtermans, 2017). To achieve such practical wisdom, the discipline of education needs to be refocused as a collaborative community where teacher educators “co-configure” on state-of-art practice underpinned by research (Engestrom, 2016). Knowledge, therefore, is transdisciplinary, reflective, and networked (Lipman, 2011). Lipman (2011) maintained that co-configuration among diverse stakeholders can set new parameters for possible solutions; transforming, not reforming or defending teacher education. In-service teacher learning is often referred to as (continuous) professional development (PD) and is considered a crucial factor for increasing teacher quality, and improving schools and student learning (Opfer & Pedder, 2011; Sammons et al., 2017).

Teachers show a high level of ownership over their own learning; they themselves decide what they learn from the learning opportunities their workplace offers them (Mead, 2015). In general, studies have shown early- and midcareer teachers to be “more eager” for PD (Flores, 2005; Kyndt, Gigbels, Grosemans, & Donche, 2016; Richter &

Veith, 2014). Early career teachers have been found to be mostly mastery-oriented and intrinsically motivated for instructional, personal, and career goals (Mansfield, Beltman, & Price, 2014). Midcareer teachers are motivated for learning to increase their impact on students' learning (Shriki & Lavy, 2012), or for career promotion and external incentives (Hildebrandt & Eom, 2011). Late career teachers seem predominantly motivated because of their own interest in their subject (Shriki & Lavy, 2012). Lipman (2011) maintained that co-configuration among diverse stakeholders can set new parameters for possible solutions, transforming, not reforming, to defending teacher education.

The early childhood initiative Good Start, Grow Smart outlined early learning guidelines that serve as framework for practice and assessment, and individuals caring for children are required to meet certain education qualifications and receive professional development to allow them to better support the needs of young children (Lahaye & Jenkins, 2015). Martinez-Beck and Zaslow (2006) stated that professional development of practicing early childhood educators is considered critical to the quality of experience afforded to children. Early childhood education professional development must go beyond the basic requirements that include credentials, experience, and associations. Rather, focus should address professional development theories, processes, and attention to the teacher and the families and children that they serve (Sheridan, Edwards, Marvin, & Knoche, 2009).

Teachers who engage with students in secondary and higher education settings may be well versed in those settings. However, they often neglect their own learning and therefore do not reflect on ways to understand their own learning needs and motivations. Adult learners are very diverse because of their backgrounds, life experiences, personality traits, and age differences. When adults pursue higher education degrees, they bring different field experiences that shape their philosophy on education (Sprott, 2019).

When discussing the term andragogy, it is important that a clear understanding is outlined. Andragogy is the method and practice of teaching adult learners as outlined by the dictionary. This concept is centered on adult education and the motivational factors that contribute to individuals pursuing or engaging in learning as adults. Loeng (2017) stated that Malcom Knowles made the term “andragogy” general in the English-speaking world in the 1970s. The European term existed long before then. The views of the term are different between Europe and North America. Alexander Kapp was a German educator and coined the term to focus on how teaching adults should take place, and the importance of developing skills to enhance occupations. This created the modern platform for professional development and credentials in the field of education.

Gitterman (2014) suggested as educators, especially those of us who teach in Early Childhood through Higher Education, we focus on the education of our students. Professional development for us centers on the requirements state or district mandated professional development that we either like or we do not. This leads me to the understanding of motivation and how it impacts adult leaning. Adults are motivated to learn in different ways and sometimes have different reasons for learning. Adult learners have the potential to be self-directed, particularly when their life and practice experiences are utilized as vital resources. An essential teaching task is to develop connections between the “abstract world” of concepts with the “real world” of personal experiences. These connections are more likely to be utilized when students are engaged in an active, collaborative learning process.

Teacher “schooling” is cited as one of the most important factors influencing student achievement and there has been increased interest in examining the effectiveness of teacher education programs. It has been found that depending on the type of training program and the training institution has an impact on student achievement (Golhaber,

Liddle, & Theobald, 2014). It is important to have evidence-based, high-quality professional development for teachers. This is essential for teachers to gain knowledge, strategies, and skills that are needed to have a positive impact on student learning. Professional development is not typically evaluated for quality beyond feedback of those being trained. There is a specific tool, called the Observations Checklist for High-Quality Professional Development Training (HQPDP Checklist), that was developed to measure effectiveness of professional development training. This could serve as a resource or guide for designing and reflecting on what teachers are trained and monitoring the impact on student achievement (Gaumer-Erickson, Noonan, Brussow, & Supon Carter, 2017). Educational leaders must keep in mind one particular focus when reviewing professional development plans. The learning transfer that takes place from the content the teachers gain and how it is delivered in the classroom impacts student achievement. Educational leaders should engage teachers in meaningful conversations about the planning, assessment, and implementation of professional development (Brion, 2020). To establish high-quality early childhood education, engaging teachers in effective preservice training is a critical component. Most early childhood professional development lacks new knowledge, enhancement of teacher practices, focus on improving child outcomes. This hinders early childhood teachers and leaders when planning training for their teachers. Guidance and research must be involved when planning, developing, implementing, and reviewing professional development. The best way to support children and families in an early childhood program is to place value in learning and continued education for all professionals (Schachter, Gerde, & Hatton-Bowers, 2019).

### **Early Childhood Degree**

There is an unprecedented number of children in early childhood education and care programs. Katz and Lowenberg (2019) stated early childhood educators have a

unique opportunity to foster the development of cognitive, behavioral, and social skills. These educators need to have an in-depth understanding of child development and mastery of complex set of skills to meet the learning needs of young children. The demand for early childhood educators is increasing (Boyd et al., 2020). Boyd and Newman (2019) argued that renewed policy strategies are required to support new early childhood graduates and professionals and attract teachers to work in early childhood education.

Research found that most students ranked an early childhood education bachelor's program among their top five choices on university selection exams, including that three top reasons for choosing early childhood education as a profession were their love for children and the profession, availability of jobs, and a reasonable salary (Unal & Kurt, 2018). The National Association for the Education of Young Children (NAEYC, n.d.) raised important complexities around degree programs and pathways for an early child education workforce. It was noted that 3,000 early childhood degree programs, with more than 60 different names at certain levels, included many tracks for each degree that were housed in different divisions or departments within a college or university.

Huss-Keeler (2019) stated that results demonstrated that the degree had both perceived personal professional value for these early childhood practitioners, which may have potential implications for their current and future practice, as well as for early childhood teacher education programs preparing to serve students such as these. The reauthorization of Head Start in 2007 required half of all lead teachers to hold bachelor's degrees with training in early education. Currently, 74% of Head Start teachers hold bachelors or advanced degrees in early childhood or a related field (Katz & Lowenberg, 2019).

There is little evidence of how effective degree programs that focus on early childhood graduates impact the field of education. However, Huss-Keeler, Peters, and Moss (2013) outlined that younger teachers also valued the degree in early childhood for their future careers, and suggested that directors played a pivotal role in motivating teachers to enroll in college, while scholarship assistance made it possible to act on desires to go to college. Early childhood education programs should ensure that ECE professionals have the knowledge, support, and resources they need to support children's learning and are adequately prepared, competent, and legislative/governing bodies should ensure they are well compensated (Vecchiotti, 2018). Vecchiotti (2018) also stated that there is ample time for state boards to improve outcome for children by strengthening the early care and education workforce and thereby improving the quality of early care and education.

Contemporary perspectives on research in early learning programs highlights schools connected to universities that are dedicated to the research of early childhood programs and instituting innovation in the field are university-based lab schools. The concept of child development laboratory schools, that are university-based, assumed a critical role in contributing to the knowledge base on child development and early education as well as the professional development of early childhood educators (Saracho, 2019). There is still a fundamental issue regarding whether teacher qualifications predict student achievement. Croninger, Rice, Rathbun, and Nishio (2007) reported positive effects of teacher's degree type on student achievement.

