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EXAMINING HOW OKLAHOMA'S QRIS ADDRESSES QUALITY, ACCESS,  
AND AVAILABILITY OF SERVICES FOR ALL YOUNG CHILDREN INCLUDING  
THOSE WITH DISABILITIES

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A DISSERTATION APPROVED FOR THE  
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CURRICULUM

BY

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## **Dedication**

This dissertation is dedicated to my late father Don Harris, who was a loving role model and mentor. As a constant encourager you taught me to dream big and to follow those dreams, never giving up. It is because of you, Daddy that I have become the person I am. You believed in me when no one else did, you sheltered me when no one else could. I love you and I miss you.

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## **Abstract**

Nearly twenty years ago Oklahoma set the foundation for high-quality childcare in the state and across the country by creating the *Reaching for the Stars* program (STARs), a Quality Rating and Improvement System (QRIS) (Norris, Dunn, & Eckert, 2003; Oklahoma Department of Human Services, 2014). QRIS is a multi-tiered rating system designed to measure global quality of childcare programs. The program was established through state policy initiatives to enhance the quality of childcare and is based on a collection of empirical findings and past theory. QRIS program standards are designed to improve child outcomes, increase professional development, and parental awareness of early care practices (Child Trends, 2010; Elicker et al., 2013; Karoly, Zellman, & Perlman, 2013;; Korjenevitch & Dunfion, 2010; Norris et al., 2003; Oklahoma Department of Human Services, 2014; Tout, 2013; U.S. Department of Education, 2011; Winton, McCollum, & Catlett, 2008).

Using Bronfenbrenner's Bioecological Systems Theory as a framework, Bronfenbrenner and Morris (2006) analyzed the quality, access, and availability of childcare services to young children with mild and severe disabilities (Bronfenbrenner & Morris, 2006). The literature base for the study outlines mediating conditions that affect quality childcare and includes a historical review of federal and state mandates, early intervention and inclusion practices, and an in-depth description of Oklahoma's QRIS program, as well as inadequacies in the macro-system of childcare services. The literature review also identifies significant gaps within the available literature for young children with disabilities who received childcare services. Focus was placed on inclusion of young children with disabilities through QRIS programs. Using a mixed-

methods research approach this study examines how Oklahoma's QRIS program supports high quality childcare services for young children with mild and severe disabilities. The examination included an analysis of the number of children with mild and severe disabilities served at each level of Oklahoma's QRIS program. The study also examined how state monetary incentives support services for children with special needs and perspectives from childcare directors' about why or why not they provide services for children with mild and severe disabilities.

## **Chapter 1: Introduction**

During the last 50 years, there has been an increased focus on educational programs for young children with disabilities beginning with the 1968 Handicapped Children's Early Education Assistance Act (PL 90-538) and the creation of experimental centers named *First Chance Networks* (U.S. Department of Health, Education and Welfare, 1968). The purpose of this first initiative was to improve early intervention services for children with disabilities, or who were at risk for disabilities, as well as their families. These early laws set the foundation for the current special education law, Individuals with Disabilities Act (IDEA) (Pub. L. No. 108-446), (U.S. Department of Education Office of Special Education Special Education Programs, 2006b, c).

Today's policy initiatives, much like those of past generations, seek to promote quality programs for all young children. Current mandates direct focus on developmental outcomes for children through the Race to the Top-Early Learning Challenge (RTT-ELC) (U.S. Department of Education, 2011). A basic premise underlying RTT-ELC is that quality ECE programs promote positive long-term developmental outcomes that prepare children to successfully enter kindergarten with the cognitive, social, and emotional skills needed to thrive (Elicker et al., 2013; Tout, 2013; U.S. Department of Health and Human Services, 2014). While quality early care and education programs (ECE) have been found to correlate with short and long-term positive outcomes for young children, the literature further supports the consensus that high quality ECE programs are good for all children, regardless of ability or socioeconomic background (Belsky et al., 2007; Burchinal, Vernon-Feagans, Vitiello, & Greenberg, 2013).

Research from special education literature has shown that integrating children with disabilities into educational environments with their typically developing peers

promotes the development of the child with special needs and the development of typically-developing peers (Cross, Traub, Hutter-Pishgahi, & Shelton, 2004). Thus, research has demonstrated a broader societal need for quality childcare programs for all young children, including those with special needs. This goal has prompted policy initiatives to enhance and ensure quality in childcare settings for young children. One such policy initiative is the Quality Rating and Improvement Systems (QRIS).

