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THE ROLE OF PRINCIPALS IN SUPPORTING EARLY CHILDHOOD TEACHERS

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DEDICATION

I dedicate this dissertation to my family, my source of inspiration and encouragement.

To my husband, Ron, who's unwavering support has carried me through this journey beginning 33 years ago as I entered college for the first time.

To my children, Ryan, Mackenzie, Elizabeth, and Taylor, and grandson Jaxon who have inspired me to persist and finish what I started, to set a good example for you, and to teach you the value of education and hard work.

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To the memory of my mother, Juanita, who modeled a deep faith and dedication to God while instilling in me a strong work ethic and determination to always do my best, because that is all she ever asked of me.

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PROLOGUE

This dissertation adheres to a journal-ready format. Three journal articles prepared for submission to refereed journals comprise the first part of the dissertation. Manuscript I, Connecting Theory and Practice is prepared for the journal *Principal Magazine* by the National Association of Elementary School Principals. Manuscript II, Building Knowledge and Experience in ECE: Strategies for Elementary Principals is prepared for *The Journal of Educational Research*, a publication of Taylor & Francis Online. Manuscript III, Principal Power: Supporting Quality Early Childhood Education in Elementary Schools is prepared for the *Early Childhood Education Journal.*

Dissertation Abstract

As access to state-funded preschools continues to increase, a steady rise in the number of preschool children enrolled in public education has occurred across the United States. Since 2004, the percentage of preschool children enrolled in state programs has increased from 14 to 32 percent (Barnett et al., 2017). This growth prompts an increase in the scope of responsibility for elementary principals to develop an understanding regarding best practices for supporting effective early childhood programs in their schools. To meet these challenges, it is essential for principals to possess background knowledge, education, and experience with preschoolers so they can effectively recognize and support quality early childhood programs within their schools. Principals participating in this study share ways to increase their knowledge and understanding of early childhood and ways to build quality programs in their elementary schools. Implications for educational practice, as well as potential future research, are discussed. This qualitative study reveals essential considerations for principals charged with overseeing early childhood programs and promotes engaged play through developmentally appropriate practices as the academic rigor school leaders are searching for in their classrooms. The revised Bloom's Taxonomy (Anderson & Krathwohl, 2001) and Piaget's (1954) constructivist theory are provided as constructs for academic learning in ECE. The purpose of this study is to provide elementary principals with essential information needed for a deeper understanding of early childhood education (ECE) and how teachers and students achieve high levels of learning in early childhood classrooms.

MANUSCRIPT I

An Elementary Principal's Guide to Early Childhood Education:

Connecting Theory and Practice

This manuscript is prepared for submission to the peer-reviewed journal *Principal Magazine* and is the first of three manuscripts prepared for a journal-ready doctoral dissertation.

Abstract

As access to state-funded preschools continues to increase, a steady rise in the number of preschool children enrolled in public education has occurred across the United States. Since 2004, the percentage of preschool children enrolled in state programs has increased from 14 to 32 percent (Barnett et al., 2017). Many elementary principals are responsible for supervising students and staff in primary and intermediate grade levels from ages four to twelve. With the increase in preschoolers comes added responsibilities for elementary principals. Elementary principals' influence is a significant factor in the success of their school, but more importantly, in the success of each student under their direct supervision and leadership (National Research Council, 2015).

Research shows a direct correlation between effective educational leadership and student achievement (Waters, Marzano, & McNulty, 2003). Highly effective principals who are leading advocates for early childhood exhibit a deep understanding of developmentally appropriate practices (DAP) and early childhood pedagogical knowledge outlined in this article. They are advocates of DAP for young children and promote positive school climate while building supportive relationships that connect children to learning (O'Sullivan, 2009; Feeney, 2013; Taylor et al., 2009; Ellis, 1998; Houston, 2001).

Keywords: developmentally appropriate practices, constructivist theory, symbolic thought, play-based learning, zone of proximal development.

An Elementary Principal's Guide to Early Childhood Education:

Connecting Theory and Practice

Early childhood education (ECE) encompasses children between the ages of birth to age eight (Copple & Bredekamp, 2009). As preschool-age children enter public schools, the responsibility of ensuring the students benefit from high quality, developmentally appropriate early childhood programs fall heavily on the instructional leader of the school. Principals are key to balancing developmentally appropriate teaching and learning practices with academics (Kauerz, 2013). To effectively promote and lead quality early childhood programs within elementary schools, principals must first appreciate and comprehend the uniqueness of early childhood as a special age and stage of growth and development.

The goal of this article is to describe and explore the knowledge and understanding principals must possess to support high-quality early childhood programs. Despite decades of research supporting effective school leadership and access to high-quality ECE as the two most important determinants of educational outcomes, many principals are not adequately prepared to meet the needs of the youngest learners in their schools (Brown et al., 2014).

Constructivism

Constructivism is a scientific theory that describes how individuals learn. Piaget (1973) defined constructivism as the process of change or the construction of knowledge that occurs in ones' thinking. Included in his definition, Piaget emphasized that constructing knowledge is much more involved than memorizing facts or specific information. The constructivist theory posits that learning comes from constructing one's

knowledge rather than acquiring it from the environment or external source. Knowledge is constructed internally through interactions within the environment.

DeVries et al. (2002) developed instructional practices that align with Piaget's constructivist theory. EC educators who understand and value Piaget's theory, respect student autonomy by allowing them to be involved in decisions about learning. They provide interesting, engaging activities that include choice and use challenging, engaging content for all levels of learners that promote child reasoning through open-ended questions and thoughtful responses to errors. Adequate time is given for investigation of topics of interest to the students, such as building. When a child builds with blocks, they are developing fine and gross motor muscles, classifying by shape and size, experimenting with balance and form, using their imagination, testing ideas, recognizing and comparing quantity, and developing an understanding of number concepts (Brown & Vaughn, 2010).

Piaget (1967), Vygotsky (1978), Dewey (1933), and Bruner (1990) all theorized that learning occurs through the active construction of ideas and concepts. The theory of constructivism is applied to education and learning through active engagement in the learning environment. Vygotsky (1978) indicated learning, or the construction of knowledge, as a social advancement encompassing memory, language, and real-life conditions, collaboration, and the scaffolding of knowledge.

Principal's Pedagogical Knowledge of ECE

Understanding early childhood theories provides principals with a foundation for understanding child development and the implications for supporting children's learning (Mooney, 2013). This understanding can aid principals in recognizing high-quality

teaching practices that impact student achievement. For example, using the constructivist theory transforms the image of the teacher as an instructor to a facilitator to support the student's search for knowledge through inquiry-based investigation (Mooney, 2013).

Zone of Proximal Development

Vygotsky (1978), like Piaget, found children learn through active learning. He explained the ZPD as an area of growth between what the child can do independently and his frustration level. Imagine a preschooler learning to count. Like most four-year-olds, counting to 20 can be challenging to master at first since 11 and 12 do not follow the predictable pattern of 13 through 19. The child can count from 1 to 10 independently and from 11-20 with the aid of the teacher. This new skill, counting to 20 with help, is within the child's ZPD. Soon with adult guidance and support, the child will be counting to 20 independently. If the adult decided to ask the child to count by fives before the child mastered counting by ones that would be outside the ZPD, developmentally inappropriate, and may cause the child to become frustrated.

Likewise, working below the ZPD of the child may cause boredom and waste valuable learning time. Working within the ZPD is ideal because the teacher is providing a scaffold for the child to reach a new level of understanding. The term, proximal in ZPD uncovers the skills the child is on the threshold of mastering (Vygotsky, 1978). Cognitive growth happens as a child constructs his or her knowledge through interactions with teachers, peers, and materials in the learning environment.

The Preoperational Child

The preoperational stage spans from ages two to seven (Piaget, 1958). This age range includes preschool, kindergarten, first, and second-grade children. During this stage

of development, the foundations for logical thought develop. Teachers provide play opportunities to help children discover relationships and new ideas. According to Piaget (1958), the egocentric child believes others see, hear, and feel the same. The process of pretending builds skills in many essential developmental areas. When a child engages in cooperative play, he learns how to take turns, share responsibility, and creatively problem-solve (Mraz, Porcelli & Tyler, 2016).

A typical learning objective for four and five-year-olds is understanding the relationship between quantities and whole numbers. Children are expected to recognize that a numeral is used to represent the number of objects in a set, up to ten. Understanding a symbol represents an object or group of objects is an abstract concept for a young child developing in the preoperational stage of development. Children need more meaningful, engaging learning opportunities to develop the concept of number. These skills are not intuitive but constructed through active, developmentally appropriate learning activities that allow children to make connections and understand associations. It is essential to understand that it is difficult for children to learn these crucial concepts through direct instruction. Young children do not wait passively in school to be told what they should learn. Instead, they learn by active engagement in their environment.

Developmentally Appropriate Practice

The National Association for the Education of Young Children's (NAEYC) position statement focusing on developmentally appropriate practices (DAP) for young children is the foundational structure for ECE, teachers and principals. The position statement includes essential standards to inform parents, teachers, and school leaders of child development to connect practice and increase the success of young children (Copple

& Bredecamp, 2009). DAP is not a curriculum; instead, it is a teaching guide rooted in research and developmental theory, explaining how young children learn and grow. There are a variety of ECE approaches and curriculums. Educators can use the DAP framework to guide them in determining an appropriate curriculum for their students. Early childhood programs or curricula considered developmentally appropriate must be carefully structured to foster all aspects of a student's well-being and capabilities (Copple & Bredecamp, 2009).

In ECE, DAP guides learning to promote all domains of child development (NAEYC, 2016). For example, a teacher might say, "I see you sorted the beads by color," which is a way to notice and value a child's efforts. Teachers make suggestions to guide them toward new learning experiences. "You might want to use the clay to make some letters. What letter does your name start with?" Teachers give ample opportunities for children to practice new skills. "Do you want to use these letters to spell your name?" They add more challenging tasks as the children are ready. "You finished that shape puzzle so quickly! I think you can handle a bigger puzzle with more pieces!" Teachers offer choices. "Do you want to share the puzzles, or would you like to work on them by yourself?" Teachers who use DAP to plan activities and learning environments for their students utilize every possible opportunity for learning (NAEYC, 2016).

Play-Based Learning

Understanding the significance of symbolic thought through play is vital to understanding how young children develop during the early childhood years (Preissler, 2006). Symbolic play includes experiences of pretending, drawing, writing, and thinking and are essential precursors to the development of literacy and numeracy. Research has

shown that child-guided, teacher-supported play has many benefits for children (Copple & Bredecamp, 2009). While children engage in play, they learn new skills, make friends, use language, take turns, and learn to regulate their behavior and emotions.

Pretend play is often referred to as symbolic play (Bergen, 2002). In pretend play, children display the ability to use objects, actions, and ideas as representations of other objects, activities, and ideas. They can create and apply an imagined situation or make-believe scenario to an actual one using meaningful and orderly sequences. An example of symbolic play is a group of children playing in the block center in their classroom. The teacher had previously added a few prompts to the center, including construction hats, safety vests, clipboards, blueprints, and a toolbox of tools. In their effort to understand new uses for the materials and activities for the center, the children begin to play. Based on prior experiences and knowledge, one child assumed the role of a builder, another the architect, and the remaining children joined in on the play scenario by taking on the part of workers building different structures. One child used a small rectangle block as a cell phone. He held the block up to his ear and made a pretend call. He said, “hello, where is my truck? I need to move this wood!”

During early childhood, children are in a constant process of experimentation, risk-taking, and negotiation, where the process is both purposeful and intentional. If children are actively participating in a print-rich environment, they begin to develop strategies and generate knowledge about the literacy around them (Christie, 1991). By labeling classroom areas and materials with pictures and words, children begin to make connections between their thoughts and ideas with print. For example, a child starts to draw in the art center. She wanted to draw a picture for her mom. Her teacher read a

special class-made book that morning about how to be safe in the center areas of the classroom. Images fill the book from each center with ways to play and be safe. She looks through the book and finds her favorite center, the housekeeping area. She decides to draw herself playing in the center and labels the picture with the word kitchen from the book. As young children play, explore, connect, experiment, and interact with other children and their teachers, learning is taking place (NAEYC, 2016).

Conclusion

The concept of theory to practice involves learning a meaningful, applicable theory and implementing that theory in a practical setting (Stayton & Miller, 2008). Constructivists, Piaget and Vygotsky believed that learning occurs in an active, constructive process. Principals who connect early childhood theory to practice recognize DAP and support a constructivist approach to teaching in their early childhood classrooms. Vygotsky (1978) held the construction of knowledge as a social progression that involves language, memory, real-life situations, collaboration, and scaffolding of learning. In collaboration with more capable peers, students can go beyond their ZPD and gain new understanding.

Principals who understand Vygotsky's (1978) theory of ZPD could utilize this method, through meaningful collaboration with early childhood teachers and peers and extend beyond their ZPD to gain essential knowledge and understanding of ECE theories and practices. Highly effective principals who advocate for quality ECE value DAP for the young children in their schools. This understanding and knowledge of ECE is a necessity in building strong foundations of academic success for the youngest learners in their elementary schools. Through the independent study of early childhood theorists,

pedagogical practices, childhood growth and development, and DAP, principals may acquire knowledge and experience necessary to effectively lead early childhood classrooms under their supervision (Kostelnki & Grady, 2009).

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MANUSCRIPT II

Building Knowledge and Experience in ECE: Strategies for Elementary Principals

This manuscript is prepared for submission to the peer-reviewed journal, *The Journal of Educational Research*, and is the second of three manuscripts prepared for a journal-ready doctoral dissertation.

Abstract

This study explores the lived experiences of elementary principals and teachers who work together in 17 different public schools in Oklahoma. Results from this study reveal that teachers need their principals to understand developmentally appropriate practice. The teachers expressed a desire for their principals to be knowledgeable about child development and understand that play is a natural way for young children to learn. In a time when access to state-funded pre-k continues to increase, a steady rise is evident in the number of preschool children enrolling in public education across the United States. This growth prompts an increase in the scope of responsibility for principals to develop an understanding regarding best practices for supporting effective early childhood programs in their schools. To meet these challenges, it is essential for principals to possess background knowledge, education, and experience with preschoolers so they can effectively recognize and support quality early childhood programs within their schools. Elementary principals' influence is a significant factor in the success of their school, but more importantly, in the success of each student and teacher under their direct supervision and leadership (National Research Council, 2015). Principals participating in this study share ways to increase their knowledge and understanding of early childhood and ways to build quality programs in their elementary schools. Implications for educational practice, as well as potential future research, are discussed.

Keywords: developmentally appropriate practice, preschool, public education, elementary principals, early childhood education

Building Knowledge and Experience in ECE: Strategies for Elementary Principals

Early childhood education (ECE) encompasses children between the ages of birth to age eight (Copple & Bredekamp, 2009). As the access to state-funded preschools increases, a steady rise in the number of preschool children enrolled in public education is evident across the United States (Barnett et al., 2017). Since 2004, the National Institute for Early Education Research (NIEER) reports that the percentage of preschool children enrolled in state programs has increased from 14 to 32 % (Barnett et al., 2017). Public pre-K classes were offered in 43 states across the US in 2016, according to the NIEER State of Preschool Yearbook. In 2018, they reported one-third of all four-year-olds in the US attended school in a public pre-K. With a rise in preschool enrollment comes an expansion in the scope of responsibilities of elementary principals.

Understanding the administrative leadership context by which principals lead is essential to the field of ECE and educational leadership (Kostelnik & Grady, 2009). To effectively promote and lead quality early childhood programs within their elementary schools, principals must first appreciate and comprehend the uniqueness of early childhood as a special age and stage of growth and development. In an exploratory study, Abel et al., (2016) maintain elementary principals possess a lack of training, experience, and understanding of ECE theory, and developmentally appropriate practice (DAP) needed to adequately supervise and lead early childhood programs and staff. In a recent survey of their membership, the National Association of Elementary School Principals (NAESP) found that only 24% of their members held certificates in early childhood education (Leiberman & Cook, 2016).

Even with current research and knowledge of the significance of ECE and the growing numbers of preschool children taught in elementary schools, educational leaders continue to complete degree requirements and obtain administrative certificates without adequate education and field experiences in ECE (Abel et al., 2016). Minimal research exists documenting how elementary principals charged with the supervision and leadership of early childhood programs respond to the needs of their youngest learners. One question surrounding a principal's role in ECE is how they adequately support and obtain knowledge to build quality programs within their elementary schools. Little attention has been given to the principal's professional knowledge and EC experience as they work with the recent influx of preschoolers in elementary schools. This scarcity of information amplifies the need for additional research. This research could provide a better understanding of the range of a principal's responsibility of infrastructure, staff, and for policies that support their education, training, and continuing professional development (Whitebook et al., 2012).

Abel et al. (2016) offer insights on the role of principals and how they impact pre-K pedagogy. Principal perceptions regarding the significance of DAP reflect the inconsistencies in the education and training of the principals surveyed. One example noted from the study indicates a steady decrease in the recognized importance of dramatic play centers as students move from pre-k to first grade. This finding indicates that many principals may not fully understand or value play-based learning as their students move through the early childhood years of school.

Another trend in the data suggests a more academic pedagogy as the principals surveyed, rated students working independently and whole group teacher-directed

instruction with a significant increase as students move from pre-k to first grade (Abel et al., 2016). While some principals may not fully understand the benefits of play-based instruction and learning, many may feel pressure to respond to increased academic expectations (Lieberman & Cook, 2016). The study went on to challenge existing norms for principal training and education programs in hopes of ensuring all instructional leaders of pre-k classrooms possess a background that inspires them to support and influence pedagogical practices that best meet the needs of their youngest learners.

In a recent study on school leadership, Talan, Bloom, and Kelton (2014) note that the quality of leadership is directly connected to the quality of early learning for young children. The National Research Council (2015) provides a framework for knowledge and competencies for school leaders of young children from birth through age eight. The competencies include practices to promote learning, child assessments, fostering a professional workforce, assessment of educators, developing and fostering partnerships, and organizational development and management. School leaders need an understanding of the implications of child development and the interactions between care, instruction, environments, practices, staff, and students.

A key contributor to continuity in high-quality learning experiences for educational programs serving children between grades pre-k and third grade are the foundational standards and core competencies (National Research Council, 2015). These standards and competencies have been established by the National Association for the Education of Young Children (NAEYC); the National Board for Professional Teaching Standards (NBPTS); The Interstate Teacher Assessment and Support Consortium (InTASC); and The Division for Early Childhood (DEC) of the Council for Exceptional

Children has issued “Recommended Practices in Early Intervention/Early Childhood Special Education” (DEC, 2014). Table 2.1 represents statements from the above national organizations to promote common knowledge and competencies for school leaders who oversee the education of young children.