### **Summary of Findings**

Professional learning communities (PLCs) promote an environment of educators that have a solid network to exchange ideas and best practices in professional learning settings. This has become harder to maintain due to the pandemic. However, many



districts and programs have shifted to a hybrid approach to on-line and face-to-face professional learning communities that focus on professional development activities. Results have shown that professional development activities that happen in learning communities such as face-to-face meetings, Facebook interactions, collaborative projects, and network formations, have apposite impact on and benefit to teacher training and advancement (Li & Krasney, 2020). Teacher training and professional development should be at the forefront of districts and programs, not only to impact student achievement but to also enhance credibility, job security, and employment prospects for teachers. Continuing development as a performance measure benefits the students and enhances the career capital for the teacher. Professional development should be outlined for each teacher and each staff should be provided with a personal professional development plan that aligns with their career goals, while using the impact that the training has on the enhancement and development of students. Professional developments can promote personal growth, empower individuals, and provide a view of teachers as professionals (Mackay, 2015).

### **Theoretical Framework**

Given this study's examination of the influence teacher credentials, years of teaching experience, teacher training, and degree area have on student achievement in early childhood education, the transition into these early school years (preschool to kindergarten) signifies an important developmental milestone; a time in which new expectations, relationships, and competencies are formed, laying the foundation for later success (Rimm-Kaufman & Pianta, 2000).

Longitudinal studies of early childhood children as they progress into grade school is a key component in tracking academic success and growth. Studying the academic progress of children in early childhood programs into grade school allows for a

prolonged and in-depth look at data over a time span (Heckman & Karapakula, 2019). *The Perry Preschool Project* is a well-known longitudinal study that targeted African American children ages 3–4 who were living in poverty and assessed to be at high risk for school failure. The goal of the Perry Preschool Project was to improve the capacity and school success in the life of disadvantaged children. The project focused on breaking the link between childhood poverty and school failure by enhancing intellectual, social, and physical development of children. The result was designed to ultimately improve employment opportunities and income for the participants and decrease those at-risk factors including crime, teen pregnancy, and welfare dependency (Derman-Sparks, 2016).

Another relevant longitudinal study that was conducted in the mid-1970s, that provided insight on the importance of tracking progress over time in early childhood programs was the Carolina Abecedarian Project. Sparling and Meunier (2019) pointed out findings in this project that address the long-term benefits for disadvantaged children in early childhood programs and the improvement in their rate of university graduation.

Early childhood educators are tasked with providing the early learning foundation and preparing children to be prepared as they enter grade school (Sheridan et al., 2009). Early education issues outline the need for educators to provide rich educational experiences for all children, including those who are vulnerable and disadvantaged. They are charged with engaging these children and the array of diverse families that come with them (Sawchuck, 2015). Beavers (2009) stated that good teachers have several distinct attributes that define who they are, how they tackle the challenges presented to them, and how they approach learning. Teachers teach because they are committed to impact the lives of children. The NICHD Early Child Care Research Network (2005) has found that children from poor families who participated in ECCE programs outperformed the

children not participating in an early childhood program. Their findings also support the idea that family income plays an important role in academic achievement.

### **Conclusion**

The study concludes with a summation of my findings on the impact that teaching certification has on student achievement in early childhood programs and how years of experience, training practices, and degree area address the needs of low-income/minority children in these programs. The primary focus was to evaluate the difference in student achievement when instruction is delivered by teachers who are certified and those who are not but have the same years of teaching experience and training on the same professional development framework. The conclusion addresses which outcome is most beneficial to low-income/minority students as they prepare for kindergarten.

### CHAPTER III: METHODOLOGY

The purpose of this study was to examine the influence of teacher certification, teacher experience, professional development, and degree area have on student achievement in Head Start Programs. Archived data were collected from a purposeful sample of Head Start teachers and their respective students from a large urban Head Start Grantee. Data consisted of Teacher Strategies-GOLD<sup>®</sup> student assessments, teacher certifications, teacher experience, and professional data collected from grantee records. Quantitative data were analyzed using percentages, frequencies, two-tailed independent *t*-tests, and regression techniques. The qualitative data were analyzed using an inductive coding process. This chapter presents an overview of the research problem, operationalization of theoretical constructs, research purpose, questions, hypothesis, research design, population and sampling selection, data collection procedures, data analysis, privacy and ethical considerations, and the research design limitations for this study.

#### **Overview of the Research Problem**

In August of 2018, the Head Start Performance Standards changed and outlined educational requirements for many positions, requiring bachelor's degrees based on duties performed (U.S. Department of Health and Human Services Administration for Children and Families Office of Head Start, 2018). In addition, the Head Start Performance Standards (2018) stated a program must ensure all center-based teachers have at least an Associate's or bachelor's degree in child development, early childhood education, or equivalent coursework. The national program requires 50% of teachers to meet this requirement. Hence, there is not coordination with the state board of education on requirements for certifications. The purpose of the changes was to ensure that teacher

credentials aligned with school readiness requirements. However, the consideration on whether student performance in early childhood programs is linked to teacher credentials, teaching experience, and professional development has yet been determined (Goldhaber, Quince, & Theobald, 2018).

### **Operationalization of Theoretical Constructs**

The study consisted of the following constructs: (a) teacher certification, (b) teaching experience, (c) professional development, (d) degree area, and (d) student achievement. Teacher certification was defined as the state certification that teachers obtain through the State Board of Educator Certification in Texas (SBEC) (Texas Education Agency, n.d.). This construct was measured using archived data providing the credentialing information as to whether the teacher has the state teaching credential based on official copies of the state license. Teaching experience was determined by the years of early childhood classroom experience and measured using information provided by the teacher state service record. Professional development was defined as teacher training that is required by the State of Texas and is measured by the number of training hours each teacher receives. Student achievement was based on GOLD<sup>®</sup> assessment scores, which measures the percentage of objectives students master. The archived data were retrieved from the student assessment results from 2019-2020 and 2020-2021.

### **Research Purpose and Questions**

The purpose of this study was to examine the influence of teacher certification, teaching experience, and professional development on student achievement in Head Start Programs. The study addressed the following research questions:

1. Does teacher certification influence student achievement during early childhood grades?

2. Do teacher certification and teacher training influence student achievement during early childhood grade levels?
3. Do teacher certification and teaching experience influence student achievement during early childhood grade levels?
4. Do teacher certification, teacher training, and teaching experience influence student achievement during early childhood grade levels?
5. Does an education in early childhood influence student achievement during early childhood grades?
6. What are early childhood teacher perceptions regarding the influence that early childhood training and years of experience may have on student achievement?

### **Research Design**

For the purpose of this study, a sequential mixed methods design was used. The first phase of this study was quantitative and the second phase was qualitative. The strength of implementing this design model allowed for a more comprehensive and thorough examination of the quantitative results by following up with qualitative data. Archived data were collected from a purposeful sample of Head Start teachers and their respective students from a large urban Head Start Grantee. Data consisted of Teacher Strategies-GOLD<sup>®</sup> student assessments, teacher certifications, teacher experience, and professional data collected from grantee records. Quantitative data were analyzed using percentages, frequencies, two-tailed independent *t*-tests, and regression techniques.

### **Population and Sample**

The population of this study consisted of a large Head Start grantee in two of the large counties in Texas with similar demographic characteristics. The Head Start Program has 2,234 children in one of the county's service area and 687 in the other county's

service area. The program also serves Early Head Start students ages 0-3 and has a Home-Based Program for pregnant mothers. Children in the Head Start Program are ages 3-5 years old. The sample for this study will be Head Start teachers who are preparing students to exit the Head Start program and enter kindergarten. The federal grant serves two counties.

The first (1H) Head Start Program has 9 stand-alone locations and 11 collaboration sites in one of the largest school districts in Texas. The second Head Start grants (2F) has five standalone locations, and one collaboration site with the largest Independent School District in the county. There are 550 staff that provide services to the children in both programs. The sample data came from one location in each neighboring county under the grantee Neighborhood Community Head Start. Teachers from one site are credentialed, and their counterparts have associate degrees/nonstate certified. The campuses have similar demographics, community make-up, and class ratios.

Tables 3.1 and 3.2 provide the certification information and degree concentration area that were provided by Human Resources and the Final Performance Indicator Report that is submitted to the Office of Head Start at the end of each program year. The data provide an accurate count of the number of teachers at each location and their educational background and teaching certifications. The tables show the information based on the age group with which the teachers work. Early Head Start (EHS) services children ages 0 to 3. The term *zero* (0) is used because pregnant mothers are serviced in the program through the home-based program. Head Start services children ages 3-5 years. Table 3.1 provides teachers by degree and certification and Table 3.2 provides teachers by degree and concentration area.