### **Research Problem**

Although research has shown quality childcare is beneficial to the development of both typically and atypically developing children, there is limited available research examining the role of QRIS programs in addressing the needs of young children with disabilities. This research study investigated the problem that, regardless of federal laws mandating children with disabilities be included in educational settings, only those children with milder disabilities are enrolled in childcare settings, that is, if they are enrolled at all (Booth & Kelly, 1998; U.S. Department of Health, Education, and Welfare, 1968; Hardin & Hung, 2011). QRIS programs were designed to ensure quality childcare services and this study investigated if all children, including those with disabilities, have access to high-quality childcare settings.

## Quality Rating Improvement Systems (QRIS)

**Figure1. Overview of Quality Rating and Improvement Systems (QRIS)**



Adapted from Mitchell, A. (2009). Quality Rating and Improvement System:  
As the framework for early care and education reform

In order to fully understand how QRIS programs ensure quality, it is important to understand the system and its components. QRIS is a method of assessing ECE global program quality through five essential components: 1) quality standards, 2) process of monitoring standards, 3) process of supporting quality improvement, 4) provision of financial incentives, and 5) dissemination of information about program quality to the parents and the community (see Figure 1) (Elicker et al., 2013; Harrist, Thompson, & Norris, 2007; Norris et al., 2003). The system strives to increase professional development and parental awareness of positive early care practices (Child Trends, 2010; Elicker et al., 2013; Karoly et al., 2013; Korjenevitch & Dunfion, 2010; Norris et al., 2003; Oklahoma Department of Human Services, 2014; Tout, 2013; U.S. Department of Education, 2011; Winton et al., 2008). The ultimate goal of QRIS is to improve child outcomes (Child Trends, 2010; Elicker et al., 2013; Norris et al., 2003; Oklahoma

Department of Human Services, 2014; Tout, 2013; U.S. Department of Education, 2011).

QRIS was set in motion in the late 1990s when Oklahoma led the nation in developing the first QRIS program (Norris et al., 2003; Oklahoma Department of Human Services, 2014). Oklahoma Child Care Services' (OCCS) *Reaching for the Stars* initiative, commonly referred to as STARS, is a state-developed and adopted Quality Rating and Improvement System (QRIS) (Norris et al., 2003; Oklahoma Department of Human Services, 2014; Zellman & Pearlman, 2008). In an effort to minimize confusion of terms for the remainder of this document, STARS will refer to Oklahoma's program and QRIS will refer to the overall implementation of similar programs nationally. Below in Table 1, Overview of Oklahoma's Reaching for the Starts program, a visual listing of the major components of Oklahoma's QRIS program is provided. The table is followed by a more detailed description of the components and policies that make up the STARS program.



**Table 1. Overview of Oklahoma's Reaching for the Stars program**

Level	Voluntary/ Mandatory	Requirements	Components Rated	Evaluation Frequency
One STAR	Mandatory for license	1 STAR- automatic with license	Min. License Requirements	3 Times yearly
One STAR Plus	Given two years to reach 2 STAR level or dropped back to One STAR Status	Apply and Meet 2 STAR Criteria	Above plus teacher and director training, weekly lesson plans, interest areas, daily reading program, parent involvement	Annual
Two STAR		Apply and Meet 2 STAR Criteria Or National Accreditation	Above plus teacher credentials, salary compensation, program evaluation including ERS	Annual, Plus ERS every 4 years
Three STAR		Apply and Meet 2 STAR Criteria And National Accreditation	Above	Annual plus ERS every 4 years, or National Accreditation

Adapted from Zellman & Perlman (2008).

In Oklahoma, participation in the STARS program is required by state licensing for all childcare centers or family childcare home providers, regardless of whether or not they receive state subsidy. State licensing workers, through annual STARS reviews, monitor programs during site visits (Norris et al., 2003; Oklahoma Department of Human Services, 2014; Zellman, & Perlman, 2008). The multi-component system encompasses quality indicators and utilizes a four-tiered approach. As a childcare program achieves a tier, it receives a higher STAR certification. The star levels range from one star, one star plus, two star, and three star. Each level of the four-tiered system requires childcare programs to meet an increasing number of requirements for each of the five established components of the QRIS system. These components include program quality standards, professional development standards, learning environment, financial incentives, as well as community and parent involvement. As the programs meet

increased requirements, they receive additional star certification and increased financial incentives (Norris et al., 2003; Oklahoma Department of Human Services, 2014).