Table 2.1 *Knowledge and Competencies for Principals*

Advocacy	The capacity to promote and serve as an advocate for early childhood education.
Assessments	The ability to select appropriate assessments to monitor a child’s progress on learning targets and to use assessment data to drive instructional practices, professional learning topics, and policies.
Collaboration	Proficiency in supporting staff collaboration and promote professional learning communities (PLC) that include resources for health, education, social services, and other groups outside the scope of leadership.
Child Development	Knowledge of childhood development to work with teachers and support the youngest students in their school in all domains: cognition, language, social-emotional, literacy, and physical.
Curriculum	Showing competence in selecting or designing appropriate curriculum and instructional approaches that support child development and developmentally appropriate practices.

Diversity	The ability to work effectively and equitably with all children. This includes all cultures, socioeconomic status, language, and abilities.
Environments	The knowledge and ability to support creative learning environments with materials, activities, and physical spaces to spark inquiry and engagement.
Evaluations	The ability to assess instruction by recognizing both poor- and high-quality teaching through an appropriate evaluation system, observations, coaching, and other learning opportunities.
Families	The ability to form and support partnerships with families to promote child learning and development.
Management	The ability in administrative and fiscal management, understanding and compliance with state and federal laws, the development, and management of infrastructure and an appropriate work environment.
Policies	The ability to formulate and implement policies that create learning environments to enhance and support quality practices in a child's development and learning.
Professional Development	The ability to implement ongoing professional learning opportunities for quality programs that reflect current knowledge of child development and highly effective instructional practices in ECE.

The primary role of principals in schools that include young children in grades pre-K through third grade is to serve as an advocate for early childhood education (Kostelnik & Grady, 2009). The benefits of ECE extend beyond the early childhood years. Children who attend high-quality early childhood programs are less likely to repeat grades, require special education services, or drop out of school (Barnett, 2008). Early childhood teachers need concentrated supervision and coaching, and they should be immersed in a continuous improvement process for teaching and learning (Kostelnik & Grady, 2009). The research presented in this article makes a strong case for the benefits of ECE on academic success and society.

Theoretical Framework

The framework for this study is based on constructivism, a theory that describes how individuals learn. Piaget (1973) defined constructivism as the process of change or the construction of knowledge that occurs in one's thinking as he or she learns. Included in his definition, Piaget emphasized that obtaining knowledge is much more involved than memorizing facts or specific information. It involves organizing information and formulating conceptual foundations for new learning. The constructivist theory posits that learning comes from constructing one's knowledge rather than acquiring it from the environment or external source. Knowledge is constructed internally through interactions within the environment.

Piaget's (1951) constructivist theory was used in this study to explain how children in early childhood classrooms learn to solve problems as they work and play acquiring skills through active engagement in their learning environments. Within this framework, educators understand that knowledge is internally constructed by the learner

making meaning from interactions within the learning environment. It is essential for principals charged with overseeing EC teachers and students to have a solid understanding of how young children learn and develop (NAESP, 2005).

According to Piaget (1958), children between the ages of two and seven are in the preoperational stage of development. Children in this stage are egocentric. They have difficulty seeing a perspective other than their own and go through times of illogical or disorganized thinking. They often jump from one illogical explanation to another without concern. For example, a common learning objective for preschool and kindergarten students is to understand the relationship between quantities and whole numbers. Four and five-year-old children are expected to recognize that a numeral is used to represent how many objects are in a set. Understanding that a symbol represents an object or group of objects and represents quantity is an abstract concept for a young child developing in the preoperational stage of development. Principals need to understand children may need more meaningful, engaging learning opportunities to develop the concept of number. These skills are not automatic but constructed through active, developmentally appropriate learning activities that allow children to make connections and understand associations. Over time, children will use their experiences to develop abilities for symbolic thought.

Central to symbolic thought is the ability to use mental representation (Bergen, 2002). These images can be of objects or actions held in the human mind or language where words represent thoughts and ideas. Symbolic thought is a major developmental accomplishment for children. It begins with toddlers and continues gradually becoming

more sophisticated throughout childhood. One of the most common places symbolic thought is observed in ECE is in pretend play.

Pretend play, often referred to as symbolic play (Bergen, 2002), occurs when children display the ability to use objects, actions, and ideas as representations of other objects, actions, and ideas when they play. They can create and apply an imagined situation or make-believe scenario to an actual one using meaningful and orderly sequences. An example of symbolic play is a group of children playing in the home living center in their kindergarten classroom. The teacher had previously added a few prompts to the center, including a white lab coat, several stuffed animals, a phone, a clipboard, notepads, pencils, and a doctor's kit. In their effort to understand new uses for the materials and activities for the center, the children begin to play. Based on prior experiences and knowledge, one child assumes the role of a veterinarian, another the receptionist, and the remaining children join in on the play scenario by taking on the role of customers bringing their pets to see the doctor because they are sick. Understanding the significance of symbolic thought through play is vital to understanding how young children develop during the early childhood years. Symbolic play includes experiences of pretending, drawing, writing, and thinking and are essential precursors to the development of literacy and numeracy (Bergen, 2002).

A critical consideration for principals is to acknowledge the importance of imaginary play during this stage. As the child learns and grows, he or she continues to develop abilities for symbolic thought. Imaginary play involves symbolism as children use objects to represent real-life experiences. Symbolic language develops as children use

words to recreate previous events. Piaget believed language was symbolic, and a child's actions formed the basis for cognitive thinking (Piaget, 1962).

It is important to note that constructivism, as defined by Piaget, describes knowledge as ever-changing with each discovery. The constructivist theory regards play as a natural way for children to learn and develop (Waite-Stupiansky, 1997). Children develop thinking and make sense of new information through social interactions as they play. In ECE, play is used as an ideal context for constructing knowledge. As children play, they develop autonomy, establish rules, negotiate with peers, agree on procedures, and assign roles. As they play, they are testing their theories or thinking by playing or acting out scenarios with peers in a safe classroom environment (Waite-Stupiansky, 1997). Piaget found indicators of almost all the essential processes of learning in his observations of children playing.

Principals who are knowledgeable of constructivism and the importance of play realize it is essential to learning, language development, critical thinking, and problem-solving. In this research, I found principals who promote their teachers and ECE programs. However, some possess a limited understanding of DAP and general ECE knowledge. By employing a constructivist framework, principals can develop a deeper understanding of ECE by making specific connections between theory and practice and constructing their own knowledge. These connections can be made through collaboration, observation, and interactions with their students and teachers.

Research Questions

1. What do early childhood teachers need their principal to know and understand to support them in their developmentally appropriate teaching practices?

2. How can principals support quality early childhood education in their elementary schools?

Methods

This qualitative research study was conducted utilizing hermeneutic phenomenology to provide a better understanding of what principals need to know and do to recognize, support, and promote quality early childhood programs within elementary schools. This type of study, according to Laverty (2003), is intended to weave together interpretations of lived experiences of the principals, teachers, and the researcher to uncover layers of details and identify the essence of a supportive ECE principal. Constructed meanings are described in rich detail, utilizing the lived experiences of the respondents.

In exploring this phenomenon, a better understanding of the essence of principals who supervise quality ECE programs and promote DAP within their elementary schools was revealed. A qualitative research study incorporates observations, interpretations, descriptions, and analysis of individual experiences and understandings of the world in which they live and work (Bazeley, 2013; Miles & Huberman, 1994).

Purpose

The purpose of this qualitative research study was to describe and explore what principals need to know and be able to do to support high-quality early childhood programs within their elementary schools. Despite decades of research supporting effective school leadership and access to high-quality ECE as the two most important determinants of educational outcomes, many principals are still inadequately prepared and educated to manage the youngest learners in their schools (Brown et al., 2014).

Setting

This study was conducted in urban, suburban, and rural schools across the state of Oklahoma. All 513 public school districts across the state including both schools managed by elected school board members and charter schools were eligible to participate. Charter schools are public schools managed by organizations, including both non-profit and for-profit groups. School settings were primarily elementary schools, early childhood centers, or administration buildings. Of the 513 school districts in the state, 19 agreed to participate in this study.

Participants

In this study, participants were selected based on school district participation in a larger feasibility study, the Early Learning Inventory (ELI) for the State Department of Education (SDE). Participants include 50 teachers from 17 public school districts in Oklahoma, serving approximately 1,100 kindergarten students. Of the 50 kindergarten teachers in the larger study, 22 were present during the focus group activity. Teachers were asked to join focus group activities, and school administrators were asked to participate in face to face interviews. Of the 17 school administrators, eleven were interviewed. Each participant signed a consent form indicating their permission for information obtained during the interview to be used for the study.

Demographic information gathered during the study were levels of education, areas of teaching and administrative certification, and previous experience. Table 2.2 represents years of teaching experience and areas of certification for kindergarten teachers. All teachers were female, and participant years of experience in education ranged from one to 31 years. Several teachers had more than one area of certification.

Table 2.2

Areas of Teacher Certification

Number of Teachers	Area of Certification
22	Early Childhood Education
1	Alternate Certification (Counseling)
1	Reading Specialist
7	Elementary Education
1	Language Arts
2	School Counselor
1	History
1	Social Studies

School administrators participating in interviews ranged from seven years of experience in education to 30 years of experience. Table 3.3 lists areas of certification.

Table 3.3

Areas of Administrator Certification

Number of Administrators	Areas of Certification
5	Early Childhood Education
8	Elementary Education
2	School Counselor
8	Elementary Principal
1	Biology
1	Home Economics
1	Superintendent
1	Social Studies
2	Reading Specialists
2	Secondary Principal

There were no tenure or experience requirements to participate in the study. Administrator and teacher years of experience range from one to 30 years. Some administrators had more than one area of certification.

Data Sources and Procedures

Data sources utilized for this study included (1) focus groups, (2) interviews, and (3) the researcher's field notes. Through data triangulation, a balanced and detailed

picture of what principals do to support ECE was revealed and served to provide more complexity of the study's findings (Glense, 2011). Triangulation, using multiple sources of data, helped the researcher cross-check and compare all the data collected from interviews, focus groups, and the field notebook.

Focus Groups. Certified kindergarten teachers participated in focus groups to explore teacher experiences within their elementary school. There were 22 teachers representing 17 different school districts across the state. The semi-structured focus group took place at the end of the school day and lasted approximately 30 minutes. Sessions were recorded for transcription, and a standard set of questions was provided to stimulate teacher responses. The researcher assumed the roles of moderator and observer as explained by Breen (2006). The group activity allowed kindergarten teachers to share and compare experiences with one another; develop and generate ideas, and explore topics of shared importance. The purpose of each focus group was to collaborate on shared ideas related to ECE, DAP, and principal support.

Participants collaborated on fourteen questions developed to provide information to the OPSR in implementing a statewide Early Learning Inventory (ELI) and to gain insight on what they think principals needed to know and understand to be supportive of developmentally appropriate teaching practices in early childhood classrooms. Each teacher was asked to state their years of experience in education and what areas of certification they currently held. Following each focus group, audio recordings were transcribed by the researcher and shared via email for both the larger ELI study and this study in Microsoft Excel format.

Interviews. Semi-structured interviews were conducted by the researcher with eleven school administrators from participating school districts (Merriam & Tisdell, 2016). Administrator interviews included questions on experience, areas of certification, understanding of DAP, ECE knowledge and support, and key differences in expectations for both lower and upper-grade elementary students. The interviews lasted approximately 45 minutes to one hour each and were recorded, transcribed, and later analyzed for common themes and trends. Audio recordings were transcribed by the researcher and shared via email for both the larger ELI study and this study in Microsoft Excel format. Interview responses were used to understand the lived experiences of elementary principals in supporting ECE programs and teachers in their schools.

Field Notebook. Glense (2011) recognizes the field notebook as a primary tool in conducting qualitative research. A field notebook was utilized to capture thoughts, impressions, and specific observations during the collection of data that were not evident from the transcripts. Anecdotal notes were included to document additional thoughts and connections made during school visits, interactions with the participants, data collection, and analysis process. Entries were labeled with the date, time, location, and context that includes actual words spoken by the participants (Bazeley, 2013). The field notebook aided the researcher in providing a synthesis of data through the triangulation of data sources and observations during the study. In addition to observations, the field notebook held the researcher's reflections, thoughts, and questions developed during data collection and review (Glense, 2011).

Analysis

Initial data analysis was the same for teacher focus groups and principal interviews. First, transcripts were read to gain an understanding and a sense of the whole to capture the essence of the data (Bazeley, 2013). During a second read of the transcript, memos or notes of personal thoughts, possible biases, assumptions, and interpretations were included in the field notebook. Transcripts from both the focus groups and interviews were uploaded into Dedoose 8.0.35 (2018), an online coding application. During the coding process, both the frequency and commonality of key terms were analyzed.

Brazeley (2013) states that coding happens in two stages. In the first stage, codes were identified to label the information. Starter codes developed during this stage identified common ideas and themes. The themes initially identified were: experience, areas of certifications, developmentally appropriate practices, play, classroom environments, professional development, key experiences, student engagement, academic rigor, ECE support, principal's ECE knowledge, and challenges.

The second stage of coding was used to refine and focus the codes specifically back to the research questions and theoretical framework of the study. Codes were collapsed during this stage that appeared to be similar or have the same meaning. Memos were written in the field notebook explaining the researcher's rationale and decisions on coding. This written account provided an audit trail that was beneficial to the researcher during the study (Lincoln & Cuba, 1985).

Additionally, the second level of analysis was used to identify themes or patterns in the data. Themes are the products of coding, classifying, and reflection (Saldana,

2009). Themes revealed through coding serve as structures describing an experience that was constructed throughout the data. Themes were categorized and related to the research questions and theoretical framework of the study. Emerging themes from this data were: principal knowledge and support, teacher knowledge and support, DAP teaching/learning strategies, and environments for student success.

Bazeley (2013) explained that the purpose of the second level of analysis is to explore similarities and differences to increase understanding and to identify additional themes and patterns. During this level of analysis, codes were examined from different perspectives. Common narratives were created to help synthesize and understand the relationships between teachers and principals from one school to another. The synthesis of the data was an important step. Using the Dedoose coding application, an electronic inquiry was conducted on the data from focus groups and interviews to uncover any patterns or themes that did not emerge during the first levels of analysis.

Provisional codes were identified from the examination of field notes and transcripts. Codes were used to identify key terms and phrases used by the participants during focus groups and interviews (Miles, Huberman, & Saldana, 2014). Level 1 starter codes were used to identify common ideas and practices. Level 2 codes were developed into themes to refine and connect the data back to each research question and to identify potential themes and patterns in the data. Relationships between principals and teachers, shared ideas, perceptions, understandings of concepts related to DAP, and quality ECE in elementary schools emerged from the transcripts during analysis.

Level 2 codes that appeared to have the same meaning were collapsed and considerations were made for different schools. Participant responses from different

schools and school districts were compared to explore similarities and differences to increase understanding revealing additional themes and patterns on varying attitudes, concepts, and feelings. Common narratives were created to help synthesize and understand the relationships between teachers and principals from one school/district to another.

Level 3 codes were developed from all data sources through triangulation during the study to establish credibility. To ensure dependability, member checks and peer audits were conducted periodically throughout the data collection, analysis, and reporting process by the researchers and the team working on the larger feasibility study for OPSR. Ultimately, a cache of information was gathered to document the objectivity of the study and support the findings. The information was documented through schedules, lists of meetings, correspondence, transcripts, and notes from interactions related to the study.

Findings and Discussion

Findings revealed through this study incorporated different perspectives from both teachers and administrators involved in teaching and supervising young children. Given the small sample size, triangulation of multiple data sources was essential in this qualitative study. Analysis of focus group transcripts provided overall themes and a more in-depth understanding of what teachers need their principals to know and understand about ECE and DAP.

Teachers used positive words and phrases to describe their relationships, knowledge, and support. Themes identified from the focus group activities include, support, professional development, knowledge, DAP, relationships and collaboration. The following quotes from teachers capture the essence of what principals need to know

and understand to support them in developmentally appropriate teaching practices. One teacher stated, “I get pretty good support. The principal we have…has worked with children. She visits our classrooms. She gives us feedback…. I feel like she knows my class…and my teaching style.” Another teacher declared, “children develop at different rates and have a variety of learning styles. If we are not providing developmentally appropriate activities, we increase the possibility that the students will become frustrated. Our principal understands how important [DAP] this is.”

Collectively, focus group teachers acknowledged the importance and appreciation for the support they receive from their building principals. One teacher stated, "thankfully, my principal is very supportive of [ECE]." Another followed by stating, "our principal is supportive in all areas [ECE, DAP]." One teacher emphatically stated, “it would be helpful for principals and administration above [district level] to have training on developmentally appropriate teaching practices.” Overall, teacher participants emphasized how supportive and understanding their principals regarded DAP and quality ECE programs. Teacher responses strengthened their belief and need for elementary principals to possess a strong understanding of ECE and DAP to support students and their teachers in early childhood classrooms. Interview transcripts provided overall themes and a more in-depth understanding of the principals’ attitudes, philosophy, experience, classroom support, and knowledge of DAP for their early childhood teachers and students. Figure 2.1 is a visual representation of common themes revealed during principal interviews.

Figure 2.1 *Principal Interviews*

During the interviews, principals collectively mentioned DAP 62 times. Of all the comments on DAP – 83% of them were made by principals with EC certificates compared to 17% made by principals with elementary, or secondary education certifications. This finding is meaningful because it provides a deeper understanding of where principals are coming from, how they speak about teaching and learning is an indicator of their knowledge, understanding, and experience.

The following quotes from principals were used to reveal how principals support quality ECE in their elementary schools. One principal stated, “I think you have to look at…. what is developmentally appropriate. We have some kindergartners reading….and some that do not know their alphabet.” Another principal associated early childhood as a time of “more hands-on… authentic learning, self-discovery… lots of conversations.” An additional comment from a principal emphasized the importance of meeting the child’s need for autonomy. He stated, “you are meeting the child’s need…those things do not change.”

Overall, principal participants in this study share a common belief that young children need purposefully planned, hands-on learning activities that are engaging and meaningful. Principals viewed DAP as individually meeting a child's needs from a whole-child perspective. One principal stated, "we try to look at each student, the whole student, and what they need… what is developmentally appropriate for them, not necessarily the whole group… this is something we have to continually work on… in the past, it has always been a blanket type [approach]." For principals to effectively promote and lead quality early childhood programs within their elementary schools, they must first appreciate and comprehend the uniqueness of early childhood as a special age and stage of growth and development (Kostelnik & Grady, 2009).

A common thread throughout the principal interviews indicated an appreciation of the early childhood mindset of teachers that young children learn best through play. However, one principal voiced concern with regard to academic rigor and purposeful learning. He stated, "the students… playing with blocks… there needs to be a purpose to it." This statement indicates a need for more targeted training, information, and understanding of the purpose and learning opportunities in the block center. Academic rigor is defined by Blackburn (2013) as a learning environment conducive to learning at the highest levels possible. When children engage in block play, they are using problem-solving, creativity, and critical thinking skills. These skills require higher levels of thinking, as outlined in Bloom's Taxonomy (Bloom & Krathwohl, 1956).