Table 3.1

*Teachers by Degree and Certification*

Programs 1H & 2F	Frequency(n)	Percentage%
CDA	0	0.0
Associate	30	21.0
Bachelors	63	43.0
Bachelors/Certified	41	28.0
Masters	8	5.0
Masters/Certified	5	3.0

Table 3.2

*Teacher Degree Concentration*

Degree	Frequency (n)	Percentage (%)
Advanced Degree EC*	11	.1
Baccalaureate Degree**	86	53.6
Associate Degree***	35	21.9
Other	39	24.4

\*Any field and coursework equivalent to a major relating to early childhood education, with experience teaching preschool-age children/early childhood education or any field and coursework equivalent to a major relating to early childhood education. \*\*Early childhood education any field and coursework equivalent to a major relating to early childhood education with experience teaching preschool-age children or any field and is part of the Teach for America program and passed a rigorous early childhood content exam. \*\*\*Early childhood education, a field related to early childhood education, and coursework equivalent to a major relating to early childhood education with experience teaching preschool-age children.

Table 3.3 focuses on the student demographics for the program. The demographics are reflective of the student population that is served at each location. The total population for each grant is listed. Program 1H has a higher percentage of



Hispanic/Latino students and has bilingual programs. Program 2F has a larger African American population and there are not bilingual classes under this grant. The following languages represent those spoken in homes and are captured on the data report: English, Spanish, Middle Eastern, European/Slavic, African. Program 2F, had a large Hispanic population, and the predominant language spoken at the homes of the children in the program is English. Program site 1H has state certified teachers delivering instruction. However, Program site 2F has uncertified teachers delivering instruction, using the same curriculum. Both sites are supplied with the same resources and support.

Table 3.3

*Student Demographics Head Start*

Grant	Frequency (n)	Percentage (%)
Total Students	2,921	100.0
African American	1,054	35.4
Hispanic	1,659	54.7
White	65	2.2
American Indian	17	.6
Asian	165	5.7
Pacific Islander	6	.2
Two or More	34	1.2

Tables 3.4 (1H) and 3.5 (2F) provide the cumulative testing results for the students in teacher populations that were sampled classrooms. These results come from the Teacher Strategies GOLD® Program. Teacher Strategies GOLD® measures student's success on 38 research-based objectives three times each year. The students are administered testing in the beginning (BOY), middle (MOY), and end of the year (EOY).

Table 3.4

*GOLD® Student Assessment Data: Program 1H*

<b>Measurable Objective</b>	<b>2019-2020 BOY/EOY</b>		<b>2020-2021 BOY/EOY</b>	
<b>Cognitive</b>	75%	91%	70%	96%
<b>Literacy</b>	69%	89%	76%	97%
<b>Spanish Literacy</b>	77%	92%	69%	99%
<b>Mathematics</b>	69%	89%	57%	92%
<b>Social Emotional</b>	76%	93%	64%	98%
<b>Physical</b>	80%	94%	69%	94%
<b>Language</b>	68%	92%	69%	95%
<b>Spanish Language</b>	68%	90%	67%	96%
<b>Spanish Literacy</b>	77%	92%	69%	99%

*Note.* Beginning of Year (BOY) and End of Year (EOY)

Table 3.5

*GOLD® Student Assessment Data: Program 2F*

<b>Measurable Objective</b>	<b>2019-2020 BOY/EOY</b>		<b>2020-2021 BOY/EOY</b>	
<b>Cognitive</b>	66%	88%	76%	95%
<b>Literacy</b>	69%	89%	74%	99%
<b>Mathematics</b>	60%	88%	48%	95%
<b>Social Emotional</b>	68%	91%	88%	98%
<b>Physical</b>	77%	94%	76%	88%
<b>Language</b>	63%	88%	74%	92%
<b>Spanish Language &amp; Literacy</b>	N/A		N/A	

*Note.* Beginning of Year (BOY) and End of Year (EOY)

### **Participant Selection**

Following the analysis of the archived data, a purposeful sample of teachers were selected to participate in one-on-one interviews. Teachers were selected to participate in interviews based on certification, years of early childhood teaching experience, and professional development hours completed. Teachers were purposefully selected for the qualitative portion of the study based on the age of the children in their classrooms, years of teaching experience, and professional development hours that were completed. This study focused on students in Head Start classrooms that were 4 and 5 years old.

### **Instrumentation**

The assessment model used in *GOLD*<sup>®</sup> follows widely held expectations for children birth through third grade and enables a whole-child approach to assessment (Lambert, Kim, & Burts, 2016). Color-coded progressions guide teachers toward selecting and adapting activities that support each child's development and learning (Kim, Lambert, Durham, & Burts, 2018). Meaningful reports inform classroom practices and individualized instruction. Teacher Strategies (*GOLD*<sup>®</sup> Teacher Strategies, 2017) stated that *GOLD*<sup>®</sup> improves outcomes for children by gathering valid, reliable, and authentic assessment data to individualize learning without sacrificing instructional time. With *GOLD*<sup>®</sup>, assessment is an authentic part of instruction, not a disruption. Embedded in your everyday interactions with children in the classroom or at home, formative assessment is an effortless, organic part of your teaching day. Teachers can easily capture, organize, and store notes, photos, videos, and digital samples of children's work in the moment to make observations authentic, objective, and easy to remember (Burts & Kim, 2014).

The assessment model used in *GOLD*<sup>®</sup> follows widely held expectations for children birth through third grade and enables a whole-child approach to assessment.

Color-coded progressions guide teachers toward selecting and adapting activities that support each child's development and learning (Burts & Kim, 2014). Meaningful reports inform classroom practices and individualized instruction. Automatically connect assessment data and observation capabilities with daily instructional resources, creating an instantaneous and ongoing feedback loop of information to individualize learning and empower teachers to capture observations in the moment (Kim et al., 2018). The GOLD<sup>®</sup> assessment engages family members with family observations, family-facing learning resources, and two-way communication. Teachers can seamlessly integrate family observations into their documentation to inform checkpoint ratings whether in a traditional classroom or distance learning setting (Kim & Smith, 2010). The 38 research-based objectives form the foundation for GOLD<sup>®</sup> and define the path teachers take with the children in their classroom.

The objectives for development and learning span from birth through third grade. They inform every aspect of teaching, including predictors of school success, that are aligned with state early learning guidelines and the Head Start Early Learning Outcomes Framework (Lambert et al., 2016). The assessment allows teachers to see children's development and learning along a progression across the whole of the early childhood years. The objectives cover 10 areas of development and learning, including broad developmental areas, content areas, and English language acquisition. Many objectives also include dimensions that guide teachers' thinking about various aspects of that objective and help clarify what it addresses (Kim et al., 2018).

### **Data Collection Procedures**

#### **Quantitative**

The researcher gained approval from the University of Houston-Clear Lake's (UHCL) Committee for Protection of Human Subjects (CPHS) before any data were

collected. The researcher also gained consent from Neighborhood Community Non-Profit to use Teacher Strategy GOLD<sup>®</sup> student assessment data for the locations that are part of the sample population. The archived data were pulled from the 2019-2020 and 2020-2021 program years. Teacher Strategies GOLD<sup>®</sup> is the program student assessment instrument. Data were collected at the beginning of the year, middle of the year, and end of the year. The data were analyzed and used to implement student interventions. Teacher data were collected via Human Resources.

### **Qualitative**

Teacher interviews will be conducted to gain teacher perspectives regarding teaching experience, credentials, and hours of early childhood training. Student testing data by school location were provided from the agency/program student assessment reports. Staff data were verified by personnel files. The qualitative data were collected from teacher participants in an interview based on certification groups. The teachers' participant groups were reviewed, and interview participants were selected from each group based on teacher certification records obtained from Human Resource. Teachers initially responding to the request for interviews were reviewed and willing participants (certified and non-certified) were selected based on an individual matching of samples resulting in the final sample pool of teachers who signed consent forms prior to the interview process. Interviews lasted approximately 30 minutes and questions focused on teacher perceptions of the influence that early childhood training and years of experience have on student achievement and the influence that teacher certification may have on student achievement. With permission from the participants, the interview sessions were audio-recorded for later transcription. The interview participant's names were changed to pseudonyms to protect participant identities. The audio recordings, transcriptions, and interview field notes will be stored on a flash drive and/or in a locked compartment in the

faculty sponsor's office a minimum of 5 years by the faculty sponsor after completion of the study. After that time, the participant's documentation may be destroyed. Electronic versions will be completely erased of memory and hardcopy versions will be shredded.