The following is a global overview of Oklahoma's QRIS components with specific examples of how quality is evaluated. Program quality encompasses evaluative measures such as development and implementation of program policy and procedures across the five components of Oklahoma's STARS. For example, professional development includes annual staff evaluations and increased training requirements. Improved learning environment includes lower student teacher ratios, implementation of a minimum number of learning centers, and lesson plans. Financial incentives include state and tribal reimbursements paid to centers for providing services to families who qualify for DHS services. The final component includes community and family involvement. Specifically this element addresses ways the center involves both the community and family in programming and decision making at the center as evident through the availability of community resource information and parent advisory committees (Norris et al., 2003; Oklahoma Department of Human Services, 2014). The evaluation frequency column in the STARS (Table 1) refers to Environmental Ratings Systems (ERS). ERSs are classroom observation assessment tools used to assess process quality of group care settings and programs.

The provisions of financial incentives, through state and tribal reimbursements, are designed to support the overall cost associated with a program's efforts to improve. Financial incentives can support cost associated with building improvements, teacher training, and program materials (Oklahoma Department of Human Services, 2014). Childcare centers that provide services for children with disabilities receive an increased reimbursement rate that is based on the number of children in the program and their

individual disability level. The increased incentives are designed to support the increased cost of caring for a child with moderate and severe disabilities including specialized teacher training and equipment needs (Oklahoma Department of Human Services, 2014). Given that the provision of financial incentives for including children with disabilities is available, one would expect children with mild or severe disabilities to be included in childcare settings, perhaps even at a higher proportion than their non-disabled peers. However, the literature is littered with reports of the challenges associated with serving young children with special needs (Belsky et al., 2007; Booth & Kelly, 1998; Burchinal et al., 2013; Hardin & Hung, 2011 Knoche et al., 2006). This literature leads to the potential conclusion that despite incentives, children with special needs may not be actively included in childcare settings.

Given the goal of QRIS is to increase the availability of high-quality childcare to all young children, what role does QRIS play in achieving this goal for young children with special needs? A review of the QRIS programs across the country reveals limited attention to young children with special needs (Booth & Kelly, 1998; Hardin & Hung, 2011; Oklahoma Department of Human Services, 2014, Tout, 2013). This fact establishes a gap in current early childhood, special education, and QRIS literature as well as a guide for this research.

### **Research Purpose**

The purpose of this research was to examine Oklahoma's QRIS program, *Reaching for the Stars*, relative to the access, availability, and implementation of quality services for young children with special needs. More specifically, this research study examined the enrollment of children with mild and severe special needs in childcare programs at each level of the STARS rating system. Additionally, the research sought to

examine if financial incentives for centers to provide services for children with disabilities, promoted inclusive practices and if those incentives promoted quality. The overarching goal of this study was to inform ECE research, policy, and practices within Oklahoma as well as across the country for infants/toddlers and young children with special needs; with specific regard to the quality, access, and availability of childcare services.

### **Specific Objectives of the Study**

1. To determine if Oklahoma's QRIS program promotes access and availability of quality childcare for children with mild to severe disabilities.
2. To examine barriers and supports, including financial reimbursements and their impact on the quality and availability of childcare programs for children with special needs.

### **Research Question and Hypothesis**

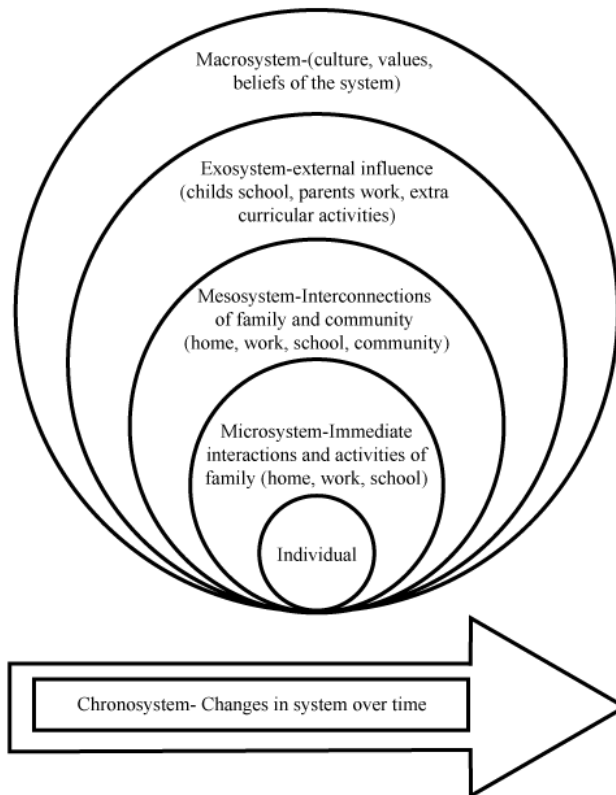
Current ECE research and practice, along with federal policy, establish the foundation for the following research questions:

1. Are young children with disabilities served in quality ECE programs as measured by QRIS ratings?
2.
  - a. Do incentives from state or tribal subsidies impact the number of children with disabilities receiving services?
  - b. Do subsidies impact the capacity of a center to serve children with disabilities?
3. What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities?

## Conceptual Framework

The conceptual framework for this research study was Bronfenbrenner's Bioecological Systems Theory. Bronfenbrenner's theory is an evolving theory of human development where the passage of time intersects a complex multifaceted system that influences the overall development of the child (Bronfenbrenner & Morris, 2006). The following visual representation of Bronfenbrenner's theory demonstrates the interconnected linkages of an individual within multiple layers of a societal network involving other individuals, cultures, and environments.

**Figure 2. Bronfenbrenner's Bioecological Systems Theory**



Adapted from Bronfenbrenner & Morris. (2006).

The microsystem, consist of the experiences of the children and the family together. The mesosystem is the first layer of external influence with connection between the child home and childcare setting. The exosystem extends a step further including

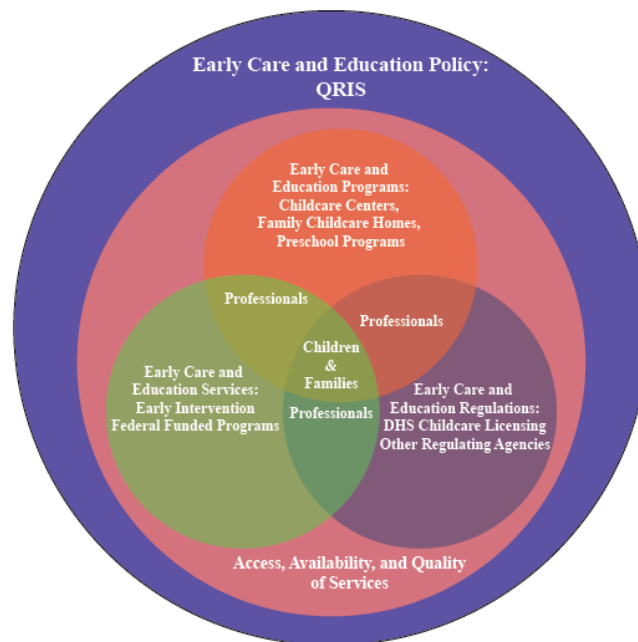
external influences on the child and family. Some of those influences include teacher professionalism while other influences are derived from places in which children rarely interact such as parents work (Bronfenbrenner & Morris, 2006; IT<sup>3</sup> Research Center, 2013; Tudge, et al., 2009). The macrosystem encompasses all of the other system layers and includes the community in which the child and family live and grow. The chronosystem is the final element of the overall system and includes the linkage of each of the evolving systems across time (Bronfenbrenner & Morris, 2006; IT<sup>3</sup> Research Center, 2013; Tudge et al., 2009).

Bronfenbrenner and Morris's (2006) notion of multiple contexts informs this study and the literature review that supports it. The complexity of early childhood and special education services requires an equally intricate framework that encompasses a systems' approach to inform research, programs, and policy. The conceptual framework graphic (see Figure 2), adapted from IT<sup>3</sup> Research Center (2013), is a visual representation of a multifaceted set of interconnected systems that require further analysis in order to identify gaps in ECE and special education research, programs, as well as policy. The visual representation demonstrates the intersection of the quality, access, and availability of childcare settings for young children with special needs, their families, and professionals. This includes a complex system of childcare services, involving quality childcare programs and early intervention services. Central to the framework are children, age birth to five, with special needs, their families, and professionals (micro and mesosystem).

The central concentric circles emphasize the intimate interconnectedness of the systems elements, namely ECE settings, ECE services including intervention services, and state childcare licensing regulations that govern ECE programs (exosystem).