Implications

This study indicates a principal's influence is of considerable significance, not only to the success of the school, but more importantly, to the success of each student.

Principals must have background knowledge, training, experience, and understanding that will help them distinguish between effective and substandard ECE. More specifically, to help them recognize the differences between academically driven curriculum and a curriculum that is considered developmentally appropriate for young children.

Principals who understand that learning is more than a collection of concepts and facts are better prepared to support the youngest learners in their schools. This understanding comes from experience in working with early childhood teachers. Collaboration with knowledgeable peers and teachers can help principals build the capacity to promote and value ECE.

Feeney (2012) noted that the first six years of a child's life are meaningful and impactful to their learning later in life. He promoted play as a valuable, meaningful tool for learning and supports that children learn best through investigation and hands-on experiences. When principals use the framework of DAP for children in the early childhood years as established by NAEYC (2009), they are informed on how best to meet the needs of all students in their elementary schools and support teachers as they develop learning environments that promote learning and student success (Copple & Bredekamp, 2009).

Limitations

Limitations for this qualitative study include the use of a small convenience sample of teachers and school administrators. By using a small sample, the researcher was not able to generalize the findings. A larger sample size would add to the credibility of the research and possibly gain wider acceptance for the study. Other limitations include the constraints of conducting a study within a larger study. Participants' attention

centered on the larger ELI study, and that may have limited the in-depth responses to focus group and interview questions relating to this study. In consideration of future research, a larger sample would allow the researcher to capture a broader perspective of attitudes, knowledge, and experiences in ECE from teachers and elementary principals.

Conclusion

Each year approximately 1.4 million four-year-old students enter preschool classes in both public and private schools (Digest of Education Statistic, 2018 ed.). Many of these students attend classes in elementary schools. Now more than ever, elementary principals are challenged to provide and support quality ECE programs in their schools. Early childhood teachers need their principals to be knowledgeable of DAP and to understand that learning comes from constructing one's knowledge rather than acquiring it from an external source. Teachers need principals to recognize DAP that promotes play as a natural way for children to learn and develop. Learning is accomplished by utilizing an interactive, play-based curriculum for young children (Bertram & Pascal, 2002).

The philosophy or essence of an early childhood principal is fundamentally necessary to maintain the identity of quality, developmentally appropriate early childhood classrooms. Elementary principals with specific knowledge and training in ECE rely on an essential understanding of pedagogy, constructivism, play-based learning, child development, and DAP, by supporting their early childhood teachers and practices that promote quality ECE in their schools. Principals who support their teachers by attending targeted professional development, participate in ongoing collaboration opportunities, and make regular classroom visits a priority will expand their knowledge

and understanding of quality ECE practices and DAP approaches for the youngest learners under their supervision.

Future Research

In the theoretical framework, it was noted that a constructivist approach involves organizing information and formulating conceptual foundations for new learning. Within this approach, learning comes from constructing one's knowledge rather than acquiring it from an external source. The same theory applies to elementary principals who are proactive in increasing their knowledge of ECE and DAP in their lower grade classrooms. In most cases, it is not practical for principals to go back to college to obtain additional degrees or certification in ECE. A future study may be to research and investigate higher education programs that incorporate more ECE course work and field experiences for aspiring elementary principals. This study would explore how well new principals in the program feel prepared to work with early childhood teachers and students in their buildings. How, if any, have their attitudes and experiences throughout the program changed their outlook and preparedness for the youngest learners in their elementary school.

Another possible future study would be to take a more in-depth look at Bloom's Taxonomy and how it can be applied as a conceptual framework to explore academic rigor in early childhood. Principals may more readily recognize and associate Bloom's hierarchical learning model with academic achievement. Utilizing this specific lens for learning may increase elementary principals' understanding of engaged, purposeful play in early childhood classrooms. This study may be the most beneficial as it could provide

essential connections and increased understanding for elementary principals who lack EC knowledge and experience.

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MANUSCRIPT III

Principal Power: Supporting Quality Early Childhood Education in Elementary School

This manuscript is prepared for submission to the peer-reviewed journal, *Early Childhood Education Journal*, and is the third of three manuscripts prepared for a journal-ready doctoral dissertation.

Abstract

Elementary principals are responsible for supervising students in primary to intermediate grade levels. The increase of preschoolers attending public school brings additional responsibilities for elementary principals. Educators completing graduate degrees to obtain administrative certificates in elementary education, typically do so without adequate education and field experiences in early childhood education (ECE) (Abel et al., 2016). Current research to inform elementary principals with the supervision and leadership of early childhood programs is limited. This article outlines essential considerations for principals charged with overseeing early childhood programs and promotes engaged play through developmentally appropriate practices as the academic rigor school leaders are searching for in their classrooms. The revised Bloom's Taxonomy (Anderson & Krathwohl, 2001) and Piaget's (1954) constructivist theory are provided as constructs for academic learning in ECE. The purpose of this article is to provide elementary principals with essential information needed for a deeper understanding of ECE and how teachers and students achieve high levels of learning in early childhood classrooms.

Keywords: early childhood education, developmentally appropriate practices, academic rigor, preschool, elementary principals

Principal Power: Supporting Quality Early Childhood Programs in Elementary Schools

Over one million pre-K children attend classes in elementary schools in the United States (Barnett et al., 2017), and elementary principals are responsible for promoting quality early childhood programs within their schools (Kostelnik & Grady, 2009). A survey administered to new principals regarding their training by the National Association of Elementary School Principals (NAESP, 2015) found that only one out of five had training in early childhood education (ECE). Even though principals oversee pre-K classes in their elementary schools, most administrators have inadequate backgrounds in ECE, which may lead to unique challenges in managing and supporting their youngest students.

Principals may ask themselves, how do I recognize and support quality early childhood practices while promoting academic rigor and overall success for my youngest learners? In a time of increased demands resulting from high-stakes testing, elementary principals may feel pressured to require more academic rigor and transfer this pressure to teachers (Riley-Ayers & Figueras-Daniel, 2018). The push for academic accountability requires teachers to be more intentional in explaining the connection between child development, content, and classroom activities to their principals and co-workers (Riley-Ayers & Figueras-Daniel, 2018).

The Importance of Play

Significant cognitive changes take place during the pre-k year. Four-year-olds are most commonly illogical, egocentric, and one-dimensional thinkers (Piaget & Inhelder,

1969). Pretend play helps preschool-age children use more organized thought and promotes the use of symbols (Copple, & Bredekamp, 2009). Advanced thinking through drawing and communication may occur at this age when children interact with their world through play. For example, a small group of children playing in the dramatic play area of the classroom may take orders from their customers while pretending to work in a pizza shop. The children's scribbles, including marks and letters, serve as a form of communication and provide documentation for the teacher that students in this stage of development are beginning to use symbols to represent their thoughts and ideas.

Piaget (1958) described this period of development as the *preoperational stage* that occurs between the ages of two and seven. Children who are preoperational in their thinking are on the verge of comprehending new words, concepts, and skills. During this stage, the foundations for logical thought develops. Logical operations are constructed through a child's autonomous activities and opportunities to discover relationships and ideas.

Opportunities for play allows the preoperational child to make cognitive gains. Children may engage in fantasy/imaginative play; constructive play; games with rules; or rough and tumble play (Mraz et al., 2016). Pretending or acting out scenarios allows children to practice new skills and ideas (Copple & Bredekamp, 2009). Innovation in play serves as an indicator of a child’s increasing cognitive skill and fosters development. Dramatic or imaginative play at rigorous levels produces documented cognitive, social, and emotional benefits (Isenberg & Quisenberry, 2002). Academic rigor in early childhood classrooms is achieved by providing opportunities for engaged play (Brown et al., 2015).

Development and learning progress at various rates, from child to child (Copple & Bredekamp, 2009). The rates of progress vary between children and across different cognitive areas. Early childhood teachers need their principal to appreciate their intentional plan for challenging activities, consideration of each child's development and skill, experiences, knowledge, and culture by supporting their learning and developmental success. Without this understanding and support, principals may wonder why their youngest students spend the majority of their time playing. Without understanding DAP, these activities may seem like a waste of academic time. However, DAP serves as the foundation for academic success in ECE.

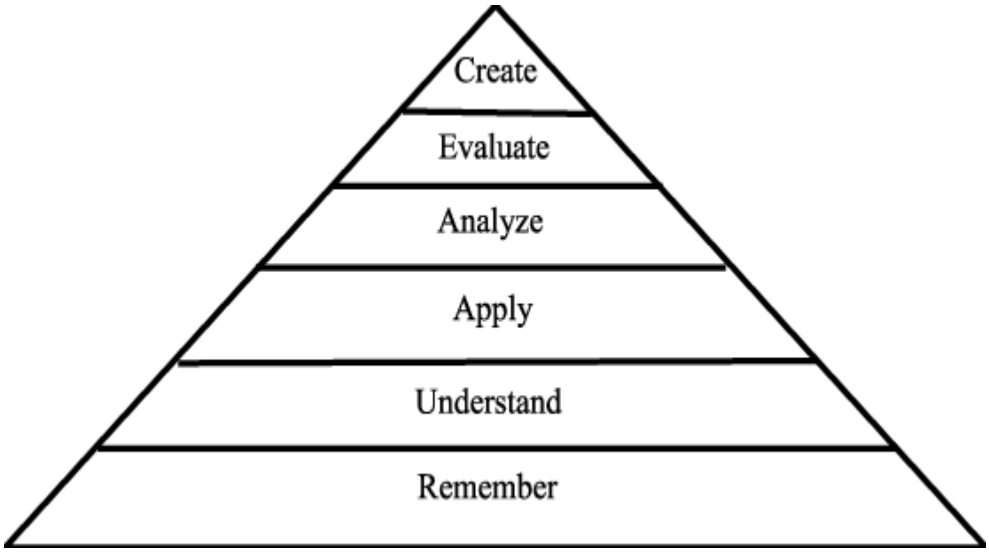
Academic Learning in Early Childhood Education

Blackburn (2013) defined academic rigor in a learning environment conducive to constructing knowledge at the highest levels possible. In this environment, students are supported to reach their highest potential and demonstrate higher levels of achievement. Play is the environment in ECE that allows children to be rigorous in their learning. When young children play, they can achieve learning at higher levels by reaching the outer boundaries of their zone of proximal development (ZPD) (Vygotsky, 1978). A child's ZPD refers to the area of growth between what a child can do independently and his/her frustration level when attempting a new task or activity.

Learning at higher levels, as outlined in Bloom's Taxonomy, is hierarchical (Bloom & Krathwohl, 1956). Each level of learning is included as one moves onto higher levels. For example, a student working at the level of analysis has already mastered the levels of knowledge, comprehension, and application. Figure 3.1 represents the revised

model of Bloom's Taxonomy, indicating both lower and higher levels of thinking (Anderson & Krathwohl, 2001).

Figure 3.1 Bloom's Taxonomy



Bloom and Krathwohl (1956) provide teachers with a systematic classification of the processes of thinking and learning. In this design, each level is more complex than the one before. Bloom's Taxonomy is a measuring stick for thinking. Anderson and Krathwohl (2001) revised Bloom's levels in response to help teachers align learning standards and educational goals of the twenty-first century. Principals and teachers use this common educational model to enable students to use more complex thinking (Ferguson, 2002).

Principals can measure academic rigor in early childhood classrooms using Bloom's Taxonomy. Children learn best by pushing their limits (Mraz, Porcelli, & Tyler, 2016). Play is a safe and familiar activity for young children. Play provides opportunities to take risks and acquire new skills and think in more complex ways. For example, a small group of four and five-year-old students pretend to be in a veterinarian clinic during center time. Earlier that morning, they listened to their teacher read a story about pets,

and one of them was sick. The students used the information from the story and their past experiences to guide and inspire their play. The teacher had purposely placed other books about pets, a phone, notepads, file folders, pencils, stuffed animals, a doctor kit, and a small desk in the dramatic play area of the classroom. The students used their prior knowledge and the materials in the center to role play and acted out scenarios that one would typically experience at a veterinarian's office.

While the students engaged in make-believe play, the teacher observed the students using problem-solving, critical thinking, collaboration, and self-regulation skills while establishing and following social expectations in this particular setting. More specific learning taking place included: invented spelling by a child writing phone messages on a notepad, and another child worked on building oral language skills by interacting and greeting clients, accepting pets into the clinic, and by discussing treatment options with the doctor and clients in the office. Other children (clients) looked at books in the waiting area. One student portrayed the veterinarian and made a vital decision about pet care. Through the previously shared reading activity and discussion of the nonfiction book about pets and the play scenario that followed during centers, the students were given opportunities to reach higher levels of learning. Table 3.1 represents the children's play in the different levels of Bloom's Taxonomy.

Table 3.1 Bloom's Taxonomy applied to dramatic play

Create • Construct the setting of a veterinarian's office. • Recreate the events from the story.
Evaluate • Consider roles and assess the care of the animals. • Consider the relationships between work, earning money, and providing care. • Assign and act out roles associated with the social setting of the Veterinarian office.
Analyze • Inspect the situation, consider the thoughts, feelings, and ideas of others. • Consider pet needs and devise a treatment plan.
Apply • Construct theories about pet care, social roles, and what veterinarians do. • Use and extend vocabulary from the story.
Understand • Explain important details from the story and apply them to play scenario. • Relate prior knowledge and experiences to the story and play scenario.
Remember • Recall essential details from the story. • Recognize prior knowledge and experience that are related to the story.

Observations of student learning, achievement, and mastery are analyzed and later documented to show growth. Play is a natural learning environment for all children. Some students, especially English Language Learners (ELL), may be quiet or shy during whole group instruction. Play offers a familiar, safe environment for expression and encourages participation and is considered the international way for young children to communicate (Mraz, Porcelli & Tyler 2016).

Academic rigor is also defined as a way to provide our students with the skills necessary to be successful in a twenty-first-century workforce (Wagner, 2008). As young

children play, they develop imagination, creativity, and social skills such as negotiation, collaboration, and empathy for others. These universal skills are essential for problem-solving and critical thinking for all children.

To show vital connections between DAP and academic learning, cause and effect must be considered. Early childhood educators understand the importance of imaginary or pretend play and value these experiences as the foundation of symbolic thought and the development of literacy and numeracy (Bergen, 2002). Imaginary play involves symbolism as children use objects to represent real-life experiences. Symbolic language develops as children use words to recreate previous events.

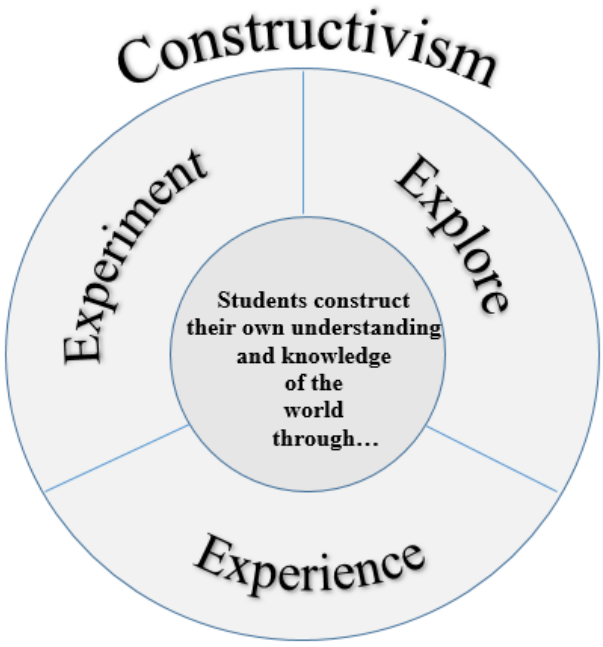
Piaget believed that language was symbolic, and a child's play or actions formed the basis for cognitive thinking (Piaget, 1946). Principals asking their teachers why they need a home living or pretend center in their classroom should consider that young children construct their knowledge through social interactions as they play (Waite-Stupiansky, 1997). Play is the natural way for children to learn and develop. Pretend, or symbolic play provides children with the opportunity to develop autonomy, social-emotional skills, establish rules, negotiate with peers, establish procedures, and assign roles.

Constructing Knowledge

Principals who support DAP in their elementary schools are more likely to understand constructivism and the importance of play. Constructivism is a learning philosophy that describes how one acquires knowledge, builds comprehension, interacts, and interprets new concepts (Maclellan & Soden, 2004). Figure 3.2 represents the process of constructing knowledge and understanding. Children learn (construct) by connecting

(exploring) what they already know (experience) to new information through play (experiment). Playful experiences provide a context for growth and support of a child's learning.

Figure 3.2 Constructivist Theory



Playing to Learn

Elementary principals missing essential training and experiences in early childhood may view play as only a fun recreational activity and a misuse of academic time. However, research indicates play experiences are not only enjoyable for children, but portray a significant role in learning and preparation for future academic success (Mraz, Porcelli & Tyler, 2016). Piaget (1951) saw pretend play as a way for young children to strengthen new abilities and apply their knowledge to different situations. Vygotsky (1978) recognized the roles and rules involved in pretend play. He believed children were motivated to conform to play structures and learn to follow specific rules,

which may lead to improved self-regulation skills (Coople & Bredecamp, 2009). Learning through play takes place both in free play experiences as well as in an environment where teachers structure or guide the play situation toward a specific learning target (Brown et al., 2015).

Winthrop and McGivney (2017) outline current literature that conceptualizes play as existing along a continuum. Playful learning begins with free or pretend play, as stated earlier. As children grow and develop, they join their peers and move into more guided play, while the teacher scaffolds their learning. Later, in the elementary years, children play games while learning to follow the rules and eventually follow constraints for activities and participate in direct instruction.

Discussion

Without adequate training and experiences in ECE, elementary principals feel pressure and engage in counterproductive and unrealistic views of learning. They may hold expectations that do not support DAP for their youngest students. In order for principals to promote quality ECE programs in their schools, they must consider the following: First, as an early childhood instructional leader, principals must be visible in ECE classrooms. Participation in collaborative activities with early childhood teachers and staff is crucial in building knowledge and understanding. Working closely with teachers and staff can be a targeted and efficient method in obtaining and increasing early childhood knowledge for principals. Second, principals must grasp the power of play and DAP in early childhood classrooms. Principals can make the connections between academic rigor and purposeful play for the youngest learners in their schools.

Engaged play that promotes creativity, problem-solving, critical thinking, and social, emotional skills is academically rigorous. Principals should promote appropriate learning environments for young children (NAESP, 2005) by providing teachers with the materials and equipment needed to make learning engaging and meaningful.

Conclusion

Principals who value quality ECE have an understanding of essential experiences in ECE and recognize and support constructivist methods that promote play as a vehicle for learning. They seek out quality ECE professional development to gain a new understanding of appropriate practices and share how essential experiences in ECE provide a foundation for future learning and success for all elementary students. Principals recognize and support classroom structures and routines that promote a child's need to connect their experiences to new information in an atmosphere of active learning. They promote academic rigor by recognizing and supporting DAP in early childhood and are purposeful in listening to teacher needs. They work with teachers to define and promote quality ECE programming for all students.