### **Data Analysis**

#### **Quantitative**

All data were collected and uploaded to the IBM SPSS for analysis. Research questions 1 and 5 were answered using a two-tailed independent *t*-test and questions 2-4 were answered using regression techniques. A significance value of .05 was used to separate the most unlikely (or extreme) 5% of the sample mean from the most likely 95% of the sample means (Gravetter & Wallnau, 2016). GOLD<sup>®</sup> student achievement data were collected as a percent correct score for each location/program in the study.

#### **Qualitative**

Following the analysis of the quantitative data, the findings were utilized to develop the teacher interview questions to provide a more in-depth understanding of the potential impact that teacher certification, early childhood training, and years of teaching experience may have on student achievement in early childhood programs. The qualitative data obtained from the interviews were analyzed using an inductive coding process to build an empirical understanding of what impact teacher credentials, early childhood training, and years of teaching experience may have on student achievement in early childhood programs. The open-ended questions were geared at providing a deeper perspective on the thoughts and motivation that drives a teacher to obtain a degree and state certification in early childhood settings. The interview data were analyzed using a constant comparative inductive coding process to create an understanding of the impact of teacher credentials, early childhood training, and years of teaching experience on student achievement in early childhood programs.

The data analysis included a process of data reduction, display, conclusion, and verifications (Berg, 2001). Data reduction allows for data to be more accessible and coherent and allowed for the extraction of relevant themes and patterns. This process took place via the transcription of the interview audio records, the organization in recurring themes, and the translation of the data into written summaries. The coding process began by recognizing in-vivo codes. Once the codes were identified, emphasis was placed on searching for patterns and themes from the data (Coffey & Atkinson, 1996) to put them into categories, subcategories were created, and the findings were recorded. Conclusions were made based upon the findings regarding the data.

### **Qualitative Validity**

The validity of the qualitative analysis process involved validation establishment through triangulation of individual teacher responses, member checking, and peer review. The data collected during the interviews were subjected to member checking by having executive college leadership review the transcripts to ensure the validity of the responses provided. The results and questions were peer reviewed by experienced educators. The purpose of the peer reviews was to obtain feedback related to questions poised to teachers related to their individual perceptions regarding teacher credentials and the impact it has on student achievement in early childhood programs and their individual motivation for obtaining credentials. Member checking was used to ensure the voices of the teachers will be properly captured, increasing the validity of the findings.

### **Privacy and Ethical Considerations**

The researcher gained approval from the UCHL's CPHS before any data were collected. The researcher also gained consent from Neighborhood Community Nonprofit to use Teacher Strategy GOLD® student assessment data for the locations that are part of the sample population. The researcher will maintain the data for 3 years as required by

CPHS guidelines. After the deadline has passed the researcher will destroy all data files associated with the study. An informed consent form and interview questions were provided to the interview participants, and the data collected were properly secured in a locked office with a password protected computer. The identities of the names of students and teachers who participated in the interview were kept confidential. The researcher remained neutral during the interview to avoid offering personal perspectives on the topic. The audio recordings were precisely transcribed to protect the validity of the data. Also, the researcher utilized automatic coding capabilities of the NVivo to secure objective themes and patterns.

### **Research Design Limitations**

There are research design limitations that should be taken into consideration, the first being human error with data recording and data input. This is normally human error where numbers are transposed or put in the data management system inaccurately. This could create false data results. The second limitation would be the results from interview responses. The respondents may feel pressure to provide a certain answer based on the questions being asked by the leader of the program. This could result in respondents not answering the questions honestly. The third limitation is the subjectivity of the assessment tool and that other factors are included in the assessment. There are many opinions that the process in which the student is assessed is skewed because an actual number is not shared, and personal information is included that is provided by the parent.

There is only 1 year of program data that is provided. The fourth limitation is that the data and information are only provided by one Head Start grantee. There are six grantees in the County and their data were not included in this study. The fifth limitation surrounds the use of this assessment tool and the professional development and training that is provided to staff. Staff may be new and have less than 1 year of teaching



experience. To get a better picture of the impact teacher credentials have on student achievement in early childhood education, student performance should be measured over a multiyear period and Head Start grantees and Early Childhood Programs across the nation should be included.

### **Conclusion**

The purpose of this study was to examine the influence of teacher certification, years of teaching experience, and teacher training on student achievement in early childhood. This chapter identified the need to further examine the relationships amongst the constructs. To better understand the influence teacher certification, teacher experience, and teacher training have on student achievement in early childhood education, both quantitative and qualitative finding was pertinent to the study. In Chapter IV, archived student assessment data teacher interviews are analyzed and discussed in further detail.

## CHAPTER IV:

### RESULTS

The purpose of this study was to examine the influence of teacher certification, teacher experience, and professional development on student achievement in Head Start Programs. This chapter presents the findings of quantitative and qualitative data analysis of the study. First, an explanation of the participants' demographics of the study are presented, followed by results of the data analysis. This chapter presents the data analysis for each of the five research questions. It concludes with a summary of the findings.

#### **Participant Demographics**

Overall, 58 Head Start teachers were included in this study. Program Site 1H had nine sites where demographic data were collected. Site 1 had an average of 65 PD hours for the site and 14 years of teaching experience. Site 2 had an average of 37 PD hours and 14 years of teaching experience. Site 3 had an average of 40 PD hours and 11 years of teaching experience. Site 4 had an average of 41 PD hours and 13 years of teaching experience. Site 5 had an average of 39 PD hours and 26 years of teaching experience. Site 6 had an average of 32 PD hours and 8 years of teaching experience. Site 7 had an average 38 PD hours and 8 years of teaching experience. Site 8 had an average of 37 years of teaching experience and 16 years of teaching experience, and site 9 had an average of 36 PD hours and 8 years of teaching experience.

Program Site 2F had four sites where demographic data were collected. Site 1 had an average of 34 PD hours and 13 years of teaching experience. Site 2 had an average of 46 PD hours and 17 years of teaching experience. Site 3 had an average of 26 PD hours and 19 years of teaching experience, and Site 4 had an average of 19 PD hours and 19 years of teaching experience. Regarding overall average teaching experience in Program Site 1H, 53.8% of the teachers that participated had 10 or more years of teaching

experience, and 21 out of 39 had more than 10 years of experience. In program site 2F, 94.7% of the teachers who participated had 10 or more years' experience, and 18 out of 19 had more than 10 years of teaching experience.

Table 4.1

*Gender, Race/Ethnicity, and Education: Both Programs*

	Frequency (n)	Percentage (%)
1. Gender		
Male	4	14.5%
Female	54	93.1%
2. Race/Ethnicity		
Asian	1	.1%
Black/African American	23	39.7%
Caucasian/White	1	.1%
Hispanic/Latino	33	56.9%
Other	0	0%
3. Education Level		
Associate Degree	6	10.4%
Bachelor's Degree	49	84.5%
Master's Degree	2	29%
Doctoral Degree	1	.1%
4. TEA Certified		
Yes	41	70.7%
No	17	29.4%

Table 4.2

*Gender, Race/Ethnicity, and Education: 1H and 2F Program*

	1H (n = 39)	2F (n = 19)
3. Gender		
Male	10.3% (n = 4)	0.0% (n = 0)
Female	89.7% (n = 35)	100.0% (n = 19)
4. Race/Ethnicity		
Asian	0.0% (n = 0)	5.3% (n = 1)
Black/African American	23.1% (n = 9)	73.7% (n = 14)
Caucasian/White	0.0% (n = 0)	5.3% (n = 1)
Hispanic/Latino	76.9% (n = 30)	15.8% (n = 3)
Other	0.0% (n = 0)	0.0% (n = 0)
3. Education Level		
Associate Degree	0.0% (n = 0)	31.6% (n = 6)
Bachelor's Degree	95.0% (n = 37)	52.6% (n = 10)
Master's Degree	2.5% (n = 1)	15.8% (n = 3)
Doctoral Degree	2.5% (n = 1)	0.0% (n = 0)
4. TEA Certified		
Yes	100% (n = 39)	89.5% (n = 17)
No	0.0% (n = 0)	10.5% (n = 2)