Progressing outward the next layer of the system includes the overall challenges of access, availability, and quality of services for children, families, and program professionals where they live and work. The outermost ring of the concentric circle encompasses public policy and includes; local, state, and federal ECE regulation, such as state childcare licensing regulations and QRIS (macrosystem). It is this outermost ring that highlights the greatest challenges of the conceptual framework, because this ring identifies the inconsistency between the intent of policy and the outcome and impact of the same policy. Furthermore, it is this inconsistency of policy that identifies the importance of continuity between service providers and access to available services for all children.

**Figure 3. Conceptual Framework- Bioecological Model of Quality ECE Programs**



The following assumptions of the QRIS conceptual framework considered Bronfenbrenner's bioecological theories as they related to the inter-connections of an early childhood community. Bronfenbrenner and Morris (2006) stated child development was an intricate biological process of cognitive, social, emotional, and physical growth

that occurs over time and across multiple environmental settings. This development occurs when there was ongoing reciprocal exchange between individuals and the environment, in which both the individuals and environments were active and evolving over a sustained period of time (Bronfenbrenner & Morris, 2006). The distal ecology of children's environments was important to the framework for establishing the context in which children interact and experience cognitive, social, emotional, and physical growth. It should be further noted that individual experiences within given environments were unique to each person. Experience outcomes could also vary greatly based on many factors including historical influence. A single experience could produce multiple different outcomes or on the reverse different experiences may produce similar outcomes (Bronfenbrenner & Morris, 2006, IT<sup>3</sup> Research Center, 2013).

Chapter two presents an in depth review of current literature as it relates to this research study. This chapter establishes the importance of quality childcare, followed by a detailed description of quality as it relates to QRIS. The chapter then provides a historical perspective of mediating conditions of quality based on the establishment of educational laws as well as an examination of current laws and inclusion practices. Oklahoma's *Reaching for the Stars* program (STARs) followed with a detailed description of the program including important historical perspectives with current regulations and a comprehensive description of the individual tiers of the program. The literature review includes shortcomings in the current macrosystem of quality and concludes with an analysis of the application of quality by examining the interaction of the macrosystems as it relates to the conceptual framework and QRIS. Chapter three outlines the methodology of this study; chapter four includes the data analysis, and the research will be concluded in chapter five by integrating the significance of this study



with the research findings and final study conclusions.

### **Significance of Study**

There is an identified need for quality childcare programs and that need exists for all children including those with disabilities. QRIS was designed to promote quality. So, one goal of the study was to examine how Oklahoma's system ensures quality. Beyond overall quality, it was also important to address access and availability of services for children with disabilities. In essence, quality does not exist, or is an illusion, if the services are not available. The question becomes, how do we change cultural perspectives to ensure the same quality for all children? Data from several sources were reviewed to detail current types of services and Developmental Appropriate Practice (DAP) for both typically developing children and children with disabilities (Copple & Bredekamp, 2009). The paper maintains the idea that inclusion provided through early care and education practices promotes social and academic achievement for all children.

### **Definition of Terms**

It is important to establish clarity and shared meaning for the terms used in this research. Thus, several definitions are provided below:

*Childcare* for the purpose of this paper will be defined as Early Care and Education (ECE) settings including public, private, or federally-funded childcare/daycare, and preschool settings that provide services to children age birth to five.

*Mild disabilities* includes young children who qualify for special education services based on federal special education law (IDEA). Children with this level of disability are frequently served with typically developing peers through their childcare

program or their Local Educating Agency (LEA), and may need only minimal special education support for developmental growth.

*Severe/significant disabilities* or special needs refers to children who have also been identified through federal special education law (IDEA) as qualifying for special education services typically because of a medical diagnosis of one or more severe disabilities, conditions, or syndromes. Children within this group typically need a significant amount of support from special education personnel to achieve developmental growth (U.S. Department of Education Office of Special Education Special Education Programs, 2006b).

*Early intervention* refers to the federally mandated and state developed services required for children who qualify for special education services, age birth to three (U.S. Department of Education, 2006b, c, d).

*Inclusion* is defined as educating children with disabilities in their natural setting or Least Restrictive Environment (LRE), with the goal of allowing children with disabilities to feel a sense of membership within the environment (Oklahoma State Department of Health, 2013).