Principals who employ the revised Bloom's Taxonomy (Anderson & Krathwohl, 2001) as a framework to validate play in early childhood classrooms can develop a deeper understanding of ECE. This understanding will aid principals in providing additional support to teachers in aligning learning outcomes to active learning in classroom environments that support DAP for all learners.

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APPENDIX A: PROSPECTUS

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE ROLE OF PRINCIPALS IN SUPPORTING EARLY CHILDHOOD TEACHERS

A PROSPECTUS

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

BARBARA A. JONES
Norman, Oklahoma
2018

THE ROLE OF PRINCIPALS IN SUPPORTING EARLY CHILDHOOD TEACHERS

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF INSTRUCTIONAL LEADERSHIP AND ACADEMIC CURRICULUM

BY

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Abstract

This study will explore what principals know and are able to do to support high-quality early childhood programs in their schools. Constructivism serves as conceptual frameworks in the examination of elementary principals that support early childhood teachers, and developmentally appropriate practices in their schools. Trained researchers collected data from principal interviews and teacher focus groups with questions focused to reveal the essence of principals who support early childhood teachers and build quality ECE programs in their schools. The analysis is planned to answer the overarching question, what is the essence of principals who understand developmentally appropriate practices and know how to support early childhood teachers, and two sub-questions, (1) What do early childhood teachers need their principals to know and understand to support them in their developmentally appropriate teaching practices, and (2) How can principals help build quality early childhood programs in their elementary schools.

The results may contribute information to provide elementary principals information to support and maintain quality early childhood programs within their elementary schools. Elementary principals and kindergarten teachers' capacity to reflect on and examine lived experiences, as well as their own practices in the context of early childhood education will be explored through a hermeneutic phenomenological research study.

Keywords: developmentally appropriate practice, play-based learning, authentic assessment, professional development, professional learning communities, response to intervention, early childhood education, early childhood educational leadership

Chapter 1: Introduction

Background and Research Problem

Elementary principals are responsible for supervising students and staff in primary grade levels from age five to twelve. Elementary grade levels generally range from kindergarten through fifth or sixth grade depending on programing. As access to state-funded preschools continues to increase, a steady rise in the number of preschool children enrolled in public education has been seen across the United States (NIEER, 2016). Since 2004, the percentage of preschool children enrolled in state programs has increased from 14 to 32 percent (NIEER, 2016). With the increase in preschoolers comes an increase in the scope of responsibilities of elementary principals. With this tremendous responsibility, it is important for principals to possess background knowledge, education, and experience with preschoolers so they can effectively recognize and support quality early childhood programs within their schools. Elementary principals' influence is a significant factor in the success of their school, but more importantly in the success of each student under their direct supervision and leadership (National Research Council, 2015).

Early childhood education (ECE) encompasses children between the ages of birth to age eight (Copple & Bredekamp, 2009). As preschool age children enter public schools, the responsibility of ensuring they benefit from high quality, developmentally appropriate early childhood programs fall heavily on the instructional leader of the school. The principal is the key influence on strong early childhood foundations. These foundations in early learning support health, lifelong learning, and positive behavior (Kostelnik & Grady, 2009).

Research Problem

Understanding the context by which principals lead is critical to the field of ECE and educational leadership (Kostelnik & Grady, 2009). To effectively promote and lead quality early childhood programs within their elementary schools, principals must first appreciate and comprehend the uniqueness of early childhood as a special age and stage of growth and development. Research reveals elementary principals possess a lack of training, experience, and understanding of ECE theory and developmentally appropriate practice (DAP) needed to effectively supervise and lead early childhood programs and staff. In a recent survey of their membership, the National Association of Elementary School Principals (NAESP) found that only 24% of their members held certificates in early childhood education (Leiberman & Cook, 2016). Other areas of certification include elementary and secondary school administration. This range of experience and education allows principals to oversee students in kindergarten through grade twelve and can contribute to vast differences in educational experiences for principals in both private and public-school settings (Abel et al, 2016).

Even with current research and knowledge on the significance of ECE, and the growing numbers of preschool children being taught in elementary schools, educational leaders continue to complete degree requirements and obtain administrative certificates without adequate education and field experiences in ECE (Abel et al, 2016). Minimal research exists documenting how elementary principals charged with the supervision and leadership of early childhood programs respond to the needs of their youngest learners or how they support and obtain knowledge to adequately build quality ECE programs within their elementary schools. Little attention has been given to principal's professional

knowledge and needs in serving the recent influx of preschoolers in elementary schools. This scarcity of information amplifies the need for additional research to provide a better understanding of the range of a principal's responsibility of infrastructure, staff, and for policies that support their education, training, and continuing professional development (Whitebook et al, 2012).

The urgency of improving school leadership in school-based early childhood programs is evident by the expansion of preschool programs in public school districts across the country. The slow but steady growth in public school early childhood classrooms has been documented from 14% in 2002 to 32% in 2016 (NIEER, 2016). With the increase in publicly funded preschools comes a need for increased accountability for school principals to meet student developmental needs and learning targets. A principal's preparation and training are critical for building quality early childhood programs as instructional leaders and in becoming effective evaluators of early childhood teachers and staff (Brown, et al, 2014).

Research Purpose

The purpose of this research study will be to describe and explore what principals need to know and be able to do to support high-quality early childhood programs while gaining a better understanding of the essence of principals who supervise quality ECE programs and promote DAP within their elementary schools. Despite decades of research supporting effective school leadership and access to high-quality ECE as the two most important determinants of educational outcomes, many principals are still inadequately prepared and educated to manage the youngest learners in their schools (Brown, et al, 2014). This study is best accomplished through a qualitative methodology as it is used to

describe and understand how principals support ECE and the use of DAP in grades preschool through third grade.

Qualitative research incorporates observations, interpretations, descriptions, and analysis of individual experiences and understandings of the world in which they live and work (Bazeley, 2013; Miles & Huberman, 1994). This study will use rich descriptions of the individual experiences of kindergarten teachers and elementary principals to reveal the essence of principals who understand DAP and know how to support early childhood teachers.

Research Questions

The purpose of this research is to explore a principal's understanding of developmentally appropriate practices and how they can support early childhood teachers.

1) What do early childhood teachers need their principal to know and understand to support them in their developmentally appropriate teaching practices?
2) How can principals support quality early childhood education in their elementary schools?

Conceptual Framework

The primary conceptual framework for this study is based on the theory of constructivism. Constructivism is the theory used to describe how individuals learn. Piaget (1973) defined constructivism as the process of change or the construction of knowledge that occurs in ones' thinking as they learn. Included in his definition, Piaget emphasized that obtaining knowledge is much more involved than memorizing facts or specific information. It involves organizing information and formulating conceptual

foundations for new learning. The constructivist theory posits that learning comes from constructing one's own knowledge rather than acquiring it from the environment or external source. Knowledge is constructed internally through interactions within the environment.

Piaget's (1951) constructivist theory will be used in this study to explain how children in early childhood classrooms learn to solve problems as they work and play acquiring skills through active engagement in their learning environments. Within this framework, educators understand knowledge is internally constructed by the learner making meaning from interactions within the learning environment. This knowledge and understanding is essential for principals charged with overseeing early childhood teachers and students.

Piaget (1958) outlined a sequence of stages to explain the development of a child's cognitive processes. The preoperational stage spans from age two to seven. This age range includes preschool, kindergarten, first, and second grade children. According to Piaget, it is during this stage the foundations for logical thought are developed. Logical operations are constructed through a child's autonomous activities that provide opportunities to discover relationships and ideas. Cognitive growth happens as a child constructs his or her own knowledge through interactions with teachers, peers, and materials in the learning environment. These interactions include both concrete and abstract concepts. The development of symbolic thought does not come automatic. It develops over time with repeated experiences in an engaging learning environment (Bergen, 2002).

Understanding how children develop cognitively is valuable to elementary principals. The preoperational child, according to Piaget, is egocentric. Children in this stage have difficulty seeing a perspective other than their own and go through times of illogical or disorganized thinking. They often jump from one illogical explanation to another without concern. As a preoperational thinker, the four to seven-year-old does not always make connections between one idea and another. For example, a common learning objective for preschool and kindergarten is for students to understanding the relationship between quantities and whole numbers. Four and five-year-old children are expected to recognize that a numeral is used to represent how many objects are in a set up to ten. Understanding that a symbol represents an object or group of objects and represents quantity is an abstract concept for a young child developing in the preoperational stage of development. It is important to understand children may need more meaningful, engaging learning opportunities to develop the concept of number. These skills are not automatic, but are constructed through active, developmentally appropriate learning activities that allow children to make connections and understand associations. Over time, children will use their experiences to develop abilities for symbolic thought.

Central to symbolic thought is the ability to use mental representation (Bergen, 2002). This can be images of objects or actions held in our mind or language where words represent our thoughts and ideas. Symbolic thought is a major developmental accomplishment for children. It begins with toddlers and continues gradually becoming more sophisticated throughout childhood. One of the most common places symbolic thought is seen in ECE is in pretend play. Pretend play is often referred to as symbolic

play (Bergen, 2002). In pretend play children display the ability to use objects, actions and ideas as representations of other objects, actions and ideas. They can create and apply an imagined situation or make-believe scenario to an actual one using meaningful and orderly sequences. An example of symbolic play is a group of children playing in the home living center in their kindergarten classroom. The teacher had previously added a few prompts to the center including a white lab coat, several stuffed animals, a phone, a clipboard, notepads, pencils, and a doctor's kit. In their effort to understand new uses for the materials and activities for the center the children begin to play. Based on prior experiences and knowledge, one child assumes the role of a veterinarian, another the receptionist, and the remaining children joins in on the play scenario by taking on the role of customers bringing their pets to see the doctor because they are sick. Understanding the significance of symbolic thought through play is vital to understanding how young children develop during the early childhood years. Symbolic play includes experiences of pretending, drawing, writing, and thinking and are important precursors to the development of literacy and numeracy (Bergen, 2002).

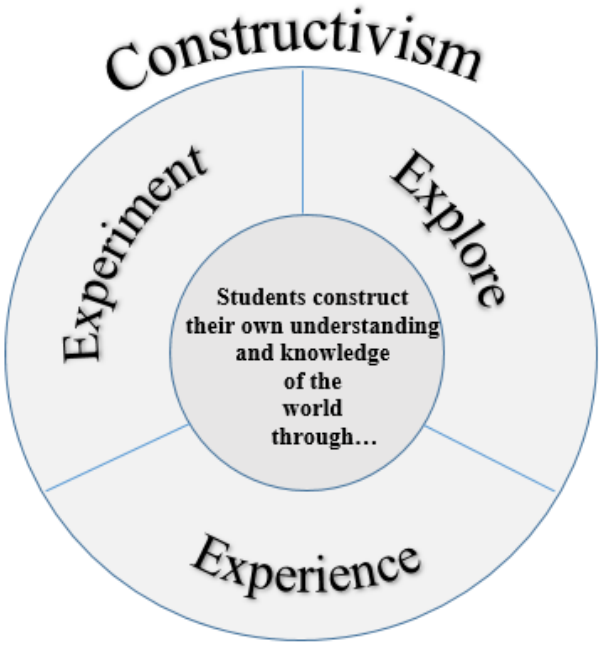
An important consideration for principals is to acknowledge the importance of imaginary play during this stage. As the child learns and grows he or she continues to develop abilities for symbolic thought. Imaginary play involves symbolism as children use objects to represent real-life experiences. Symbolic language develops as children use words to recreate prior events. Piaget believed language was symbolic and their actions formed the basis for cognitive thinking (Crain, 2000; Piaget, 1946).

It is important to note that constructivism, as defined by Piaget, describes knowledge as ever changing with each new discovery. The constructivist theory regards

play as a natural way for children to learn and develop (Waite-Stupiansky, 1997). Children develop thinking and make sense of new information through social interactions as they play. In ECE play is used as an ideal context for constructing knowledge. As children play, they develop autonomy, establish rules, negotiate with peers, agree on procedures, and assign roles. As they play, they are testing their theories or thinking by playing or acting out scenarios with peers in a safe classroom environment (Waite-Stupiansky, 1997). Piaget found indicators of almost all the important processes of learning in his observations of children playing. Principals who understand constructivism and the importance of play realize it is essential to learning, language development, critical thinking, and problem solving.

Constructivism is a significant foundation for this study and is used to establish the framework for ECE and appropriate teaching and learning practices for young children.

Figure 1: Conceptual Framework



The purpose of a conceptual framework is to inform the design of the study (Maxwell, 2013). The framework provides a link for each component of the research within the study. In using constructivism as a conceptual framework, a standard was established to connect theory to practice in quality ECE programs that recognize and understand how young children learn through active play. This framework directly relates to the research questions posed in this study as within a constructivist approach to ECE and teaching exemplifies an understanding of DAP and knowledge to support early childhood teachers and student learning.

The methodology of this study is also informed by the conceptual framework. A hermeneutic phenomenology is used for the central purpose of understanding (Glense, 2011). As individuals experience life, and in this study, teaching and learning in ECE, they construct individual meanings. The constructed meanings are described through the lived experiences of the participants (Van Manen, 1990). In this study, a description in rich detail is given to describe a phenomenon, the essence of supportive elementary principals and their experience as they lead and oversee early childhood programs in their schools. This type of study is intended to weave together interpretations of lived experiences of the principals, teachers, and the researcher to uncover layers of details and identify the essence of a supportive ECE principal.

Significance of the Study

The National Association for the Education of Young Children (NAEYC) believes educators should understand which goals are essential for young children (Copple & Bredekamp, 2009). The most effective educators not only know what they are teaching, but also know why they are teaching certain concepts at specific times.

Knowledge of foundational beliefs in ECE is valuable in understanding how young children learn and develop.

Increasingly, elementary principals are overseeing early childhood programs. Early childhood leadership is essential in supporting and maintaining quality programs that connect theory to practice. Principals must possess knowledge, understanding, training, and experience that helps them distinguish effective, high-quality, developmentally appropriate early childhood practices from ineffective, poor ECE (Kostelnik & Grady, 2009). As the primary evaluator of early childhood teachers and staff, elementary principals need to understand, appreciate, and comprehend the uniqueness of early childhood as a special age and stage of development. A school's leaders' education and experience may not be sufficient in preparing him for this responsibility. By connecting early childhood theory to practice, principals are better equipped to understand the scope of early childhood leadership and how they can use this knowledge to build stronger foundations for academic success (Kostelnik & Grady, 2009).

This study contributes specific information on how elementary principals can support early childhood teachers. Early childhood is a short season as children grow and learn from preschool through grade three. Elementary principals have a unique opportunity to embrace and encourage strong ECE programs through their leadership, support, and knowledge. Principals are the instructional leaders of their schools. This study will be used to inform leaders on child development skills that support classroom instruction and provide information to guide principals, teachers, community partners,

families, and policymakers in making decisions on how to enhance and differentiate early learning opportunities.

Definition of Terms

The following operational definitions of terms will be used in this study:

1. Early Childhood Education (ECE): is a division of education theory which relates to the teaching of young children up until the age of about eight.
2. Principals and or school administrators: a principal is a school leader/administrator of a school. For this study, principal and school administrator or leader will be synonymous with the role of educational leader within one school building.
3. Developmentally Appropriate Practice (DAP): is a perspective within early childhood education whereby a teacher or caregiver nurtures a child's social/emotional, physical, and cognitive development by basing all practices and decisions on (1) theories of child development, (2) individually identified strengths and needs of each child uncovered through authentic assessment, and (3) the child's cultural background as defined by his community, family history, and family structure (Copple & Bredekamp, 2009).
4. Play-based Learning: learning developed through a child’s natural desire to engage in experiences based on interests, strengths, and developing skills (Samuelsson, 2008).

Chapter 2: Literature Review

The Role of Principals in Supporting Early Childhood Teachers

Elementary school principals have many responsibilities in managing their schools (Strong-Wilson & Ellis, 2007). Each year millions of students are educated in schools under the direct supervision of the school principal. Their primary duty is to make sure students are safe, supported, cared for, academically challenged, and are making adequate progress. Also, principals are held accountable for student's developmental needs and progress. Student development includes cognitive, physical, social and emotional domains. Principals' oversee teachers and school staff to ensure the curriculum and learning environment is supportive and nurturing of each child.

As elementary principals manage and interact with students and staff in their schools, their influence is of great significance, not only to the success of the school, but more importantly to the success of each student (National Research Council, 2015). With this tremendous responsibility it is imperative for principals to have background knowledge, training, experience, and understanding that will help them distinguish effective early childhood education from substandard early childhood education. More specifically, to help them recognize the differences between academically driven curriculum and a curriculum that is considered developmentally appropriate for young children.

The National Research Council (2015) highlight common differences in philosophies, policies, curriculum, and learning goals between early childhood programs and elementary schools. Assumptions may exist that elementary schools focus more on academics rather than developmentally appropriate practice (DAP) for children in grades

pre-k through third grade. Expectations and teaching strategies for intermediate elementary grades have descended the grade level continuum to primary classrooms including pre-k and kindergarten. The ability for young children to manage their emotions and behaviors is important for school success and academic achievement (Webster-Stratton & Reid, 2004). Early childhood teachers spend as much time teaching young children how to manage their emotions and make friends as they do teaching literacy and math concepts. Problem solving and communication skills are foundational for school success.

The focus of this literature review includes early childhood education, educational leadership, and specifically early childhood leadership in an elementary school setting. Understanding the context which school administrators must lead is essential in the field of early childhood education and educational leadership (Brown et al., 2014). To understand early childhood education fully, school leaders must recognize and appreciate the early childhood years as a distinctive age of child development.

Effective early childhood leaders appreciate this special time of childhood and embrace its unique opportunities and challenges by understanding DAP in education, applying knowledge of ECE theories, and providing resources for teachers and students that support their learning. This research has the potential to enhance early childhood leadership practices by increasing awareness of ECE topics and support of curriculum models, and DAP (Kostelnik & Grady, 2009). This review reveals what principals need to know and be able to do to support and promote early childhood teachers and students in their elementary schools.

Knowledge and Competencies for Effective Early Childhood Principals

The National Research Council (2015) states elementary school principals, early childhood center directors, and other school administrators serve in an instrumental role in the education and care of educational professionals working with young children in preschool and primary grades. They strengthen core competencies in creating a work environment where professional educators use their full knowledge and skill. Kostelnik and Grady (2009) developed levels of effective contributions from leadership to rate an administrators' contribution to the care and education of young children. They include, (0) unaware, (1) aware, (2) knowledgeable partner, (3) resource coach, (4) translator, and (5) leader. These levels are important factors for principals and school leaders related to the quality of early learning experiences for the young children in the programs and schools they are charged with overseeing.