Table 4.3

*Interview Participants*

	1H (n = X)	2F (n = X)
1. Gender		
Male	20% (n = 1)	0.0% (n = 0)
Female	80% (n = 4)	100% (n = 5)
2. Race/Ethnicity		
Asian	0.0% (n = 0)	0.0% (n = 0)
Black/African American	40% (n = 2)	100% (n = 5)
Caucasian/White	0.0% (n = 0)	0.0% (n = 0)
Hispanic/Latino	60.0% (n = 3)	0.0% (n = 0)
Other	0.0% (n = 0)	0.0% (n = 0)
3. Education Level		
Associate Degree	0.0% (n = 0)	100% (n = 5)
Bachelor's Degree	100% (n = 5)	0.0% (n = 0)
Master's Degree	0.0% (n = 0)	0.0% (n = 0)
Doctoral Degree	0.0% (n = 0)	0.0% (n = 0)
4. TEA Certified		
Yes	100% (n = 5)	0.0% (n = 0)
No	0.0% (n = 0)	100% (n = 5)

**Research Question 1**

Research Question 1 *Does teacher certification influence student achievement during early childhood grades?*, was answered using an independent *t*-test with teacher certification as the independent variable (certified; not certified) and student achievement as the dependent variable. Baseline equivalence was established by using the GOLD<sup>®</sup> BOY data for both literacy and math ( $p > .05$ ). Findings of the independent *t*-test suggest that teacher certification did not have an influence on Head Start EOY literacy achievement,  $t(46) = .219$ ,  $p = .827$ , or Head Start EOY math achievement,  $t(52) = -.455$ ,  $p = .651$ .

In terms of literacy, certified teachers ( $M = 73.8$ ,  $SD = 26.4$ ) had, on average, lower student achievement at BOY than did non-certified teachers ( $M = 76.5$ ,  $SD = 21.6$ ). By EOY, certified teachers' ( $M = 88.7$ ,  $SD = 12.6$ ) average literacy achievement had surpassed that of noncertified teachers ( $M = 87.7$ ,  $SD = 18.2$ ). In terms of math, certified teachers ( $M = 69.9$ ,  $SD = 25.3$ ) had, on average, lower student achievement at BOY than did noncertified teachers ( $M = 71.1$ ,  $SD = 31.0$ ). By EOY, certified teachers' ( $M = 96.2$ ,  $SD = 5.5$ ) average literacy achievement was almost equivalent to that of noncertified teachers ( $M = 96.9$ ,  $SD = 4.7$ ). Given that 100% of the teachers were certified in the 1H program and only two teachers were certified in 2F, the analysis was not conducted per program.

### **Research Question 2**

Research Question 2, *Do teacher certification and teacher training influence student achievement during early childhood grade levels?*, was answered using a multiple regression technique with teacher certification and teacher training as the independent variables and student achievement as the dependent variable. Findings of the multiple regression techniques suggest that teacher certification and teacher training did not have an influence on Head Start EOY literacy achievement,  $F(2, 45) = .274$ ,  $p = .762$ , or Head Start EOY math achievement,  $F(2, 51) = .639$ ,  $p = .532$ . Given that 100% of the teachers were certified in the 1H program and only two teachers were certified in 2F, the analysis was not conducted per program.

### **Research Question 3**

Research Question 3, *Do teacher certification and teaching experience influence student achievement during early childhood grade levels?*, was answered using a multiple regression technique with teacher certification and teaching experience as the independent variables and student achievement as the dependent variable. Findings of the

multiple regression techniques suggest that teacher certification and teaching experience did not have an influence on Head Start EOY literacy achievement,  $F(2, 45) = .039, p = .962$ , or Head Start EOY math achievement,  $F(2, 51) = .308, p = .737$ . Given that 100% of the teachers were certified in the 1H program and only two teachers were certified in 2F, the analysis was not conducted per program.

#### **Research Question 4**

Research Question 4, *Do teacher certification, teacher training, and teaching experience influence student achievement during early childhood grade levels?*, was answered using an multiple regression techniques with teacher certification, teacher training, and teaching experience as the independent variables and student achievement as the dependent variable. Findings of the multiple regression techniques suggest that teacher certification, teacher training, and teaching experience did not have an influence on Head Start EOY literacy achievement,  $F(3, 44) = .209, p = .890$ , or Head Start EOY math achievement,  $F(3, 50) = .647, p = .588$ . Given that 100% of the teachers were certified in the 1H program and only two teachers were certified in 2F, the analysis was not conducted per program.

#### **Research Question 5**

Research Question 5, *Does an education in early childhood influence student achievement during early childhood grades?*, was answered using an independent *t*-test with type of degree as the independent variable (EC field; not EC field) and student achievement as the dependent variable. Baseline equivalence was established by using the GOLD<sup>®</sup> BOY data for both literacy and math ( $p > .05$ ). Findings of the independent *t*-test suggest that type of degree did not have an influence on Head Start EOY literacy achievement,  $t(46) = -.669, p = .507$ , or Head Start EOY math achievement,  $t(52) = -.625, p = .534$ .

In terms of the 1H program, findings of the independent  $t$ -test suggest that type of degree did have an influence on Head Start EOY literacy achievement,  $t(29) = 4.089, p < .001$ , but not Head Start EOY math achievement,  $t(33) = -.905, p = .372$ . Those teachers without an education in early childhood, on average, scored higher on the EOY literacy and EOY math achievement than those with an education in early childhood. These findings might have been the result of the disproportionate number of those with an EC education ( $n = 8$ ) in comparison to those without an EC education ( $n = 28$ ).

In terms of the 2F program, findings of the independent  $t$ -test suggest that type of degree did have an influence on Head Start EOY literacy achievement,  $t(15) = 2.337, p = .034$ , but not Head Start EOY math achievement,  $t(17) = -.087, p = .932$ . Regarding literacy, teachers with an education in EC had, on average, higher student achievement at BOY and EOY than did non-EC education teachers. Regarding math, teachers with an education in EC had on average lower student achievement at BOY than did non-EC education. By EOY, teachers with an education in EC had average student math achievement equivalent to that of non-EC education teachers. For this program, there were 11 teachers with an EC education in comparison to 8 without an EC education.

### **Research Question 6**

Research Question 6, *What are early childhood teacher perceptions regarding the influence that early childhood training and years of experience may have on student achievement?*, was answered by using a qualitative inductive coding process. In an attempt to capture a more in-depth understanding of the relationship between certification, years of teaching experience, and professional development on student achievement in Head Start Programs, Head Start teachers were interviewed regarding their perception regarding early childhood training and years of teaching experience and



how they influence student achievement. A deductive coding analysis developed several distinct themes based on the review of the literature and perceptions.

### **Years of Teaching Experience and Educational Background**

Teaching experience of the teachers who were interviewed ranged from 6 years of teaching experience to 23 years of teaching experience. When asked to describe their educational background and credentials. Participant C stated, “I currently hold a Child Development Associate Credential for preschool and am working towards my Associates Degree in Early Childhood Education.” Participant A stated,

I am a high school graduate and continuing my education at the collegiate level to obtain a degree in Early Childhood education. I have obtained a Technical Early Childhood Certificate, and Child Development Associate in both Infant and Toddler Preschool which have helped develop the research skills for a job in education. I have been teaching for 23 years.

Participant D stated,

I have been working in the educational field from 2000 until now in the USA. I previously taught college students in my origin country Mexico. Most of my experience has been working with Pre-K students. My current credentials are Bilingual Education-Supplemental Spanish/Generalist Grades (EC-6).

Participant E stated,

I have a bachelor’s in interdisciplinary studies, and I am a certified EC-6 Bilingual teacher. I started working as a Head Start Teacher Assistant in 2015 and was in that position for three years. I then moved to being a Lead Teacher in an ESL classroom for two years. Now I am in a Bilingual classroom for the current year.