*Quality Rating and Improvement System (QRIS)* is a method of assessing global program quality through five essential elements 1) quality standards, 2) process of monitoring standards, 3) process of supporting quality improvement, 4) provision of financial incentives, and 5) dissemination of information of program quality to the parents and community (Norris et al., 2003; Oklahoma Department of Human Services, 2014). Reaching for the Stars program, *STARS*, is Oklahoma's state developed and adopted QRIS program.

## **Chapter 2: Review of Literature**

The literature review for this study considered research from three areas of literature, early childhood, special education and QRIS research. The chapter will begin by identifying four dimensions of quality and why quality childcare programs are vital to child outcomes. The chapter will transition next to what is referred to as mediating conditions of quality childcare. Mediating conditions, more specifically federal mandates and inclusion, represent regulations that were been put in place to ensure children with special disabilities had equitable access to educational services. Chapter two continues by identifying Early Intervention programs and why these programs are so important for young children. Next the chapter will identify shortfalls of quality affect macrosystem of childcare programs.

Presently, the economic and social circumstances of an increasing number of US families require more mothers than ever to seek employment outside of the home. A direct result of the increase of mothers in the workforce has resulted in an increase in the number of young children with and without disabilities, spending time in some form of childcare (Harrist et al., 2007; Knoche et al., 2006). In 2011, the National Association of Child Care Resource and Referral Agencies (NACCRRA) reported eleven million children between birth and five years of age attended childcare programs in US. The National Institute for Early Education Research [NIEER], (2010) reported 6.6 million children between two and five year's old attended childcare facilities outside of the home. Nearly two million of those families lived in poverty. Both of the reports stated that early childhood aged children spend an average of 30-35 hours per week in some form of childcare.

The fact that an increased number of children are spending significant amounts of time in childcare reinforces the need for quality childcare programs, a need that is comparable for all children including those with mild to severe disabilities (Booth & Kelly, 1998). Although there are estimates that half of the children who attend ECE programs would qualify for special education services, Knoche and colleagues (2006) suggested it is truly unknown how many of the children, who have disabilities currently, attend childcare settings. Therefore, the percentage of children who are receiving early childhood special education services is likely lower than the percentage that actually need or would qualify for those services. Ensuring quality services are available for all children, not just those children who are typically developing, is a key reason why it is important to analyze the current system of services. In addition to the need for quality childcare is the need for intervention services and access and availability to those services.

Parents of children with severe disabilities report ongoing difficulty locating quality, affordable childcare (Booth & Kelly, 1998). Although there are external pressures of federal mandates driving the push to provide early intervention services, many early childhood programs simply do not provide the specialized services children with disabilities need in order to be successfully included. ECE programs typically only accept children with milder disabilities (Clawson & Luze, 2008; Hardin & Hung, 2011; Knoche et al., 2006). The most frequently stated reasons for limited childcare services include building and equipment needs, lack of knowledge and training, and the overall cost associated with caring for children with special needs including higher wages of teaching staff (Clawson & Luze, 2008; Knoche et al., 2006; Silverman, Hong, & Trepanier-Street, 2010). For these reasons, young children with significant disabilities

are seldom served in community preschool programs, although these children could be successfully included (Cross et al., 2004).

Oklahoma's early leadership in ECE services through collaborative partnerships with programs such as Head Start and Early Head Start have helped to establish and reinforce a model for quality childcare across the state. Head Start and Early Head Start programs are able to promote quality childcare through the use of allocated funds. Presently these programs spends thousands of state, federal, and grant dollars providing and or improving services for at risk families living in the state (NACCRRA, 2011; Peterson et al., 2004). This partnership has proven a definite need for quality childcare programs in the state's communities; however, it is a need that exists for all children, including those with mild to severe disabilities. Quality ECE programs and services matters in terms of child outcomes, this is a widely held belief that many early childhood educators, administrators, and stakeholders have argued for years. This is an argument that is now supported by governmental focus and federal grant funding, of the Race to the Top- Early Learning Challenge RTT-ELC (U.S. Department of Health & Human Services, 2014). Hardin and Hung (2011) stated that specialized services are often part of quality early childhood programs and are essential to development for special needs children.