The quality of leadership is directly connected to the quality of early learning for young children (Talan, Bloom, & Kelton, 2014). The National Research Council (2015) established a framework for knowledge and competencies for school leaders of young children from birth through age eight. The competencies include practices to help children learn, child assessments, fostering a professional workforce, assessment of educators, developing and fostering partnerships, and organizational development and management. School leaders need an understanding of the implications of child development and the interactions between care, instruction, environments, practices, staff, and students. Leaders should demonstrate knowledge in the following areas:

- Assessment practices and methods used to monitor a child's progress and are willing to adjust if needed.

- Assessment selection, the ability to select assessment tools that are appropriate for their students.
- Understanding of the competencies required to work with the children served in their school or center.
- The ability to formulate and implement policies that creates an environment to enhance and support quality practices in development and learning.
- Appropriate implementation of ongoing professional learning opportunities for quality of programs that reflect current knowledge of child development and highly effective instructional practices.
- The ability to assess the quality of instruction, addressing poor quality through an appropriate evaluation system, observations, coaching and other learning opportunities.
- The ability to use assessment data to effectively adjust improve learning outcomes for students and to inform professional learning decisions and policies.
- The ability to support collaboration from various staff under their leadership.
- The ability to enable inter-professional opportunities for themselves and their staff that include links to health, education, social services, and other groups outside of their leadership.
- The ability to work with families and support staff in working with the families of the children in their school.
- The knowledge and ability in administrative and fiscal management, knowledge and compliance with state and federal laws, the development, and maintenance of infrastructure and an appropriate work environment.

As Principal roles and responsibilities change to meet the needs of all students, including those between the ages of three and eight, they become more central in the world of early childhood education (Kostelnik & Grady, 2009). Effective principals strive to work with families and community organizations to support children at home, in their surrounding community, and at school (NAESP, 2006c). Bronfenbrenner (1974) observed the family as the most effective and economic system for nurturing and helping sustain a child's growth and development. Intervention is not likely to be successful without family involvement. The few effects that are achieved may be temporary and disappear as soon as the intervention is discontinued.

Program Quality and Continuity

A great contributor to continuity in high-quality learning experiences for educational programs serving children between grades pre-k and third grade are the foundational standards and core competencies (National Research Council, 2015). These standards and competencies have been established by the National Association for the Education of Young Children (NAEYC); the National Board for Professional Teaching Standards (NBPTS); The Interstate Teacher Assessment and Support Consortium (InTASC); and The Division for Early Childhood (DEC) of the Council for Exceptional Children has issued "Recommended Practices in Early Intervention/Early Childhood Special Education" (DEC, 2014). Statements from national organizations promote common strategies for early childhood professionals:

- Work effectively and equitably with children of diversity; this includes all cultures, socioeconomic status, language, and abilities.

- Support creative learning environments with materials, activities and physical spaces.
- Possess knowledge and skill to support a child's development in all domains (cognition, language, social-emotional, language/literacy, executive function, physical, learning competencies, moral, and ethical development).
- Understand content areas and be knowledgeable to design curriculum and activities that aid young children in understanding and applying concepts.
- Use appropriate assessments for young children and use data to inform practice.
- Understand childhood development across all domains and content knowledge, set appropriate goals for young learner based on their development, and select instructional approaches that are appropriate for child development.
- Use strategies to engage learning in all content areas that are DAP, adjust based on progress and interest to promote growth.
- Participate in professional learning communities (PLC) to inform practice and promote leadership opportunities in the field of ECE.
- Collaborate with other ECE professionals.
- Form partnerships with families to support children's learning and development.

The primary role of principals in schools that include young children in grades pre-K through third grade is to serve as an advocate for early childhood education (Kostelnik & Grady, 2009). This role should come naturally and be a constant goal for principals as a quality early childhood program will result in school success, benefiting the students throughout their lives. The benefits of ECE extends beyond the early childhood years. Children who attend high-quality early childhood programs are less likely to repeat

grades, require special education services, or drop out of school (Barnett, 2008). Early childhood teachers need intensive supervision and coaching, and they should be immersed in a continuous improvement process for teaching and learning. There is clear supportive evidence on the benefits of quality ECE on academic success and society (Barnett, 2008).

The Center on Enhancing Early Learning Outcomes (CEELO) was asked to review how states prepare principals to supervise and support early childhood teachers in schools (Brown et al., 2014). In their study, they found principal leadership to be second only to teaching as a significant impact on student learning outcomes. Strong leadership was found to have a positive impact on schools facing poverty, high teacher turnover, and limited resources. The location and school district size also had an impact on leadership. Most of the 21 states reviewed showed a need for improvement to better prepare elementary school principals to evaluate pre-K through third-grade teachers. In reviewing the states licensing systems and requirements, they found that nearly all 21 states had adopted some Interstate School Leaders Licensure Consortium (ISLLC) standards. These standards outline a set of competencies that school principals need to meet to improve instruction. However, not one standard or state, except the state of Illinois, have included early childhood content in their licensure, accreditation, mentoring, or evaluation process.

States have a variety of administrator licensure titles assigned to grade-level authority (Brown et al., 2014). Illinois has included early childhood content into state licensure and accreditation. No requirement of early childhood content is found as a requirement of principal preparation or professional development in this study. Most

states include pre-K within the scope of their principal licensure but have limited to no requirements for early childhood content or experience.

CEELO shared specific recommendations for improving training and experiences for teachers and elementary principals working in education programs (Brown et al., 2014). The recommendations include:

- Connect principal professional development to state policy priorities for increased effectiveness. Specifically, include early childhood content to better prepare principals to oversee pre-k through third-grade classrooms and tightly align reform initiative including state academic standards and teacher evaluation systems.
- Create professional development model and approach to reflect state policy and local implementation. Form partnerships with professional associations around the state and communities to build support for ongoing training and help build coherence and continuity for children from birth to third grade with an emphasis on the influential role of the elementary principal.
- Include a broad range of educational experiences for principal preparation programs. Courses on child development, models of early education, early childhood curriculum, instruction and assessment practices, developmentally appropriate practices, and family and community involvement should be required for certification.
- Provide incentives to include early childhood content in school administrator license and professional development requirements. Include higher education professors in the state training initiatives and conversations about principal

preparation programs. States should work with college professors who teach future school principals.

- Use principal preparation and professional development as talent recruitment and retention strategies. Focus on training, retention, and evaluation, to provide on-going feedback and support for principals. There are numerous opportunities to reveal early childhood content and child development training for principals who are supervising teachers in early childhood classrooms in our elementary schools.
- Include evaluation and data collection to track outcomes of principal professional development models. Use data to understand how to support principals, districts, and states in content and processes within their programs. Include early childhood content on child outcomes and classroom quality from principals who have early childhood training and experiences.

The CEELO study conducted by Brown et al. (2014) reports school leaders do not have sufficient training, understanding, or experiences in early childhood classrooms. Early childhood education coursework and practical experiences are not required for degrees in school administration.

The youngest learners in schools are shaped by the daily experiences within the early childhood classroom (Kostelnik & Grady, 2009). By studying pedagogical practices and early childhood theorists, principals have the knowledge needed to manage, support and promote quality, developmentally appropriate early childhood programs in elementary school settings. In addition to this understanding, principals can serve as effective educational leaders who identify practices that support elementary and

secondary education, but also the education of young children in early childhood classrooms.

Early Childhood Education

Teacher Certification

Early childhood education in the United States includes all children between the ages of birth to eight (Copple & Bredekamp, 2009). Elementary education majors across the United States complete coursework on assessments, special education, productivity tools, technology, cultures, child guidance, parent and community involvement, health and physical education, and art. Core subjects covered include math, literacy, social studies, and science in both primary (K-5) and intermediate (6-8) grade levels (Brown et al, 2014). Program requirements include course work, field experiences, and the passing of specific certification exams required for licensure. Exams cover general education topics, subject area content, and teaching knowledge.

Principal Certification

School administrators (principals) are required to obtain certificates in either elementary administration (pre-k through sixth) or secondary administration (seventh through twelfth) (Brown et al., 2014). Coursework and requirements for administrative degrees vary from state to state. However, in most states, teachers working towards master's degrees in education to obtain their administration certificates complete coursework on school law, instructional leadership, school finance, technology, supervision, and performance improvement. Graduate level students are required to take elective coursework that may include special education, early childhood, or other administration related courses. Traditionally, administrative certification requirements are

for candidates to hold a standard master's degree in education, the completion of an approved leadership skills program, successful completion of administrative internship, pass subject area and principal specialty area exams, and the completion of two years of successful teaching experience in an accredited public or private school. With limited, if any, coursework in early childhood theory, child development, and practice future school leaders may not be fully prepared for the uniqueness of early childhood education in their elementary buildings (Kostelnik & Grady, 2009).

From Theory to Practice

Principals with experiences and knowledge consistent with more traditional instruction and curriculum models based on the transmission or instruction of information may not fully comprehend the theory or practice of a constructivist approach to teaching. In the traditional view, students passively absorb or learn basic facts and information discovered by others from texts written by adults (Cobb, 1988). Consistent with a more direct instruction, teacher led model, instruction involves a transmission of established facts, skills, and concepts to students.

Constructivism offers a distinct contrast to this view. Information is not passively received from the teacher or learning environment. The social climate originated by the teacher is crucial to the development of logico-mathematical knowledge (Kamii, 1994). Children construct the sense of number on their own through reflective abstraction without social transmission of knowledge. For example, the idea or concept of five or *fiveness* cannot be directly discovered by a child's intellect. Learning what represents five comes from the relation the child applies to a set of objects. This connection is constructed by the child through reflections on actions performed on numerous sets of

objects, such as contrasting the counting of sets having five objects with the counting of sets having three, four, and six objects. Even though the teacher may have demonstrated and numerically labeled many sets of objects for the student, the mental unit of "five" can be created only by the student's thinking. Kamii (1994) explains mathematical concepts are reinvented by children through experience and reflection. True understanding of mathematical concepts and knowledge is not transmitted from others.

Learning is more than a collection of concepts and facts (Waite-Stupiansky, 1997). Learning is a progression towards sophisticated thought. Young children develop intellectual autonomy by considering information from various sources and points of view while using reasoning to develop their own conclusion (Kamii (1994). Constructivist teachers provide children with opportunities for autonomous decision making. Children are encouraged to make decisions based on consequences. Decision making allows children to assume leadership roles and build responsibility. In creating opportunities for autonomy, teachers help children build confidence by experiencing satisfaction in their work. Because of their efforts, children gain a sense of self-efficacy and build confidence in their thinking and skill. Early childhood teachers who recognize the significance of student autonomy have a deep respect for young children and cultivate their potential by providing opportunities to problem solve and make decisions.

The National Association for the Education of Young Children (NAEYC) (2009) revised standards for early childhood professional preparation programs. These standards represent a continued vision for early childhood and serve as a support and guide for the educational institutions charged with preparing future professional educators in the field of ECE. The standards for early childhood professional preparation are:

1. Promoting child development and learning
2. Building family and community relations
3. Observing, documenting, and assessing to support young children and families
4. Using developmentally effective approaches to connect with children and families
5. Using content knowledge to build meaningful curriculum
6. Becoming a professional

NAEYC (2009) promotes ECE students to be grounded in child development knowledge. Future teachers should understand characteristics and needs and use developmental knowledge to create healthy, respectful, challenging and supportive learning environments for the young children they teach. Knowledge in understanding families and diversity in the community is key in providing opportunities to engage families in their child's learning. Young children entering school are at a critical point in their development and learning. NAEYC believes our youngest learners are vulnerable and cannot always articulate their own rights. Early childhood professionals have compelling responsibilities to know about and uphold ethical guidelines and other professional standards and serve as advocates for children, families, and the profession of ECE (NAEYC, 2009).

Feeney (2012) notes characteristics considered to be best practice in the field of early childhood. The compiled list is from both pre-modern and modern pioneers in the field of early childhood education. Regardless of differences in pedagogy, development,

and learning methods, they all shared an aspiration to care for young children. The list of characteristics includes:

- The first six years are important and impact development later in life.
- Social, emotional, cognitive, and physical development are connected, and we should attend them all by teaching to the whole child.
- Children are naturally motivated to learn.
- Children learn best through investigation and hands-on experiences.
- The curriculum should be meaningful and important to children.
- Play is an important, meaningful tool for learning.
- A carefully planned learning environment is an essential tool for learning.
- Education is not just preparation for the future; it is life for the child.
- Education enriches lives and diminishes the effects of poverty on young children.
- A teacher's role as a guide is to nurture young children.
- Respectful relationships are essential to the healthy development of a child.
- Families play a critical role in children's lives.
- The relationship between home and school is valued and supported.

Feeney (2012) noted that all developmental domains are interrelated and early childhood educators prepare environments and activities that teach the whole child. They include all developmental domains.

Teaching to the Whole Child

The National Education Association (NEA) identified five critical components of a High-quality ECE program. The first component is to provide a well-rounded curriculum that supports all areas of development. Quality program must consider the

cognitive, social-emotional, and physical needs of young children (NEA, 2003). Socio-emotional, physical, creative, and cognitive abilities are deeply interwoven and equally important in ensuring a child's wellbeing, learning, and growth (Durlak et al., 2011).

Cognitive Development

Cognitive development occurs when a child develops the ability to think and understand. Jean Piaget (1958) theorized that humans move through four important stages of cognitive development from birth to adulthood. His distinct stages describe how individuals think about the world around them. The four stages are, (1) sensorimotor, (2) preoperational, (3) concrete-operational, and (4) formal-operational. Children attending preschool through second grade in elementary school are functioning in the preoperational stage of cognitive development. They are egocentric and have difficulty seeing another person’s perspective and are developing abilities for symbolic thought as they are learning to read, write, add, and subtract numerals.

Social-Emotional Development

Social-emotional development is a combination of experience, expression, and management of emotions. It includes the ability to establish positive and rewarding relationships with those around us, embracing both intrapersonal and interpersonal processes (Cohen, Onunaku, Clothier, & Poppe, 2005). When working with preschool-aged children, it is essential to start with the central features of emotional development. This necessary first step includes the ability to identify and understand feelings, which helps children recognize and comprehend the emotional state of others. By doing so, they develop empathy for others and learn how to manage their feelings in the process. This

process is key to building and maintaining lasting, healthy, supportive relationships (National Scientific Council on the Developing Child, 2004).

Experiences with family members, teachers, and peers in preschool provide ample opportunities for young children to learn about social relationships and emotions through supportive, predictable interactions (Denham & Weisberg, 2004). Early childhood teachers and caregivers are vital in supporting the social-emotional development of young children. Daily interactions with children, communication with families, careful planning of classroom environments, and implementing appropriate curriculum.

Young children who can navigate healthy social, emotional, and behavioral adjustments are on the path to improved academics in elementary school (Cohen, Onunaku, Clothier, & Poppe, 2005). Early childhood programs support positive learning outcomes in all domains by keeping the focus on helping a child's healthy social and emotional development and on building executive function (EF) for young children (Raver, 2003).

An essential, life-long skill for young children is an executive functions (EF) (Bernier, Carlson, & Whipple, 2010). Struss and Benson (1986) acknowledged a theory that recognized a close connection between executive functioning and the development of the prefrontal lobe. Understanding this theory led to supporting evidence that individuals develop EF skills in adolescence (Golden, 1981). Since then, EF is acknowledged to develop much earlier and is assessed in preschool-aged children (Carlson, Mandell, & Williams, 2004; Diamond, Barnett, Thomas, & Munro, 2007).

Physical Development

Physical-motor development includes both fine motor and gross motor development (Venetsanou, 2010). Fine motor development includes small muscles used for grasping, holding, coloring, writing, and cutting. Preschool and kindergarten children cultivate their fine motor skills by drawing, writing, modeling with clay, manipulating small pieces, snapping, buttoning, and using scissors as teachers are preparing them for formal handwriting lessons beginning at age six. Gross motor development refers to large muscle growth used for walking, running, jumping, climbing, and lifting (Santrock, 2012).

John Hopkins Medicine (2017) reports growth during the third year to be slow compared to the first year of life. For example, most three-year-old's slim down their toddler's tummies as they become more active. While all children grow at various rates, four, five, and six-year old's growth shows great changes during this important time in their development. They can gain as much as 4 to 6 pounds each year and add from 3 to 5 inches in height. As children grow and develop, they learn to flex their muscles in harmony and coordinate movement that includes running, climbing, riding a bike, writing symbols, and increased periods of concentration.

Environmental factors on motor development are important to consider (Venetsanou, 2010). Motor development occurs in a specific social context as the environment around children can have both positive and negative implications. Each environment places demands on the motor competencies and physical activities of children. In school, recess is used to promote social and emotional learning and development for children by offering them a time to engage in peer interactions in which

they practice and role play essential social skills (Bjorklund & Brown, 1998). Physical activity during recess at school is beneficial to a child's physical well-being, social, and academic maturation (Robert Wood Johnson Foundation, 2007). Physical, active learning that involves play promotes motor development and academic success in school.

Developmentally Appropriate Practices

The National Association for the Education of Young Children's (NAEYC) position statement was written to promote excellence in the field of early childhood education (Copple & Bredekamp, 2009). *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8* brought attention to the appropriateness of age and the individual child. In 2006, a revised paper added appropriateness of culture (Copple & Bredekamp, 2009; Feeney, 2012). NAEYC defines DAP as methods for early childhood educators to meet the needs of the children attending their programs. The key statements include creating a caring community of learners, teaching to improve development and learning, planning curriculum to reach important goals, assessing children's development and learning, and establishing shared relationships with families (Copple & Bredekamp, 2009). By using the framework of DAP for children in grades pre-k through third grade, elementary principals are informed on how best to meet the needs of all students in their schools and support teachers as they develop learning environments and plan for instruction.

DAP is teaching each child's age and stage of developing cultural context (Copple, & Bredekamp, 2009). Teachers use DAP by meeting children where they are as individuals and within the group to reach new challenges and achieve their goals. These achievements contribute to the child's development and learning. Teacher's planning for

DAP lessons and activities must consider the child's physical, emotional, social, and cognitive development. Additional considerations for the child's home language, culture, family, and interests are made. Goals are established to be challenging and achievable. The teacher is intentional in planning challenging activities and understands the individual learner's development and skill, experiences, knowledge, and culture all support learning.

Intentional and effective teachers strive to balance the demands of accountability and standards with their expert knowledge about how young children learn while remaining an advocate of DAP for all children (Bredekamp, 1997; Epstein, 2007; Leong & Bodrova, 1996; Parker & Neuharth-Pritchett, 2006; Pianta et al., 2005). Principals who understand this balance, support teachers in providing materials and instructional experiences that promote learning and development. Principals support children in the development of skill and concepts within the established goals and academic standards. DAP teachers recognize great differences in development and skill among young children. One year can make a vast difference in growth and development. Considerations are given to individual children's rate of development. When a child turns five, he or she may not have mastered all the developmental milestones of a typical four-year-old. Children grow and develop at their own rate regardless of their chronological age. Principals and teachers who understand DAP consider what is appropriate for stages of development while considering social and cultural contexts in which their children live and learn.