Participant G, stated,

As of now my educational background and credentials consists of a B.A in Integrated Communications with a minor in Organizational Leadership & Supervision from the University of Houston, which I obtained in December 2015. Currently, I am a graduate student at Texas A&M Commerce working to obtain a M.Ed. in Early Childhood Education with one year left until completion. As for credentials, I am certified in the state of Texas to teach Early Childhood-6<sup>th</sup> grade and certified to teach English as a second language.

The final portion of the interview consisted of questions related to the interview participants' perspectives on the importance of teaching experience, the impact teaching experience had on student achievement in early childhood grade levels, and their own professional development goals.

### **Teacher Credentials Impacting Student Achievement**

The participants' perceptions regarding the impact teacher credentials have on student achievement was answered in the initial question that asked their thoughts on the matter. Participant D stated,

I believe that having a teacher certification is not only that I have a document that proves that I am a teacher but it proves that I am an experienced and prepared teacher with the necessary knowledge to work with students with different needs.

Participant B stated,

Teaching credentials are an important aspect to student achievement. When teachers have studied, trained, and acquired the skills and knowledge to lay the foundation for academic success, the results in student achievement are endless.

Teachers should be well informed and educated to teach children.

Participant D stated,

Teaching credentials will allow the employer to see I am a qualified, knowledgeable, and skilled professional in the ECE field. Student achievement is a reflection on what's been taught or conveyed on a daily basis and having credentials affords me the opportunity to do what I'm passionate about and that's ensuring children have a solid foundation for the educational journey.

Participant A stated, "I believe having teaching credentials ensures that all educators have a basic level of pedagogy needed to lead a classroom. Having teaching credentials also ensures that teachers continue to learn through professional development requirements for certification renewal." Participant F stated, "I think when someone holds teaching credentials it brings more quality and more support to the environment where they are working and makes a huge difference" One participant, E, who is certified stated,

I would say having teaching credentials is important because it demonstrates that a person went through the entire process of getting educated and demonstrated that they are capable of doing the job, but I do think that there a lot of people out there that lack the credentials, but have the same or sometimes more knowledgeable as someone who already has credentials.

Participant C stated,

Teaching credentials are a very important aspect in a student's education. Knowing the ways on how to apply different types of strategies to teach different types of learners to where each student can benefit from it and be successful is important.

### **Years of Teaching Experience Influencing Student Achievement**

The subsequent question asked how important to teaching, teaching experience is. Participant D stated,

At this moment I feel very confident to express that having teaching experience is fundamental because the knowledge gained for a teacher through the years helps the students be more confident in an environment in which everything runs with control. The students demand more knowledge and they are engaged to respond with good grades and behave well.

Participant B stated, Teaching experience is imperative when educating children of any age, especially early childhood learners. Having teaching experience prepares and gives educators the foundation one needs to set standards and expectations for their students and classrooms environment, alongside knowing how to handle any challenges and adversities that they might face during their time in the classroom. Teaching experience had an enormous impact on student achievement. When teachers have experience in their career fields, it sets the tone for success in the class. They are knowledgeable, resourceful, and are willing and ready to educate the students in their care. Experienced teachers have more patience and are willing to go the extra mile to ensure their students meet their developmental milestones. Experience also prepares teachers for obstacles or hurdles that they may encounter when in the classroom when facing challenges such as learning disabilities and behavior issues.

Participant G stated,

Teaching experience is important because over time you will learn how to handle yourself in certain situations. Teaching is a “learn-as-you-go” profession in my opinion, because no amount of training could prepare you how to properly lesson plan or deal with an extremely difficult student!

Participant C stated,

It is imperative to have teaching experience being that you have to be able to take what you learned from school and apply it to the classroom. By having experience, it helps you adapt to different situations that may arise in the classroom.

Participant F stated,

As teachers gain experience, their students are more likely to do better on other measures of success beyond test scores, such as school attendance, because students feel motivated. The teacher with experience solves a lot of problems in the classroom being a proactive teacher most of the time.

Participant E stated,

It is very important to have some type of teaching experience or experience working with kids because it gives the teacher knowledge needed to help students succeed. The first years of teaching are always the hardest because a teacher is learning and making mistakes along the way to better his/her teaching and classroom management skills.

Participant H stated,

I believe a passion and desire to teach can have more of an impact on a child's education than actual teaching experience. Those that are passionate about something are more willing to learn and more apt to connect and do whatever it takes to meet the needs of each student. You can teach someone how to be a teacher, but you cannot teach passion and willingness to be a lifelong learner.

### **Professional Development**

The final theme that surfaced throughout the interviews was the perceptions on professional development, trainings, and self-motivation to pursue additional training and

obtain additional degrees and certifications. The participants' hours of professional development ranged from the required program professional development hours, which is 32, to participants who had an additional 20+ professional development hours.

Participants were aware that their employer provided tuition reimbursements and full paid scholarships to obtain bachelor's and master's degrees in the field of education.

Participant H stated,

Teacher training is very important because new data and different ways of thinking is [*sic*] updated frequently. It is important to be a life-long learner and seek ways to better serve your student populations. Having the ability to go to trainings was very helpful. It gave me the strategies to better connect with my students and differentiate instruction to meet the individual needs. Being able to meet the needs of each student increases academic outcomes. I would like to shadow a master teacher and take notes. I would also like to attend training on implementing the curriculum and I am very motivated to continue my education because I feel I have more to offer than I am currently qualified to. So, I believe I can truly make a difference. My education goals are to obtain a bachelor's degree and become a certified teacher. I plan on enrolling in a study group that will assist with understanding key concepts needed to pass state exams and seek out professional development opportunities offered at my campus to better prepare me for my future career.

Participant E stated,

It is important to receive teaching trainings because you are able to get ideas from fellow teachers on how to improve your own classroom. Teacher training impacts student achievement in a positive way because teachers can see different strategies and perspectives to better the classroom to help children succeed. I am

ready and motivated to continue my education. After seeking my certification. I took a break from school, but I am ready to go back and strive for my Masters. Participant F stated, "Training gives new teachers the greatest chance of success as well as veteran teachers as they meet new challenges in education. I would like to complete a professional degree or certificate and apply for a promotion." Participant C stated,

The impact of training has been beneficial for early childhood grade levels because it is the foundation of learning. Teacher training is very important because the classroom environment is always continuing to change and to be an effective teacher you must know how to change with the times. My ideal professional development plan is to get started now and take time out to make a vision board and work towards my goals. My two boys are my motivation to get it done. They watch every move I make, and I want to make sure I'm leading them in a positive way to the best of my ability. My plan is to take a few classes at a time.

Participant A stated,

Teachers need to be given regular training opportunities to stay on top of my [sic] game and to stay abreast of all current information in ECE. Training and development leads to improved quality, positive attitudes, and improves the overall functions/development of children's learning. My family is the reason I do what I do and getting my degree would show them to never give up on your dreams and always strive for excellence. The second motivation would be job advancement. I would like an opportunity to move up and showcase my skills.

The agency is big on promotion from within.

Participant G stated,

Teacher training is important because along with your personal experience, trainings can be a good supplement to your teaching tool belt especially when relevant to your grade level. I feel trainings will assist the teacher to broaden their student's horizon. Personally, I enjoy hands on or independent trainings that I complete myself. For me, being able to maintain a good work-like balance that would allow me to come home and study would help me achieve my goals.

Participant B stated,

Receiving teacher training is significant and needed for educators to stay relevant in their career. Teacher training allows teachers to stay current with the evolving academic standards set forward by the education department in their state, while learning new teaching strategies to ensure student success in the classroom. Even the best teachers will begin to depreciate if they don't continue to strive for excellence. Teacher trainings have had a forceful impact on student achievement during early childhood grade levels. Teacher trainings help build support and taught educators how to reach all students while keeping the curriculum informative fun and engaging. It helps teachers identify red flags that may hinder learning and development, corrected behavior issues, and how to aid problems before reaching the grade school years. My ideal professional development includes me working in a Professional Learning Community to strengthen my knowledge and awareness of early childhood programs.