Throughout the generations, there has been great debate about growth and development of young children and the teachers of early childhood programs that best serve children's overall development. Today's current educational accountability pressures of No Child Left Behind (NCLB) have become inclusive of early childhood and special education services (U.S. Department of Education Office of Special Education Special Education Programs, 2007). NCLB currently requires highly qualified

early childhood professionals to examine and enhance the quality of childcare and education for young children (Clawson & Luze, 2008; Cottingham, Glantz, & Layzer, 2000; Winton, et al., 2008; Zellman & Perlman, 2008). Additionally, a federal push for high quality childcare through the Race to the Top-Early Learning Challenge (RTT-ELC) has forced each state to evaluate their current educational focus on early childhood programs and best practice (U.S. Department of Education, 2011; U.S. Department of Health & Human Services, 2012; U.S. Department of Health and Human Services, 2014).

The renewed governmental interest in early childhood affirms how early childhood educators and professionals address children with a variety of different developmental needs and socioeconomic backgrounds (Frost, Wortham, & Reifel, 2012; U.S. Department of Health and Human Services, 2014). This belief of long-term development is at the basis of child development theory and is foundational to RTT-ELC's efforts to promote and ensure high quality early childhood care and education for all children through high quality programs. The literature describes quality childcare as a precious commodity for children in the United States and across the world. However, what does quality mean to those providing or receiving the services?

The more recent shift in ECE services incorporate childcare settings in the debate, and more important than the setting, is the quality of the setting. The goal of RTT-ELC is to promote quality through program services and community connections to health care and family support services (Burchinal, et al., 2013; Clawson & Luze, 2008; U.S. Department of Health and Human Services, 2014; Winton, et al., 2008; Zellman & Perlman, 2008). These accountability trends place emphasis on many areas of the early childcare and educational system including health care and family support. However,

specific focus has been towards improved academic outcomes through the development and implementation of Quality Rating and Improvement Systems (QRIS) (Elicker et al., 2013; Tout, 2013; U.S. Department of Health and Human Services, 2014). The QRIS program, designed with measureable standards, focuses on improved child outcomes with the goal of preparing children for successful entry into kindergarten (Child Trends, 2010; Elicker et al., 2013; Norris et. al., 2003; Tout, 201; U.S. Department of Education, 2011).

Furthermore, research suggests that inclusive ECE programs provide a number of potential benefits such as supportive environments, developmentally appropriate practice, peer modeling, and social play for children with and without disabilities (Clawson & Luze, 2008; DeVore & Russell, 2007; National Professional Development Center on Inclusion, 2009; Vakil et al., 2009). There is a significant gap in current research for young children with severe disabilities in childcare settings (Booth & Kelly, 1998; Buell, McCormic, & Hallam, 1999). The limited available research focuses on training and implementation and implications of inclusive practices for providers in ECE facilities (DEC/NAEYC, 2009; DeVore & Russell, 2007; Silverman et al., 2010; Vakil et al., 2009). The fact remains there is still a lot of work to do before there will truly be a quality childcare and education system for students with severe disabilities, although there is a push from federal mandates like NCLB and RTT-ELC that have led the ECE field to begin focusing on quality for all children. The reality is that quality, as measured through QRIS systems and other global quality assessments may be lacking in the true impact and implementation for children with significant special needs (National Professional Development Center on Inclusion, 2009).

## **Dimensions of Quality**

Recent shifts in ECE programs have incorporated the importance of quality childcare settings. The National Association for the Education of Young Children (NAEYC) developed a national accreditation process for early care and education programs, by establishing guidelines for quality and an accredited system based on program adherence to ten standards: relationships, curriculum, teaching, assessment of child progress, health, teachers, families, community relationships, physical environment, and leadership/management (Aytch, Cryer, Bailey, & Selz, 1999; NAEYC, 2011).

The real problem with the concept of quality for an identified subgroup of children is that the definition is not universal across the ECE field. Quality means something different to each of the stakeholders working to promote early learning and child outcomes (Harrist et al., 2007). Belsky et al., (2007) described quality as related to school readiness, more specifically cognitive development, academic achievement, and social emotional ability stating that high quality is associated with higher achievement scores. Teacher training level, higher wages, and lower turnover indicate other factors of quality (Cottingham et al., 2000; Knoche et al., 2006; Thomason & LaParo, 2009; Winton et al., 2008)

Burchinal et al., (2013) analyzed the threshold between quality childcare practices and child outcomes. While their research found high quality care promoted cognitive and social development, they also determined quality varied across regions. Researchers have been examining quality for more than 20 years; however, the fact remains that variation in services and the ability to adequately measure quality continues to be a challenge to the early childhood field. This fact further reveals that quality is not



a universal indicator of child outcomes, across a region, socioeconomic level, program type, classrooms, or even teacher child interactions (Aytch et al., 1999; Burchinal et al., 2013). Although Burchinal and her colleague's research reported significant social growth with simultaneous decrease in negative behaviors of the children, the study further stated the same gains were not evident for academic outcomes of children for this reason, quality must be analyzed further.