Culture is socially transmitted behaviors, attitudes, and values shared by groups of people (Phillips & Scrinzi, 2013). This concept includes families of young children. As

three and four-year-old children transition to formal schooling, they may have had limited experiences moving between one culture and another. This transition can be a big change, especially for those with home languages and cultures that differ from the teacher and others at school.

Early Childhood Environments

Early childhood programs are found in various places in public schools. They are typically found in elementary schools, but some may be in portable buildings, on high school campuses, and in some cases, in buildings devoted solely to preschool-aged children (Kostelnik & Grady, 2009). Evidence does not indicate one location being superior over another. However, wherever the early childhood program is housed, the physical features of the classroom will impact the education and lives of the students. An early childhood classroom is unique in that it is specifically designed and set up to support young children. Furniture and materials are child size and may include special furnishings not typically found in classrooms of older students. Principals and teachers make an informed plan and decide on materials, curriculum, furniture, space, and room arrangement. These decisions are imperative to student growth and development in early childhood classrooms.

The physical environment of an early childhood classroom affects how students and teachers feel and interact with each other (Dodge, 2003; Weinstein & Mignano, 2007). The learning environment inspires what happens in class and has a direct impact on how successful the children are in meeting learning goals. This situation is true for adults and children, but especially true for young children as they learn through their

senses, utilizing touch, taste, smell, sight, and hearing to interact with the world around them to increase understanding and comprehension.

Early childhood classroom environments significantly impact every domain of early development and learning (Evans, 2006; NAEYC, 2005). A child's social-emotional development or behavior is affected by specific design elements in their classroom. These elements include density, materials, color, sound, and light. Evans (2006) reports high-density environments can have a negative impact on student behavior, by increased aggression. As the group size grows the room size shrinks, students are less likely to cooperate with each other and can become aggressive as tensions rise. The availability of materials can affect how well children interact with each other. If sufficient materials do not exist for children to use, playful interactions decrease and conflicts can increase. Young children in pre-K and kindergarten classrooms are learning how to show empathy by learning how to recognize feelings of themselves and others while developing self-regulation skills (Cohen et al, 2005). In developing executive function young children can self-regulate and work cooperatively with their peers in different situations. Learning to share materials and take turns are examples of this skill.

Jago and Tanner (1999) found colors in learning environments to have a bearing on children's attitudes, behaviors, and learning. Vibrant or bright colors are shown to over-stimulate children and may not be appropriate for areas where children are encouraged to participate in quiet, calm activities such as reading, listening, or concentrating (Taylor, 2002). Warm, soft, neutral colors are less distracting and may help students stay calm and concentrate on learning tasks. Classroom sound and light levels

can be influential both positively and negatively on student learning at school (Jago & Tanner, 1999).

Noisy rooms can signify an actively engaged classroom full of young children. Talking, exploring, and moving around is common learning strategies in early childhood classrooms. Light impacts children in psychological, aesthetic, and physical ways (Evans, 2006). Both dimly lit rooms and rooms with harsh lighting are associated with disruptive behavior (Jago & Tanner, 1999). Children spend several hours a day in school working on visual tasks where appropriate lighting is necessary for student success. Natural light is important for good health and should be used over artificial sources at every opportunity (Dinos, 2004). Windows allow students to access natural light and observing seasonal and weather changes throughout the day.

Well organized classroom environments are predictable and provide young children with cues about how to be successful (Colbert, 1997; Hohmann & Weikert, 2002). A purposeful, organized design increases a child's sense of control. This control is achieved by established and well-defined areas marked with spatial boundaries. The room is divided into learning areas using physical cues such as rugs, furniture, clustered center materials, and shelving. Environmental print or symbolic cues are also used as labels or signs for interest areas. These commonly include words and pictures to aid students in planning activities, crowd control, and as a reference to use in cleaning up the area at the end of the activity. Mobiles, signs, or special hangings may be used as visual dividers in the classroom.

Supporting young children in DAP classroom environments requires principals to support teachers and staff in their efforts to provide rooms that encourage a child to be

independent, foster decision making, and encourage discovery and problem solving (Kostelnik & Grady, 2009). Montessori (2002) was one of the first to look at classroom environments and how they could serve as a significant role in promoting student learning outcomes. Malaguzzi (1998) the original Reggio Emilia teacher, wrote about the value of classroom environments and how teachers purposely stage learning areas to teach. The environment is the focal point of learning. Reggio Emilia teachers view classroom environments as the third teacher (Malaguzzi, 1998).

Each day young children attend preschool classes in the United States (Kostelnik & Grady, 2009). Children spend long hours subjected to practices and work in environments that are considered to be low quality. Studies conducted in recent years suggest 40 to 50 percent of programs observed did not meet high or medium quality standards (Cox, Phillips, & Pianta, 2002; Helburn, 1995; Raikes et al., 2004).

Play as a Vehicle for Learning

Early childhood teachers today feel pressure to focus on academic standards and assessments in an era of increased accountability (Phillips & Scrinzi, 2013). This pressure creates challenges as teachers try to juggle play-based learning, academics, and social-emotional learning. Studies indicate students who attended preschool and kindergarten classes with a heavy emphasis on academics earned significantly lower grades later in elementary school than students who attended classes with a child-centered or play-based approach (Marcon, 2002). A child's future school success can be enhanced by a more active, child-centered early learning experience.

Opportunities for play support students as they learn important skills and concepts in school and at home. These skills include communication, academics, persistence,

creativity, cooperation, curiosity, and self-confidence (Gronlund 2010; Zigler, Singer, & Bishop-Josef, 2004). Play may be even more critical for young children today as many have fewer opportunities to play due to their busy daily schedules outside of school (Miller & Almon, 2009).

Play allows children to actively explore their worlds, make decisions, explore new ideas as they begin to understand how things work and use their imaginations to explore situations based on real-world experiences (Phillips & Scrinzi, 2013). In play-based classrooms, teachers support children in engaging activities and experiences to develop problem-solving skills, expand communication and vocabulary, learn about the world around them, take on new roles, and learn to be flexible when working in a group. Teachers engage students in higher-level play experiences by helping them think about the scenarios they will enact, what types of props they will need, and what roles they will need to play. During play-based experiences, the teacher models and scaffolds student learning by asking open-ended questions (Early Childhood Funders, 2007).

Some early childhood programs have a stronger focus on academics rather than play-based instruction (Kostelnik & Grady, 2009). Some programs focus on a combination of both. While more academic programs focus on formal instruction, most allow for a period of open-ended play time. Instruction is delivered by the teacher in a whole group setting. In contrast, play-based programs encourage students to spend a great portion of the day interacting with each other, engaged in projects or play scenarios. Children play games, explore school and classroom environments, and work on projects individually and with peers in small groups.

Depending on the principal's education and experience, play-based instruction may be unfamiliar and seem non-productive (Kostelnik & Grady, 2009). Most principals with elementary and secondary backgrounds are familiar with a more academic approach to teaching. This lack of understanding or experience in teaching to the whole child may result in unrealistic expectations of teachers and students that attend programs in elementary schools.

Copple (2012) advocates "when children have appropriately stimulating surroundings, including interaction with responsive caretakers, rapid brain growth occurs; from preschool to kindergarten, the brain grows steadily, increasing from 70% to 90% of its eventual adult weight" (p. 25). Consequently, research denotes a strong relationship linking the development of the social-emotional and cognitive function of young children. Understanding of how a young child learns and develops is crucial for teachers and school administrators.

Sprenger (2008) found cognitive function linked to brain-compatible teaching principles. Early childhood educators should be cognizant of these principles to understand how young children learn. The brain is the only organ that develops through interactions within the environment. The principles noted by Sprenger are: each brain is unique, our learning is guided by our emotions, stress levels affect learning, there is a brain-body connection, our brain has multiple memory systems and modalities, our brain seeks meaning and relevance, experience teaches the brain, our brains are social, grows through enrichment, and learns in patterns.

Akers (2017) compiled a list of the top five things that every early childhood teacher wishes their principal understood. These critical aspects in our educational structure support a focus on student learning. Akers' list includes:

1. Children grow along the same path, but at varying rates through ages and stages of development.
2. Relationships through play significantly affect brain growth and development.
3. Brains grow and develop when bodies are active.
4. Developmentally appropriate curriculum and play supply stronger learners and improve test scores.
5. Parents are advocates for their child, and a team approach is paramount.

Young children grow and develop at a rapid pace (Akers, 2017). The Center on the Developing Child at Harvard University (2017) states,

> "The early years are the most active period for establishing neural connections, but new connections can form throughout life, and unused connections continue to be pruned. More importantly, the connections that form early provide either a strong or weak foundation for the connections that form later."

The development of EF is at the highest rate from ages three through five (Center on the Developing Child, 2017). EF is a key indicator of academic and lifelong success and includes self-regulation, working memory, and cognitive flexibility. Children do not arrive at school with fully developed EF skills. They develop over time through relationships and environments.

Leong and Bodrova (2001) conducted studies on the long-term effects of play-based learning on young children and how self-regulation develops. Their findings promote classrooms with Vygotskian play-based learning approaches in producing higher student tests scores rather than student's scores from more traditional classroom methods. Statistically significant increases were noted in improved letter recognition, improved sound to symbol correspondence, a better comprehension of patterns in a text, enhanced understanding of the printed word, and improved separation of printed word into its component letters. Leong and Bodrova (2012) found teaching methods used in project classrooms produced gains in the children's early literacy development outside those produced in more traditional classrooms. They also found this method to increase student productivity, love of learning, and the development of self-regulation skills.

When teachers understand and support the importance of play, recognize and plan for the child's interest, developmental needs, and local and state early learning standards, the child's engagement and focus level are likely to be increased (Phillips & Scrinzi, 2013). During play-based learning, children learn how to work as a team, form hypotheses, use mathematical and scientific skills, negotiate, collaborate, build communication skills, show persistence, and success through interactions with others. Through observations, the teacher can gain valuable information supporting learning goals.

Accountability and Assessments

Play-based learning is the vehicle that children use to explore the content or curriculum that promotes desired learning outcomes (Phillips & Scrinzi, 2013). The curriculum is the plan for children to reach desired targets or learning outcomes.

Assessment is the activity or process of looking at a child's growth toward achieving the learning outcomes appropriate for his age or level of development. In developmentally appropriate classrooms, teachers use assessments to monitor a child's development and learning; guide instruction and planning; identify children who could benefit from additional supports; and to report and communicate achievement to parents, students, and administration (McAfee, Leong, & Bodrova, 2004).

Assessment is an ongoing process that encompasses collecting, synthesizing, and interpreting information about students, instruction, and the classroom (Epstein, 1999). Schools around the world use formal and informal testing to measure skills in literacy and numeracy. While formal testing can provide parents and teachers information about acquired skills and a child's development, it cannot accurately provide a complete picture of what a child knows about a particular subject or skill. Young children, unlike older students, do not always have sufficient skills necessary to complete formal tests.

Bagnato and Yeh-Ho (2006, p.16) state "authentic assessment refers to the systematic recording of developmental observations overtime about the naturally occurring behaviors of a young child in daily routines by familiar and knowledgeable caregivers in the child's life." Authentic assessment is culturally sensitive and serves as an alternative to testing. These assessments also refer to the observations of familiar caregivers and teachers of young children in their natural environment and routines for documentation of development and behavior milestones. Taking an authentic approach to assessments requires the observer to be reflective of a child's abilities in their natural environment during normal routines.

McAfee, Leong, and Bordova (2016) describe authentic assessment as an ongoing assessment in a child's life and learning in the classroom, playground, hallway, cafeteria, and other school settings typical to students. Assessment tasks are similar to practical experiences for children. For example, rather than underlining or coloring in a bubble to show evidence of knowledge and skill, a child can match, sort, and classify pictures of real objects to show understanding and mastery of concepts in real, authentic ways. Normal classroom activities are observed and assessed as indicators of student progress. This connection to the child's real-life experiences increases engagement and makes learning meaningful.

A focus on real-life learning generates higher order thinking skills such as those listed in Bloom's Taxonomy (Huitt, 2011). Curriculum-embedded assessments connect the real world with classroom context and require active performance to demonstrate understanding. This demonstration is performance-based learning at its best. The teacher and the child collaboratively determine the assessment by completing structured child tasks. Assessments focus on progress rather than identifying a student's weakness. This alone ensures success for every child at every level.

Teachers of young children must be intentional in supporting theories and practices of child development and learning (Bagnato, Goins, Pretti-Frontczak, & Neisworth, 2014). In developing a strong foundation of developmentally appropriate practices that include more authentic assessments, teachers can better understand and plan for their students' developmental needs. Assessment data gathered daily through observations allow teachers an immediate response to strengthen and improve student outcomes and the early childhood program.

Assessing what young children know and what they can do is a challenging task for teachers (NAESP, 2005). Effective principals recognize multiple assessments are needed to create experiences that improve student learning in early childhood classrooms. Standard-based education and assessments are common in elementary and secondary classrooms. These assessments can clarify expectations and learning standards for school readiness in primary classrooms. Principals should be the leading advocate promoting competent early childhood teachers as the best judge of student performance and growth on assessments, especially when standards are extended to standardized tests. Standardized assessment results from students in the early childhood years are not likely to produce useful or accurate information (NAESP, 2005). Principals with a strong understanding of early childhood development are supportive of teachers who:

- Use DAP assessments that are meaningful to children.
- Use observations, anecdotal records, and student portfolios to guide student learning and plan for instruction.
- Use assessment data to identify barriers to learning, develop intervention strategies, plan for new learning, and participate in conversations to promote vertical alignment.
- Share information about curriculum effectiveness between grade levels and schools.
- Share information with parents about academic and developmental progress.

Assessments created around observations and analysis of student work can help develop an accurate continuum of early childhood learning that allows children to

gradually build new skills from pre-K through the beginning of fourth grade (NAESP, 2005). Assessment practices in schools serving children in grades pre-K through third grade must be carried out in a manner that benefits children (Egertson, 2008). Authentic assessments are not based on a single test or assessment process. Authentic assessments should never be used to rank, exclude, label a child or as evidence for teacher imposed sanctions.

Educational Leadership

Elementary school principals have an instrumental role in helping teachers working with young children to strengthen early childhood expertise and by providing a work environment where they can use their knowledge to skillfully teach young children (National Research Council, 2015). School leaders often have great influence on the selection of instructional content and professional development activities used in their schools (Matsumura et al., 2010).

Education levels of school principals are linked to program quality by indications provided by learning environment observations, instructional leadership practices, and program accreditation (Talan, Bloom, & Kelton, 2014: Ressler, Doherty, Ferguson, & Lampley, 2016). Effective school principals can increase student achievement in gains as much as two-seven months in a school year (Branch, Hanushek, & Rivkin, 2013). Marzano, Waters, and McNulty (2005) conducted a meta-analysis of studies finding a positive correlation between principal leadership and student achievement. Student achievement is a significant indicator of high-quality instruction and leadership. Principals who participate in response to intervention teams with their teachers are more

likely to be engaged in ongoing school improvement and as a result increase student achievement.

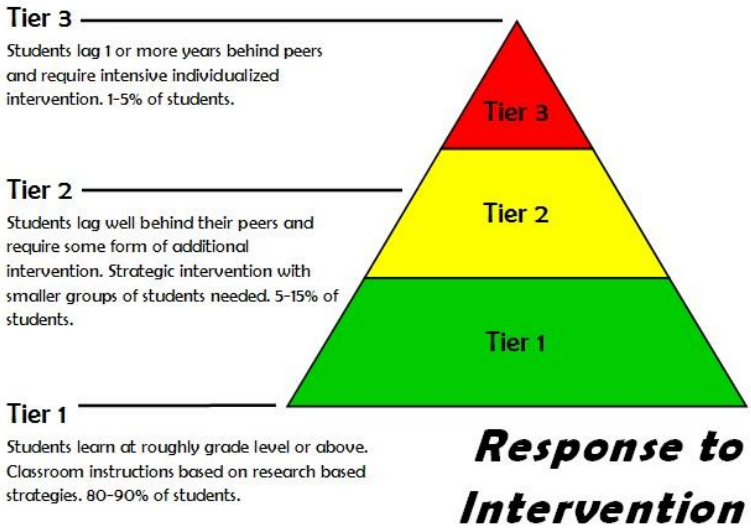
Response to Intervention in Early Childhood Education

Undeniable evidence indicates response to intervention (RTI) as a successful engagement tool for teachers to participate in a collective process to provide every child with the support and additional time needed to learn at higher levels (Burns, Appleton, & Stehouwer, 2005). In the RTI process, teachers and staff do not delay in providing meaningful interventions for struggling students. By providing targeted assistance and differentiated instruction to students as soon as they are unable to master concepts and skills, teachers can intervene immediately and prevent the student from falling further behind. In some cases, this quick intervention may prevent students from being referred for special education testing.

The RTI model is presented in a three-tier approach and can be used for both academic and behavior interventions (Greenwood et al., 2011). The model shown in figure 2, suggests a typical classroom of children to have 80 or 90% scoring proficient on tier one. Tier one represents the general curriculum and supports that all children receive. Tier two represents approximately 5 to 10% of children who are identified at risk by their teachers and receive tier one curriculum and targeted interventions to help in the mastery of skills. Tier three represents 1 to 5% of children who receive tier one curriculum, targeted, and intensive, individualized interventions. Typically, in pre-k and kindergarten classrooms, student interventions are focused more on behavioral concerns than academic as the children are entering school for the first time. When using the RTI model, teachers can incorporate DAP to meet the needs of the whole child. Principals who participate in

the RTI process gain understand of DAP and can become advocates of ECE and support both the cognitive and social-emotional development of all students in their school including early childhood classrooms (Buysee & Peisner-Feinberg, 2013; Coffee et al., 2013).