### **Educational Background: Degree Area**

One theme that surfaced during the teacher interview portion, and was relevant to Research Question 5 of the study, was the responses from the teachers who have background and certification in Early Childhood Education. Five of the interviewed staff have Associate Degrees in Early Childhood Education and Child Development (Infant



and Toddler) Credentials. During the interview process, these staff were confident in the pedagogy and methodology involved in the success of children in early childhood programs. The research did not show a relationship between certification, years of training, or professional development regarding student achievement in early childhood programs. However, students who were taught by teachers with a degree in early childhood education and/or a CDA (Infant & Toddler) credential had students with higher achievement scores in their GOLD<sup>®</sup> data assessment. These teachers in the interview process had a common theme that focused on factors that influenced student achievement and factors that are relevant to influencing student achievement during early childhood years. The participants were all asked what aspects of Early Childhood Education Programs they were familiar with and the responses from the participants with a degree/credential in early childhood education were evident. Participant D stated,

I am familiar and engaged with all of the aspects. First, because I am a mother of two graduated sons and because through the years I have the experience to know different situations between the families and the importance that the education environment is critical in the first years in which the student develop their personality, and self-esteem.

Participant A stated,

I am familiar with all areas of ECE as I have been in the field for over 23 years. Physical environment, program support, structure, effective leadership, developmentally appropriate practices, and age-appropriate curriculum are just a few of the areas of ECE that I am familiar with.

Participant F stated, "I am familiar with age-appropriate curriculum, physical environment, head start program structure, comprehensive family engagement activities, and conscience discipline strategies." Participant E stated,

I am familiar with the social, physical, and cognitive aspects of Early Childhood Education. Children need to learn to be independent and develop social skills to succeed. Kids learn through play and movement which helps them develop their physical and cognitive skills.

The final participant stated, “I am familiar with cognitive development, fine and gross motor skills, oral language, social emotional awareness, balanced literacy and numeracy awareness. I believe all these components are essential in preparing children for the journey through education.”

### **Summary of Findings**

This chapter presented the analysis of qualitative and quantitative data collected from teacher interviews, participant demographics, and processes of answering each research question. In the next chapter, findings will be presented to compare what was found through this study with existing literature. Implications of this study in education and future research will be discussed.

## CHAPTER V: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to examine the influence of teacher certification, teaching experience, professional development, and education in early childhood have on student achievement in Head Start Programs. Archived data were collected from a purposeful sample of 58 Head Start teachers and their respective students from a large urban Head Start Grantee. Quantitative data were analyzed using percentages, frequencies, two-tailed independent t-tests, and regression techniques. The qualitative data were analyzed using an inductive coding process. This study was completed during the Spring of 2021. Additionally, 10 Head Start teachers participated in semi structured interviews. Qualitative data enhanced the understanding of teacher perceptions and attitudes regarding the influence certification, experience, and professional development have on student achievement. Beavers (2009) stated that teachers are required to attend mandatory teacher professional development, among other tasks, to ensure their “highly qualified” teacher status that often provides job security. It is an overwhelming undertaking even for the most skilled teacher. Within this chapter, the findings of this study are contextualized in the larger body of research literature. Implications for Head Start programs across the nation, early childhood educators, and legislative governing bodies as well as recommendations for future research are also included.

### **Summary**

The research questions addressed whether teacher certification, years of teaching experience, and professional development influence student achievement in Head Start Programs.

Research Question 1 asked if teacher certification influenced student achievement during early childhood grades. Quantitative analysis demonstrated that teacher

certification does not influence student achievement. These results are similar to the results from other research that demonstrates having a degree in early childhood education can be a factor in student achievement, but a degree alone does not guarantee teacher competence (Hyson et al., 2009). Certification requirements for early childhood teachers are not unified across states. The current standards for early childhood teacher preparation advocated by the National Association for the Education of Young Children (NAEYC) recommended that teachers participate in field experiences (Observations, practica, and student teaching) where they can practice what they have been learning (Hyson, 2003). In other studies, evidence was provided that certified teachers impact student achievement (Clotfelter et al., 2007). Further studies supported the strengthening of certification requirements and testing efforts in many states (Goldhaber & Brewer 2000). (Hyson et al., 2009). Another supporting study done by Darling-Hammond et al. (2001) found strong evidence that supported that, as compared with students whose teachers were uncertified, students with teachers who were certified in a particular content area outperformed their peers whose teachers were not certified.

Research Question 2 asked if teacher certification and teacher training influenced student achievement during early childhood grade levels. Quantitative analysis demonstrated that teacher certification and teacher training do not influence student achievement. These results support previous research demonstrating that although teachers have state licensing requirements that outline professional development activities, often teachers find their professional development is both inadequate and irrelevant (Neito 2009). Further research suggested that the type of training program and the training institution has an impact on student achievement (Goldhaber et al., 2014). Other research stated that although professional development practices have changed

over the years, the focus is still to yield positive outcomes for student achievement (Brion, 2020).

Research Question 3 asked if teacher certification and teaching experience influenced student achievement during early childhood grade levels. Quantitative analysis demonstrated that teacher certification and teacher experience do not influence student achievement. These results supported previous research demonstrating that teachers should have an essential knowledge base, but educators as professionals need to develop general specialized knowledge applicable to their practice (Taylor & Tyler, 2012). Additional research stated that advanced data systems have been developed to research the effect that teaching experience has on student achievement as they gain experience. However, it has been extremely difficult in the past to track a specific teacher and compare groups over time (Podolsky et al., 2019). Teachers with more experience and higher ability often work in schools with advantaged students (Clotfelter et al., 2016; Loeb et al., 2012). This leads to further research that suggested that students in poorly resourced schools, with inexperienced teachers and a high teacher mobility rate, create a barrier when tracking possible potential student learning gains. However, some researchers felt that investing in building experiences, highly collaborated, professional learning communities that reduce teacher attrition will result in greater student learning. (Donohoo, 2017).

Research Question 4 asked if teacher certification, teacher training, and teaching experience influence student achievement during early childhood grade levels. Quantitative analysis demonstrated that teacher certification, teacher training, and teacher experience do not influence student achievement in Head Start Programs. These results supported previous research demonstrating programs should aim to improve quality and quantity to achieve higher student achievement in early childhood programs

(Charlesworth, 2018). Additional research stated that teachers are required to attend mandatory professional development to ensure that they are “highly qualified” and this often provides job security. However, this is an overwhelming undertaking for even the most skilled teacher (Beavers, 2009). Other research suggested that having a teacher certification provided for a solid foundation in the education profession that enhances the quality of the profession (Bakhtiar & Famelia, 2017). Similar studies outlined that teachers perceived that they were skilled at their professions (Ryan et al., 2004).

Research Question 5 asked if an education in early childhood influenced student achievement during early childhood grades. Quantitative analysis demonstrated an education in early childhood education does influence student achievement in Head Start Programs. These results supported previous research demonstrating that having a degree in early childhood education can be a factor in a teacher’s effectiveness, but a degree alone does not guarantee teacher competence (Hyson et al., 2009). Additional research stated that results demonstrated that a degree in early childhood has value to the practice and positive implications for the field (Huss-Keeler, 2019). Other studies (Vecchiotti, 2018) outlined there is still a fundamental issue in regard to whether teacher qualifications predict student achievement. Again, this conflicted with research by Croninger et al. (2007) that reported positive effects of teachers’ degree type on student achievement.

Research Question 6 explored the perceptions early childhood teachers had regarding the influence that early childhood training, certification, years of experience, and degree may have on student achievement. A total of 10 teachers were interviewed and responded to semi-structured questions about their educational backgrounds, relevant factors influencing student achievement, teaching experience, teacher training influencing student achievement, their thoughts on certification, professional development, and the

influence these factors have on student achievement. These 10 teachers from site 1H and 2F discussed their perceptions regarding the influence that early childhood training and years of experience may have on a student achievement. Five of the teachers were certified and five were not. The five that were not certified by the state had Associate degrees in Early Childhood Education and a Child Development Credential. When asked about their perceptions regarding how training and years of experience influenced student achievement in Head Start Programs, the overwhelming response was that training and professional development played a key role in teachers staying abreast of what was new and trending in the field. They agreed that yearly and ongoing training was needed to improve teaching techniques and strategies that especially dealt with classroom management and behavior techniques in the class. There were personal preferences on the types of training and how the training was delivered. However, the common theme was that it was needed and necessary.

Regarding teacher experience, the perceptions varied. There was a common theme that as you progress in years of experience you learn techniques and best practices that help you become a master teacher. However, responses varied on whether a 1st-year teacher and a teacher with 20+ years of experience influence student achievement in different ways. Most participants felt that teachers enter the field to impact the lives of children and you can make a positive impact whether you are starting your career or getting ready to retire.

### **Implications**

As the results from this study were examined and explored, many questions remained about the influence teacher certification, years of experience, professional development, and degree area have on student achievement in Head Start Programs. This study is significant because not only must the teacher have certain educational

requirements, the program/district must provide professional development that aligns with the performance standards and the teacher credentials. The two program sites in this study have different education requirements. In August of 2018, the Head Start Performance Standards changed and required individuals in certain positions to have bachelor's degrees and others to obtain credentials. The purpose of the changes was to ensure that teacher credentials aligned with school readiness requirements. The background, age, and credentials varied throughout the entire program based on the position that was held. Teachers teach because they are committed to impact the lives of children. Nieto (2009) stated because of state licensing requirements, all teachers must engage in professional development both before they enter the profession and periodically afterward. Despite such requirements, too often teachers find their professional development is both inadequate and irrelevant.

Head Start Performance Standards (2018) stated a program must ensure all center-based teachers have at least an associates or bachelor's degree in child development or early childhood education-equivalent coursework. The Head Start Program sites 1H and 2F are part of the largest Head Start grantee in the Houston Metropolitan Area. The programs are in two different counties. Site 1H serves 2,234 children in a large urban county and has a collaboration partnership with one of the largest school districts in the nation. Site 1H was acquired by the grantee in 1997 and the non-profit who holds the grant also has a Charter School that serves as the Local Education Agency (LEA) for this site. The inter-agency collaboration, which the agency charter school, allows for all Head Start teachers to be certified. Although, teachers in this program have bachelor's degrees and are certified, the degree can be in any field, but there must be at least 12 early childhood classes on the college transcript. Site 2F serves 689 children in the smaller county and encompasses rural areas. This grantee was awarded to the agency in 2015



during the rebid process through Administration of Children and Families. The teachers are not required to be certified, but must have, at the minimum, an associate degree in early childhood education and a child development credential.

One American model of a quality early childhood program is Head Start. Since its inception in 1964, the effectiveness of Head Start in improving the cognitive, relational, and behavioral skills in preschool children has been unclear and even questionable (Cooper & Lanza, 2014). Many studies assessing the effectiveness of Head Start have been done; however, these studies have resorted to the *traditional moderation framework* and have usually focused on a single trait across subgroups of children, such as the level of maternal education (Cooper & Lanza, 2014). Cooper and Lanza (2014) have suggested the use of a *latent class framework* that would enable them to assess multiple cohort traits found across various subgroups of children. Dearing, McCartney, and Taylor (2009) looked at the relationship between the quality of programs and school readiness well as the math and reading success of 1,364 low-income children. The results showed that receiving a high-quality early childhood education appeared to promote achievement indirectly via early school readiness skills. In summation, programs should aim to improve quality and quantity to achieve higher benefits for children.

Although the study did not find a relationship between certification, years of experience, or professional development when it came to student achievement, it did show that a degree in early childhood education and credentials in early childhood education do influence student achievement in Head Start programs. Obtaining a state certification affords an educator the opportunity for advancement in employment that impacts salary to include bonuses and stipends related to certain areas of certification. By not having a state teaching certification, teachers are limited to the salary they earn and are sometimes not eligible for state funding and bonuses that become available to

certified teachers. Districts offer signing bonuses for certified teachers based on their state certification. Early childhood teacher mobility is limited due to the fact teachers do not have their state certification. However, the lack of mobility also creates continuity and consistency in early childhood programs because the teachers stay and do not seek employment in the school districts because they lack certifications.

Despite the limitations in this study, the findings have important implications for teacher requirements and the importance of teacher degree area, training, and professional development alignment for teachers who teach in early childhood programs.

When Head Start programs hire teachers to deliver instruction to children, the area of degree and a background in early childhood should be a critical factor. Professional development and training for candidates should integrate best practices for early childhood educators and encompass university-based teacher programs that focus on the early development of children to lay a solid foundation for their success in these programs. In addition to informing hiring practices within Head Start programs, these results could also serve to inform decisions about the type of professional development and training needed for teachers who are certified and have degrees that are not in the field of education, specifically early childhood education. State legislation and governing bodies could provide grants, funding, and support of university-based laboratory schools for early childhood educators that establish infrastructure that supports traditional early childhood practices for teachers who lack exposure, and for enhancement of teachers who need targeted professional development to stay abreast on new and innovative trends in the field of early childhood education.

### **Recommendations for Future Research**

There are several recommendations for future teachers. Although the sample size was limited, this study provided insight into the influence teacher certification, years of

experience, professional development, and degree area have on student achievement in Head Start programs. The first recommendation is to increase the sample size and include Head Start Programs in neighboring cities, counties, and even across the nation. This would provide additional data to validate the findings of this study. Expanding the sample size to include multiple Head Start grantees would allow for comparisons and results not limited to one grantee, as in this study. Further, with expansions of this study to grantees across the nation, the study could be used influence early childhood credentialing programs and requirements for teachers in all early childhood programs.

The second recommendation would be to research the influence teacher certification, years of experience, professional development, and degree area have on students with identified disabilities, behavior issues, and those impacted by trauma and mental health concerns. This study could expand critical early intervention measures for children who struggle with one or more of these issues and provide insight on techniques and services to ensure they receive the necessary intervention.

The final recommendation is for this data to be relevant to university-based teacher education programs in developing preparation programs for early childhood teachers and professional development plans, and providing university-based continuing education programs. Establishing lab schools that work collaboratively with local, state, and national governing bodies to create a unified early childhood credentialing standard. By developing research-based programs from data in this study, state legislation and funding could have a positive influence on early childhood programs.

### **Conclusion**

The influence teacher certification, years of teaching experience, professional development, and teacher degree area have on student achievement in early childhood programs has been thoroughly examined. Research suggested that teacher certification,

teacher experience, and professional development do not influence student achievement in early childhood programs but having a degree and/or credentials in Early Childhood does influence student achievement in Head Start Programs.

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## APPENDIX A:

### INFORMED CONSENT

#### **Informed Consent to Participate in Research**

You are being asked to participate in the research project described below. Your participation in this study is entirely voluntary and you may refuse to participate, or you may decide to stop your participation at any time. Should you refuse to participate in the study, or should you withdraw your consent and stop participation in the study, your decision will involve no penalty or loss of benefits to which you may be otherwise entitled. You are being asked to read the information below carefully and ask questions about anything you don't understand before deciding whether to participate.

**Title:** *The Influence of Teacher Credentials in Early Childhood Education*

**Principal Investigator(s):** Cimberli Darrough, M.Ed.

**Student Investigator(s):** Cimberli Darrough

**Faculty Sponsor:** Dr. Antonio Corrales

#### PURPOSE OF THE STUDY

**The purpose of this study is to examine the relationship between teacher certifications and student achievement in early childhood programs.**

#### PROCEDURES

**The participant will be asked to participate in an interview. The interview will consist of questions related to the participants background, experience, and goals. The interview will be held in the teacher's classroom. Participants will be asked the following questions:**

APPENDIX B:  
INTERVIEW QUESTIONS

**Research Study: University of Houston-Clear Lake**  
**Conducted by: Cimberli Darrough-Doctorial Candidate**  
**05/2021**

Circle your work location:      **Houston**                      **Fort Bend**

**Instructions: Please answer the questions below in detail. Please type your response under the question and change the font color to red.**

---

1. Describe your educational background and credentials?
2. What are the most relevant factors influencing student achievement during early childhood grade levels?
3. What aspects of Early Childhood Education Programs are you familiar with?
4. What are the most relevant factors of Early Childhood Education Programs and why do you consider them important?
5. How important is having teaching experience?
6. What impact has teaching experience on student achievement during early childhood grade levels?
7. How important is receiving teaching training?
8. What impact has teaching training on student achievement during early childhood grade levels?
9. What are your thoughts on teaching credentials and how it impacts student achievement?
10. What would be your ideal professional development plan to help you achieve your personal career goals in education?
11. What would motivate you to continue your education?