Figure 2. **Response to Intervention**

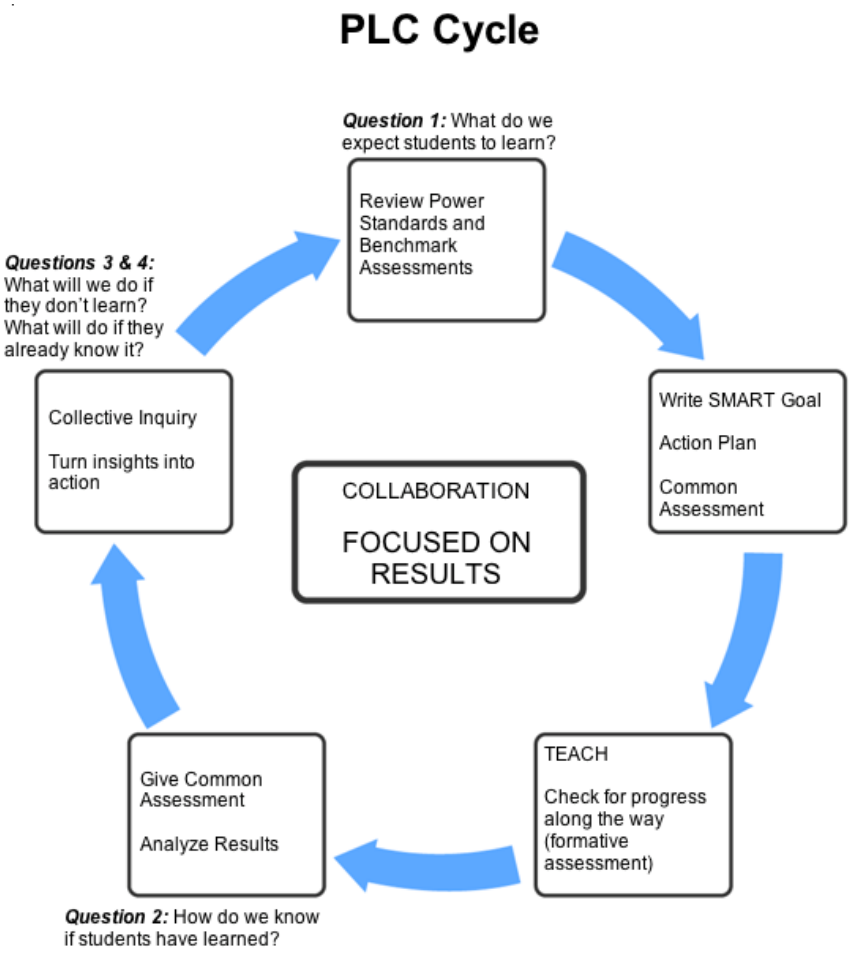


Professional Learning Communities

Dufour and Marzano (2011) outlined how school leaders and teachers might enhance student achievement through collaboration by implementing and using professional learning communities (PLC). PLC teams provide educators with the tools necessary to effectively collaborate and focus their efforts on past practice to new learning. Dewey (1997) may be the first to recognize the value of this practice in his work as he claimed that schools are social communities where the worth of education is realized in forming groups of individuals with common goals and practices.

The PLC may be organized in different ways within schools (DuFour & DuFour, 2012; DuFour & Marzano, 2011). Some schools may use a vertical alignment approach where teams are formed with teachers from each grade level. Other schools may combine all members from each specific grade level on a team. For example, all the kindergarten teachers within a building would serve on the same PLC team. Regardless of how the teams are organized, all PLC teams are charged with answering four basic questions each week as they collaborate on student achievement as indicated in figure 3.

Figure 3, Professional Learning Communities Cycle (Solution Tree, 2006).



The questions are:

1. What do we want a student to know?
2. How will we know if they are learning?
3. How will we respond when individual students do not learn?
4. How will we enrich and extend the learning for students who are proficient?

Baccellieri (2010) explained the idea of the collective responsibility of a PLC team as the driving force that moves the community forward. By asking and answering these four basic questions, teachers working with their teammates can reflect on practices related to student achievement and approaches to learning. In looking at student achievement, the principal is the central person in determining the quality of a school (Matthews & Crow, 2010). Principals who participate in this process can increase their understanding of ECE by engaging in collaboration and planning with their highly qualified, knowledgeable early childhood teachers. PLCs provide opportunities to developed curriculum and establish practices that improve student achievement.

Teacher collaboration is shown to increase the academic success of students (Goddard & Goddard, 2007). The weekly collaborative PLC process may be used to review and discuss ECE practices that increase student learning. Regardless of the principal's education, experiences, or understand of ECE, involvement in the PLC process can provide valuable feedback and information that supports quality developmentally appropriate activities in early childhood classrooms (Kostelnki & Grady, 2009). Principals can utilize this information to build their understanding of early childhood practices that support the cognitive, physical, and social/emotional development of their youngest students. Additional support may be provided to teachers

during their teacher observations and evaluation process because of increased participation in grade level PLCs.

Teacher Evaluations

Teacher performance is evaluated annually by school principals in public schools (Reno et al., 2008). Principals observe and analyze the work of teachers during the evaluation process. They encourage teacher strengths and address the weakness by providing feedback and support through a formal evaluation two to three times annually. In providing feedback throughout the year, principals can be proactive and prevent negative behaviors while promoting best practice.

Marzano and Toth (2013) recommend that principals help teachers feel comfortable with the evaluation process. Darling-Hammond (2013) compiled a list of four characteristics that a principal should possess when conducting teacher evaluations. A principal should be, (a) trained and skilled as an evaluator, (b) be supportive to the teachers that need assistance, (c) a resource within the school, and (d) fair in their authority and be able to make sound personnel decisions.

Principals engage in teacher evaluations with a varying degree of preparation (Darling-Hammond, 2013). Educational leadership coursework offers a variety of topics, and many are related to evaluations of school staff. However, not all information presented can adequately prepare principals completely for this important task. It is vital for principals to find additional support so they may be adequately prepared to provide quality feedback and support to teachers in both primary and intermediate grade levels.

For principals to be the educational leader of their school, they need an adequate understanding of pedagogy (O'Sullivan, 2009). Early childhood teachers and leaders

acquire pedagogical beliefs and understanding by earning an endorsements and certificates in early childhood education. Other school leaders working with young children seek additional information by joining professional organizations geared specifically toward early childhood education and gain knowledge over time about DAP, trends, and what is considered best practice in the field. This understanding is critical in evaluating early childhood teachers. The task of evaluating any teacher is challenging but may be especially difficult for principals that lack experience or training with younger learners.

Early childhood principals should be cognizant of how early childhood teachers instruct and assess their students (Feeney, 2013; Taylor et al., 2009). Background knowledge in early childhood education allows principals to recognize the differences in instruction between children in pre-K through third grade. They understand why teachers in the early grades do not use the same curriculum and activities as their fourth and fifth-grade peers.

Rodd (2006) cites communication as a critical component of the quality early childhood organizations. If early childhood principals lack the knowledge and understanding associated with the field, teachers and staff will not be able to communicate effectively. In planning for professional development to assist teachers in improving instruction, Cardno (2012) suggest a holistic approach. Four components should be considered: (1) school development, (2) curriculum development, (3) management development, and (4) personal development. The focus for professional development should focus on the immediate need, but all components should be presented equally.

In the early childhood setting, professionalism is being an advocate for what is appropriate for children and their families (Feeney, 2012). Advocacy is a historical tradition in early childhood education. It is detrimental for young children to be subject to practices that are not appropriate for their age and level of development. The principal can advocate for early childhood teachers by understanding how teacher evaluation tools support DAP in pre-K through third-grade classrooms. Principals and teachers serve as the best advocates for early childhood education.

Marzano and Toth (2013) developed a teacher evaluation model used across the United States to promote teacher growth and student achievement. An understanding of the 21 responsibilities from an early childhood perspective is crucial for principals evaluating teachers in grades pre-K through third grade. Many states developed statutory and regulatory requirements for teacher evaluations and developed their tools to evaluate teachers in all grade levels pre-K through twelfth grade. Specific evaluation tools or modifications may emerge as states develop specific policy guidance and materials for early childhood teachers (Martella & Connors-Tadros, 2014).

Relationships and School Climate

Marzano, Waters, and McNulty (2005) acknowledged the relationship between teachers and the school principal as extremely important in high-performing schools. In contrast, low-performing schools lack strong, positive relationships between teachers and their school principal. The most successful schools are led by school administrators who make it a priority to involve their entire staff in school improvement (Deal & Peterson, 1990).

Positive school climate correlates with teachers' perceptions that they can trust their principal (Ellis, 1998). In a positive school climate, teachers feel respected and can get help when they need it, and they are involved in decisions that are important to the school. The school leader is the primary person responsible in establishing and maintaining the climate of the school (Schweitzer, 2000). If the principal does not share and promote the attitudes and behaviors of the school culture, it will not be successful. Relationships that connect children to learning, children to children, children to adults, adults to adults, and adults to the community are all key to a principal's success in managing a school (Houston, 2001).

Conclusion

This review of literature presents evidence including information on responsibilities and characteristics of effective early childhood school principals. Using NAEYC's position statement and DAP as a guide, ECE principals can understand and recognize great differences in development and skill among the youngest learners in their elementary buildings. In using the framework for DAP for children in grades preschool through third grade, principals are informed on how best to meet the needs of all students in their school. Principals who support ECE by recognizing active learning, authentic assessments, special learning environments designed for young children, and utilize multiple sources of student data to present learning outcomes to parents are better prepared to manage early childhood classrooms, students and staff.

Minimal research exists documenting how elementary principals charged with the supervision and leadership of early childhood programs respond to the needs of their youngest learners or how they support and obtain knowledge to adequately build quality

ECE programs within their elementary schools. Little attention has been given to principal's professional knowledge and needs in serving the recent influx of preschoolers in elementary schools. This scarcity of information amplifies the need for additional research to provide a better understanding of the range of a principal's responsibility of infrastructure, staff, and for policies that support their education, training, and continuing professional development (Whitebook et. al, 2012).

The urgency of improving school leadership in school-based early childhood programs is evident by the expansion of preschool programs in public school districts across the country. The slow but steady growth in public school early childhood classrooms has been documented from 14% in 2002 to 32% in 2016 (NIEER, 2016). With the increase in publicly funded preschools comes a pressure for increased accountability for school principals to meet student developmental needs and learning targets. A principal's preparation and training are critical for building quality early childhood programs as instructional leaders and in becoming effective evaluators of early childhood teachers and staff (Brown, Squires, Connors-Tadros, & Horowitz, 2014).

As the topics of ECE and educational leadership shape our understanding of how early childhood educational leadership should shape our programs in schools, we form ideas that describe what it means to effectively lead early childhood classrooms and staff. To examine these ideas related to early childhood educational leadership, the following study was written for elementary principals and early childhood teachers serving in public school settings.

Through independent study of early childhood theorists, pedagogical practices, childhood growth and development, and DAP, principals may acquire knowledge and

experience necessary to effectively lead early childhood classrooms under their supervision (Kostelnki & Grady, 2009). Participation in building level PLCs and RTI meetings with early childhood staff may prove to be an excellent collaborative activity for elementary principals who want to increase their knowledge and effectively support ECE within their elementary schools. This collaboration is key in promoting the success of all learners and vital to the ongoing support of teachers and staff.

Chapter 3: Methodology

This research study follows a qualitative research approach as outlined by Miles, Huberman, and Saldana (2014) and Bazeley (2014). The study is conducted utilizing a hermeneutic phenomenology. The goal of the study is to provide a better understanding of what principals need to know and do to recognize, support, and promote quality early childhood programs within elementary schools. Information gained from the experiences and practices of participants will be revealed in data analysis from the Early Learning Inventory (ELI) feasibility study.

The purpose of this research is to explore a principal's understanding of developmentally appropriate practices and how they can support early childhood teachers.

1) What do early childhood teachers need their principal to know and understand to support them in their developmentally appropriate teaching practices?

2) How can principals support quality early childhood education in their elementary schools?

In serving as a research partner with the University of Central Oklahoma on this research, access to focus group and interview data will provide unique insight into

principal knowledge and skill. This information is valuable in answering the research questions of this study. This study relates to a larger feasibility study designed to provide the Oklahoma State Department of Education (OSDE) and the Oklahoma Partnership for School Readiness Foundation (OPSRF) and participating school districts sufficient information for future expansion of a universal kindergarten assessment. The ELI is an assessment aligned with current Oklahoma Academic Standards addressing the five developmental domains for kindergarten students and will be used to provide information necessary to integrate standards and domains into instruction. The domains are (1) physical motor, (2) social and emotional development, (3) approaches to learning, (4) thinking and knowledge, and (5) communication, language, and literacy. Current state mandated assessments are literacy focused and do not comprehensively address all five developmental domains. The larger ELI study will examine the feasibility for classrooms to adopt the ELI for future use. As a research partner with the University of Central Oklahoma, access to focus groups and interview transcripts will provide the empirical data used in this study.

Research Design

A hermeneutic phenomenological research design is used for this study to increase the understanding of the phenomena of elementary principals who support early childhood practices. Hermeneutic phenomenology focuses on the subjective experience of individuals and groups (Cohen, Manion, & Morrison 2000). More specifically, this type of research will be used to unveil the essence of principals who understand and support developmentally appropriate practices (DAP) and early childhood teachers. The answers to the research questions come from the stories of lived experiences of the

participants in this study. Van Manen (2007) explains phenomenology as the most appropriate method to discover pedagogical significance promoting the understanding of lived experiences.

Hermeneutic Phenomenology

In this research paradigm, interpretivism is used to emphasize shared meanings made by both the researcher and the participant to provide understanding (Glense, 2011). In using this approach, the researcher will share the lived experiences of the principals to uncover the essence of early childhood leadership in an elementary school setting (van Manen, 1990). As teachers and principals experience life at school each day, they construct individual meanings. The researcher will borrow the teachers and principal's experiences and reflections to understand the deeper meaning and significance of the phenomenon of a principal who supports early childhood teachers in an elementary school setting.

Husserl (1913) characterized phenomenology as the study of how people describe their experiences through their senses. He based this on his theory that "we can only know what we experience by attending to perceptions and meanings that awaken our conscious awareness" (p. 116). Experiences of a teacher and elementary principal include the interpretations of those understandings that include practices, skills, and the involvement in early childhood classrooms.

Bazeley (2013) makes a specific distinction between experiences and significant skills in this type of research. This is important to consider as teachers and principals are not typically aware of each element occurring during everyday general happenings of each other during school. However, they are aware of significant skills or experiences.

Bazeley classifies significant experiences as a phenomenon that has already been the subject of feeling and reflection by the person undergoing the significant event. It is significant for teachers to encounter support and guidance of ECE and DAP from their elementary principal.

In using hermeneutics, the researcher analyzes the text for meaning. In this study, the interview and focus group text will be studied to inform the narrative inquiry. Patton (2016) explains the researcher using a hermeneutic philosophy places their focus on interpretation. The researcher uses this perspective to understand meanings of historical and cultural context.

Qualitative research, and specifically phenomenological studies, are designed to describe, not define (Davis, 1995). The research cycle begins with the research subject's understanding of the experience. He or she uses that understanding to interpret or provide an explanation to the researcher, a description of the lived experience. The researcher understands the account and interprets that understanding into written text. Readers interpret the text with intentionality (Davis, 1995). In working through this cycle, the researcher and the subject's interpretations of the experiences are woven together to uncover deeper layers of understanding (van Manen, 1990). The deeper understanding reveals the essence of the significant experience or studied phenomenon.

A hermeneutic phenomenology, as described by Henriksson and Friesen (2013), is the art and science of interpretation and meaning. It is defined as theory, reflection, and practice together with rich descriptions of lived experiences (phenomenology) interlaced with reflective interpretations of meaning (hermeneutics). In using a hermeneutic paradigm, along with the conceptual framework of constructivism, the researcher will co-

construct an understanding of the essence of an elementary principal who supports early childhood teachers and helps develop quality early childhood programs. Co-construction will occur as the researcher collects and interprets descriptions of the teachers and principal's lived experiences at school. Uncovering the lived experiences of the principals in their day-to-day management of the school and the reflection and experiences of the teachers is key to answering the research questions in this study. By the researcher co-constructing understanding of what it means to be a teacher and principal in an elementary and early childhood center, another layer of understanding may be achieved during the analysis of data and provide additional insight in answering the research questions of this study.

Focus group activities and interviews will be utilized in collecting data considered consistent with a hermeneutic phenomenological study. These activities will stimulate discussions to provide a better understanding of what principals do to support early childhood teachers and appropriate practices in their schools. Deeper understandings of this phenomenon are revealed through the sharing of first-person experiences in the school environment.

Sample Selection

The sample for this study is a convenience sample based on time, location, and availability of respondents (Merriam & Tisdell, 2016). The researcher will have access to the sample because of participation and assistance in collecting data for the Early Learning Inventory Feasibility Study. Participation in the feasibility study was offered to all 513 public school districts in the state of Oklahoma. Seventeen districts agreed to participate in the study.

Participants

Individuals interviewing for this study include Pre-K-6th-grade public school administrators and kindergarten teachers. There are no requirements as to years of experience to participate in this study. All school principals and district administrators, including superintendents, are required by the state of Oklahoma to have completed master's degrees in school administration, be licensed by the OSDE, and hold current certifications in the state of Oklahoma. Kindergarten teachers participating in this study are required by the state of Oklahoma to have completed either a bachelor's degree or master's degree in early childhood education, and hold current early childhood teaching certificates with the state of Oklahoma.

All participants were selected based on their school district volunteering to participate in the ELI Feasibility Study. Participants in this study include 50 teachers from 17 school districts in Oklahoma serving approximately 1,100 kindergarten students. Information about participant's gender and age were not requested as part of this study as it was not considered a variable of concern. All adult participants volunteering for this study are between 18 and 65 years of age. The types of personal information gathered in this study are the level of education, teaching certification, and previous experience with observational assessments.

School districts participating in the ELI feasibility study were notified by the state Superintendent of Education in the spring of 2017 through a statewide newsletter asking for districts to volunteer in piloting the ELI to inform the Feasibility Study conducted by OPSR. Participants contacted OPSR stating their interest in the feasibility study and volunteered to use the ELI in their kindergarten classes during the 2017-2018 school

year. Participants signed consent forms and confidentiality agreements and were informed that participation was voluntary and could be discontinued at any time.

Participating teachers will be asked to share experiences in a focus group interview (see Appendix A). School administrators will be invited to participate in interviews (see Appendix B). Audio recorders will be used to record responses of participants during the focus groups and interviews. All tapes will be erased upon completion of transcription.

Data Collection

Data sources utilized for this study will include (1) focus groups, (2) interviews, and (3) the researcher's field notes. One way to support the credibility of qualitative research is by triangulation of the data. By using multiple sources of data, the researcher can test data against other data (Bazeley, 2013).

Triangulation using multiple sources of data helps the researcher cross-check and compare all the data collected from interviews, focus group, and the field notebook (see Appendix C). Patton (2016) explains the triangulation of data includes having two or more persons independently analyze the same data and compare their findings. In the analysis of this data, at least two researchers will be used to transcribe and code data to increase validity and reliability.

Focus groups. Certified kindergarten teachers using the ELI will be asked to participate in the focus groups in each school district (see Appendix A). Focus group responses can be influenced by the group process (Bazeley 2013). The group activity will allow kindergarten teachers to further reflect and expand on their experiences in an interactive environment. By listening to others discuss similar ideas and experiences,

participants generate additional information that they may not share individually (Bazeley, 2013). The purpose of each focus group is to identify and investigate common ideas and themes related to ECE, DAP, and principal support for kindergarten teachers and their classrooms.

The focus group recordings will be transcribed on a laptop computer using Microsoft Word verbatim. The transcript will be coded using Dedoose. The first cycle codes will be developed to identify common words, categories, and phrases used by the teachers during the focus group activity.

Interviews. Van Manen (1990) listed two purposes for using interviews in a hermeneutic phenomenological study. The first purpose is to use the interview to explore and gather narrative data from the interviewee that will aid the researcher in a deeper understanding of the phenomenon. The second purpose is to use the interview as an opportunity to build a relationship with the individuals who are sharing their lived experiences. By recognizing the purpose of the interviews, the researcher can use them to create meaning and understanding of the phenomenon.

Administrator interviews will be conducted by the researcher with assistance from OPSR staff and UCO master's level students (see Appendix B). Interview questions used for this study are listed in bold text. Audio recorders will be used to record responses during interviews. Recordings of all interviews will be transcribed on a laptop computer using Microsoft Word verbatim. The transcript will be coded using Dedoose, an online application. All tapes will be erased upon completion of recording and analysis. School administrator's identity will be removed via de-identifying, deleting any digital information upon completion of the interview.

The researcher will utilize the identical process for teacher focus groups. First cycle codes will be identified and developed from the examination of key terms and phrases used by the principals during their interview. Interview transcripts are expected to produce overall themes to provide a more in-depth understanding of the principals' attitudes, philosophy, experience, classroom support, knowledge of assessments, and DAP for their early childhood teachers and students. During the coding process, both the frequency and commonality of key terms will be analyzed.

Field Notebook. Van Manen (1990) believed recording insights and reflection could aid the researcher in distinguishing patterns that may have otherwise been missed in her research. Glense (2011) recognizes the field notebook as a primary tool in conducting qualitative research. A field notebook is used to capture thoughts, impressions, and specific observations during the collection of data. Entries are labeled with the date, time, location, and context that includes actual words spoken by the participants (Bazeley, 2013). The field notebook will allow the researcher to gather information during school visits, interviews, and focus groups that may not have been evident from the transcripts.

Data Analysis

The purpose of this qualitative research study is to describe, understand, and interpret data (Merriam & Tisdell, 2016). A database built from interviews and focus groups transcripts is often a significant source of information needed to understand a topic of study. Audiotaped interviews ensure complete statements will be included in the transcripts for review and analysis. The line numbering system will be utilized to organized transcripts from the focus groups and principal interviews.

Data analysis will identify segments from the data that are responsive to the study topic (Merriam & Tisdell, 2016). The qualitative coding method utilized to organize the data is Dedoose. Specific words and phrases pulled from the transcribed interviews and focus group transcripts will represent starter codes that are used to categorize and organize the data for this study. Color codes will be utilized to organize transcribed notes and make sorting information more efficient during level one analysis.

Level 1 Analysis: Coding

Miles et al, (2014) stated a single analysis of data is seldom enough to provide sufficient findings. Initial data analysis will be the same for the teacher focus groups and principal interviews. First, the researcher will read the entire transcript to gain understanding. In doing so, a sense of the whole will be established to capture the essence of the data (Bazeley, 2013). During a second read of the transcript, memos or notes of personal thoughts, possible biases, assumptions, and interpretations will be written in the field notebook.

Bazeley (2013) states that coding happens in two stages. In the first stage, the researcher codes to identify and label the information. Starter codes are developed during this stage to identify common ideas and practices. A second stage of coding will be used to refine and focus the codes specifically back to the research questions and conceptual framework of the study. Codes will be collapsed during this stage that appear to be similar or have the same meaning. Memos will be written in the field notebook explaining the researcher's rationale and decision on coding. This written account will provide an audit trail that is beneficial to the researcher during the course of the study

(Lincoln & Cuba, 1985). Dedoose will be utilized to assist the researcher in sorting and storing coding information.

Level 2 Analysis: Thematic Analysis

A second level of analysis is planned to identify themes and patterns in the data. Themes are the products of coding, classifying, and reflection (Saldana, 2009). Themes revealed through coding serve as structures describing an experience that is constructed throughout the data. Thematic analysis engages the researcher to examine the data both as a whole and in parts to increase her understanding of the phenomenon. This method is consistent with hermeneutic phenomenology. Laverty (2003) describes this continual repetition between parts of the data and the whole understanding of the phenomenon as the hermeneutic circle.

Bazeley (2013) lists looking for patterns, sorting quotes, expressions, and finding relationships between conditions as methods to ensure all possible themes are identified during the coding process. Additional themes may be identified through the comparison of the data between different schools and school districts. This perspective will allow the researcher to refine concepts, consider attitudes and feelings, and better understand contextual factors from teacher to teacher, school to school, and district to district. Insights and observations will be recorded in the field notebook as memos. Memos will be documented and organized by theme on a spreadsheet with specific colors for each of the participating schools.

Level 3 Analysis: Synthesis

Bazeley (2013) explains the purpose of this level is to explore similarities and differences to increase understanding and to possibly identify additional themes and

patterns. During this level of analysis, codes will be examined from different perspectives. Common narratives will be created to help synthesize and understand the relationships between teachers and principals from one school to another. Synthesis of the data is an important step. Bazeley (2013) suggests that there are three steps in the process of comparison. First, the data must be sorted and shifted to give comparisons in multiple categories. Next, identification and summary of key points are used to note any differences or reasons for differences. This information will be presented in graphic organizers such as a web, diagram, or chart to organize the data and make information meaningful. An electronic inquiry using Dedoose will be utilized on the data from focus groups and interviews to uncover any patterns or themes that did not emerge during the first levels of analysis.

Ethical Considerations

Upon final approval from my committee, the study will be submitted to the Institutional Review Board at the University of Oklahoma. Ethical conduct is essential for all types of research (Glense, 2011). As the researcher of this study, it is my primary responsibility to ensure the highest standard of ethics is met and maintained.

Ethical considerations are made for all participants in the research study (Glense, 2011). All participants, including teachers and principals, signed informed consent forms to participate in the study. Consent forms included the purpose of the study, and everyone was given an opportunity to ask questions about the study and their participation. Participation in the study, the focus group, and interview sessions is completely voluntary, and participants can discontinue participation at any time during the study. All

participants will be treated with the utmost respect and pseudonyms for participants and schools will be used to ensure confidentiality.

Trustworthiness

The trustworthiness of qualitative research is sometimes misunderstood. Quantitative researchers apply reliability and validity to support their findings while qualitative researchers rely on credibility, dependability, confirmability, and transferability to support their findings (Lincoln & Guba, 1985). External validity represents the ability to generalize from the research sample to the population (Merriam, 1995). Qualitative researchers would not use this term because the purpose of their research is not to generalize, but to focus on a specific population (Glense, 2011). Trustworthiness is used by qualitative researchers to convince the audience that the findings are meaningful and can be trusted (Lincoln & Guba, 1985).

Credibility

Credibility is the most crucial aspect in establishing trustworthiness in qualitative research (Lincoln & Guba, 1985). In determining credibility, the researcher must make clear links between the research findings and reality to established truth in the findings. One of the most common methods used to establishing credibility is the triangulation of data.

Triangulation involves the use of multiple methods, observers, data sources, or theories to acquire a complete understanding of the phenomenon being studied (Miles & Huberman, 1994). Triangulation used to make sure that the research findings are rich, robust, comprehensive, and fully developed. Miles and Huberman (1994) outlined five

types of triangulation that researchers can utilize to increase the credibility of their study. They are:

(1) Triangulation by the data source (data collected from different persons, or at different times, or from different places).

(2) Triangulation by method (observation, interviews, documents, etc.).

(3) Triangulation by researcher (comparable to inter-rater reliability in quantitative methods)

(4) Triangulation by theory (using different theories, for example, to explain results)

(5) Triangulation by data type (combining quantitative and qualitative data).

To establish credibility for this qualitative research study, the following procedures and practices will be implemented during the study.

- The researcher will utilize an audit trail and keep written memos explaining decisions made during data collection and analysis (Lincoln & Guba, 1985).
- The researcher will use triangulation of sources by collecting multiple sources of data (focus groups, interviews, and field notes) to report the experiences of participants. Research findings will be connected to the review of literature for this study.
- The researcher will utilize the member check technique by asking participants to read their interview transcripts to check for errors, clarify intentions, and clarify for accuracy before analysis. This will occur within one week after the scheduled interview.

- The researcher will participate in weekly peer debriefing meetings with other students in the early childhood doctoral program with impartial views of the study. During the meetings, the researcher will discuss methodology, transcripts, coding, notes, and analyses of data. Discussions with peers will increase understandings of methods, research design, findings, and identify areas that need improvement.

Transferability

Transferability in qualitative research is synonymous with generalizability, or external validity, in quantitative research. When a qualitative researcher provides his audience with evidence of the findings that could apply to other situations, times, and populations (Guba, 1985). An important consideration for this type of research is to understand the researcher cannot prove the findings will be applicable, but he can provide the evidence that it could be applicable. Lincoln and Guba (1985) described transferability as a responsibility to provide the data base that makes transferability judgments possible on the part of the potential application. It is not the qualitative researcher's task to provide an indicator of transferability.

To establish transferability for this qualitative research study, the following procedures and practices will be implemented during the study.

- The researcher will use detailed, rich descriptions to allow readers to use the data to identify similar relationships in their world (Bazeley, 2013). These descriptions will include contextual and significant information.

Dependability and Confirmability

Dependability of the research shows the findings are consistent and could be repeated. Dependability can be confirmed by audit trails (Lincoln & Guba, 1985). External audits involve another researcher, not involved in the research process, examining both the process and product of the research study. The purpose of the audit is to evaluate the accuracy of the findings, interpretations, and conclusions to determine if they are supported by the data.

Confirmability is the final measure of Trustworthiness used by qualitative researchers and represents the level of confidence that the research study's findings are based on the participants' narratives and words rather than potential researcher biases. Confirmability is used to verify that the findings are shaped by participants more so than they are shaped by a qualitative researcher. Two techniques used to establish the confirmability of the research study's findings are audit trails and reflexivity (Lincoln & Guba, 1985). Reflexivity is an attitude that a qualitative researcher adopts when collecting and analyzing data. In achieving this attitude, the researcher must look at his or her background and position and consider the influences they present to the study.

To establish confirmability for this qualitative research study, the following procedures and practices will be implemented during the study.

- The researcher will keep an audit trail to document the details of data collection, analysis, and interpretation by recording unique and interesting topics during data collection. This may include information on coding, a rationale for merging codes, and explanation of themes.

- The researcher will maintain a field notebook and use it in part as a reflective journal to log values, interests, and note what is taking place in the research process. In this research paradigm, interpretivism is used to place an emphasis on shared meanings made by both the researcher and the participant to provide understanding (Glense, 2011).

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Appendix A: Focus Group Questions

1. **What assessments did you use last year? How did you like it?**

2. **What additional assessments did you use with the Early Learning Inventory (ELI) this year?**

   Now, I am going to ask you about your experience with the ELI and related training and resources.

3. **What kind of coaching or guidance did you receive from your principal or administrator during the pilot?**
   a. Follow-up: did they provide you additional resources? What kind?
   b. Follow-up: Were those resources useful? How?

4. What did you like about the teacher reports and data you received from the ELI?
   a. Follow-up: What did you dislike?

5. **How do you share the results with parents? How do parents respond to the results in general?**

6. What did you like about the parent reports and data you received from the ELI?
   a. Follow-up: What did you dislike?

7. How did you use the data you received from the ELI?

8. What did you like about the ELI?

9. What did you dislike about the ELI?

10. How is the ELI better (or worse) compared to other assessment tools you used in the previous year?

11. What challenges did you have in being able to use the ELI?

12. If you can make a decision, would you want to use the ELI in the future too? Why or why not?

13. What recommendations do you have for improving the experience? (e.g., recommendation for OPSR, administrator, etc.)

    a. Follow-up: Was there any professional development resources that you feel were missing that would have made your experience better?

14. What do principals need to know and understand to be supportive of developmentally appropriate teaching practices in your classroom?

15. How many years of teaching experience do you have?

16. What teaching certificates do you currently hold?

17. Any other comments you want to add?

Appendix B: ELI Administrator Interview Questions

1. **Why did you choose the assessment you chose?**
2. What kind of guidance or comments did you provide on the assessment results/reports?
3. **What are the challenges and/or barriers in implementing the assessment?**
4. What recommendations can you give for improving this experience?
5. **Would it be difficult for you to implement this assessment on your own if you had to provide everything? Why or why not?**
6. What are some examples of positive experiences you have had with the assessment?
7. **What benefits have the teachers received by using this assessment?**
8. **How has the assessment benefited your students?**
9. **Has this assessment increased kindergarten parent engagement?**
10. **How will you use the assessment data?**
11. **How do you support DAP curriculum, assessments, class environments, and professional development for your early childhood teachers?**
12. **What key experiences are important for kindergarten students?**
13. **When you enter a kindergarten classroom, what do you expect to see?**
14. **What can kindergarten teachers do to increase student engagement and academic success for their students?**
15. **What is your perception of DAP for kindergarten students?**
16. **How are you prepared to work with and support the early childhood teachers in your building?**
17. **How many years' experience do you have in education?**
18. **What teaching certifications do you currently hold?**

APPENDIX C: INTERNAL REVIEW BOARD APPROVAL

UNIVERSITY OF Central Oklahoma

August 24, 2017 IRB Application #: 17112

Proposal Title: Early Learning Inventory Feasibility Study

Type of Review: Initial-Expedited

Investigator(s):
Ms. Debra Andersen
Ms. Kiersten Durning
Ms. Megan Scott
Smart Start Oklahoma
Campus Box 132
University of Central Oklahoma
Edmond, OK 73034

Dear Ms. Andersen, Ms. Durning and Ms. Scott:

Re: Application for IRB Review of Research Involving Human Subjects

We have received your materials for your application. The UCO IRB has determined that the above named application is APPROVED BY EXPEDITED REVIEW. The Board has provided expedited review under 45 CFR 46.110, for research involving no more that minimal risk and research category 7.

Date of Approval: 8/24/2017
Date of Approval Expiration: 8/23/2018

If applicable, informed consent (and HIPAA authorization) must be obtained from subjects or their legally authorized representatives and documented prior to research involvement. A stamped, approved copy of the informed consent form will be sent to you via campus mail. The IRB-approved consent form and process must be used. While this project is approved for the period noted above, any modification to the procedures and/or consent form must be approved prior to incorporation into the study. A written request is needed to initiate the amendment process. You will be contacted in writing prior to the approval expiration to determine if a continuing review is needed, which must be obtained before the anniversary date. Notification of the completion of the project must be sent to the IRB office in writing and all records must be retained and available for audit for at least 3 years after the research has ended.

It is the responsibility of the investigators to promptly report to the IRB any serious or unexpected adverse events or unanticipated problems that may be a risk to the subjects.

On behalf of the UCO IRB, I wish you the best of luck with your research project. If our office can be of any further assistance, please do not hesitate to contact us.

Sincerely,

MPowers

Melissa Powers, Ph.D.
Chair, Institutional Review Board
University of Central Oklahoma
100 N. University Dr.
Edmond, OK 73034
405-974-5497
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The UNIVERSITY of OKLAHOMA

Institutional Review Board for the Protection of Human Subjects

Notice of Deferral Approval for OU Collaborator to Conduct Research

Date: February 26, 2018

Principal Investigator: Barbara Ann Jones

IRB#: 8929
Reference#: 675825

Study Title: The role of elementary principals in supporting early childhood teachers.

This letter is to notify you that the University of Oklahoma (OU) Institutional Review Board (IRB) has approved your request for OU to defer all IRB responsibilities with regard to the above-referenced study to the IRB at the University of Central Oklahoma. This signed and IRB- approved OU Collaborator Assurance serves as the University of Oklahoma IRB's approval for you to conduct your research under the review and authorization of the University of Central Oklahoma.

On behalf of the OU IRB, I have reviewed the above-referenced study and determined that it meets the criteria for deferral. As a collaborating investigator on this study, you are responsible to:

- Comply with the IRB Authorization Agreement signed by OU collaborating researcher(s) and the University of Central Oklahoma Principal Investigator, Debra Anderson, referencing the University of Central Oklahoma IRB-approved study titled, "The role of elementary principals in supporting early childhood teachers. ";
- Conduct the study in a manner consistent with the requirements of the IRB's of the University of Central Oklahoma and the University of Oklahoma and federal regulations 45 CFR 46;
- Request approval from the University of Central Oklahoma IRB prior to implementing any/all modifications, as changes could affect the exempt status determination;
- Notify the University of Central Oklahoma IRB of any protocol deviations or unanticipated problems;
- Maintain accurate and complete study records for evaluation by the University of Central Oklahoma and University of Oklahoma HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor; and
- Notify the University of Central Oklahoma IRB at the completion of the project.

For circumstances involving the review of uses and disclosures of protected health information (PHI) under the Health Insurance Portability and Accountability Act (HIPAA), a determination will be made between the two institutions as to who will serve as the Privacy Board, if applicable.

If you have questions about this notification or using iRIS, contact the HRPP Office at 405-325-8110 or irb.ou.edu.

Cordially,

Aimee Franklin, Ph.D.
Chair, Institutional Review Board

Table 1: Qualitative Research Plan

Data Source	Person Responsible	Procedure	Analysis	Triangulation
Teacher Focus Groups (14 Questions) Using #1, 2, 3, 5, 7, and 11.	UCO, OPSR Staff, research students B. Jones	UCO researchers will email/call kindergarten teachers to set up date and time for FG. Teachers will meet with research staff in January 2017 or February 2018 for focus group activity. UCO researchers will record all audio of the questions and responses. UCO Staff, Research Students, and B. Jones will transcribe FG and develop verbatim transcripts of the FG recordings.	**Level I** - BJ-will receives all data. Coding – **Check Reliability** BJ-lead a priori codes from literature review. **Level II** – Identify Themes, Meta-Analysis (look at every question) Merge Questions Collapse Codes	Multiple Data Sources -surveys -focus groups -interviews -field notebook Multiple Investigators -UCO & OPSR Staff -UCO graduate students -OU Researcher Compare and cross-check codes and themes from all data sources. School profiles represent 17 different school districts across the state of OK. Compare and contrast different school districts, principals, teachers, and their responses. Compare and contrast principal interview data with their school FG data.
Administrator Interviews (17 Questions) Using #1, 3, 5, 7, 8, 9, 10, and 11-18	UCO, OPSR Staff B. Jones	B. Jones will call each administrator from the 17 participating school districts to schedule a date and time for the interview. Administrators who agree to participate in the interview will meet with researchers in January and February 2018. UCO researchers will record all audio of the questions and responses. UCO Staff, Research Students,	**Level I** - BJ-will receives all data. Coding – Reliability BJ-lead a priori codes from literature review. **Level II** – Identify Themes, Meta-Analysis (look at every question) Merge Questions Collapse Codes **Level III** – Use qualitative mapping strategy to look at all levels of data.	

		and B. Jones will transcribe interview responses and develop verbatim transcripts of the interview recordings.	Identify additional themes, compare all data sources including the field notebook. Look at specific principal interviews and corresponding FG information, consider the teacher responses at that particular school and district.
Field Notebook	B. Jones	Researcher will use a field notebook to document all research, activities, settings, conversations and interactions that may benefit this study.	

Table 2: Organizational Timeline