While many researchers refer to quality or the need for quality in ECE programs, there is a gap in the literature when defining quality in relation to children with disabilities. There is a great deal of research supporting quality and child outcomes for infants, toddlers, children in poverty, or at risk of poverty, typically developing children, and even school readiness; however, research on the level of quality for children with disabilities is virtually non-existent (Belsky et al., 2007; Burchinal et al., 2013; Elicker et al., 2013; Knoche et al., 2006; Tout, 2013; U.S. Department of Health and Human Services, 2014).

Quality has been defined comprehensively through the depth, availability, and intensity of services. Programs that offer more intense service models promote higher achievement skills of the infants/toddlers and families enrolled; however, programs that are not able to attain comprehensive quality fail to meet the needs of their families (Love et al., 2012). The research has further identified four dimensions of childcare quality: contextual, global, structural, and process. Each of these dimensions examines specific attributes of quality childcare. Contextual features of quality encompass the overall setting through global constitute of day-to-day routines, health, safety, and materials aspects of the program. Structural examines the context of the program, where the program is located, and the type of the program. The last dimension of quality is process

quality, which includes the overall experiences of the program such as teacher-child interactions, ratios, activities, and room arrangement (Aytch et al., 1999).

Dimensions of quality for infants and toddlers examines the use of inclusive practice and, while supported by federal mandates, has become a widely debated topic in education through the years (Hestenes, Cassidy, Hedge, & Lower, 2007). While generally the quality of infants and toddler programs tend to be lower, inclusive programs tend to promote higher quality child outcomes. Child outcomes relate to the next aspect of quality, and are typically characterized as school readiness, but more specifically cognitive, academic, and social development. The belief that long-term development is at the cornerstone of child development theory is foundational to RTT-ELC's efforts to promote and ensure high quality early childhood care and education for all children through high quality programs.

The over-arching goal of RTT-ELC's is to promote and provide quality ECE through program services and community connections to health care and family support services designed for federally-funded programs such as Head Start and Early Head Start (Burchinal, et al., 2013; Clawson & Luze, 2008; U.S. Department of Health and Human Services, 2014; Winton et al., 2008; Zellman & Perlman, 2008). This intentional focus established through accountability measures on many areas of the early childcare and educational system including health care and family support. The specific focus being aimed at improved academic outcomes through the development and implementation of Quality Rating and Improvement Systems (QRIS) (Elicker et al., 2013; Tout, 2013; U.S. Department of Health and Human Services, 2014).

Currently, President Obama and his administration have put a great deal of focus on promoting healthy early learning experiences through their implementation of Race to

the Top- Early Learning Challenge RTT-ELC (U.S. Department of Health & Human Services, 2014). Through significant financial incentives, states across the nation are working to enrich, implement, or develop QRIS programs designed to support and evaluate quality of ECE programs within their states (Elicker et al., 2013; Tout, 2013; U.S. Department of Health and Human Services, 2014). The purpose of this initiative is to establish quality ECE standards designed to promote child outcome and build kindergarten readiness. While the focus is to promote quality across all ECE programs, financial incentives are primarily focused on federally-funded programs such as Head Start and Early Head Start (Children's Defense Fund, 2010; U.S. Department of Health & Human Services, 2012). NAEYC, whose national accreditation program for early care and education programs is yet another source of national-level influence of support for ECE programs. NAEYC provides supports in many ways including its established program accreditation guidelines for quality including the following ten standards: relationships, curriculum, teaching, assessment of child progress, health, teachers, families, community relationships, physical environment, and leadership/management, in which programs are evaluated (NAEYC, 2011).

Belsky et al. (2007) concluded that while quality and quantity were linked for children from at risk populations, quality was jeopardized when children spend excessive quantities of time at childcare centers. Further exploring quality, Hardin and Hung (2011) stated access was an essential element of academic and social development especially for children with special needs. However, quality access is often unequal for these children. Hardin and Hung (2011) also stated that specialized services are often part of quality early childhood programs and are essential to development for special

needs children. However, few children with special needs receive those services as compared to their non-disabled peers (Knoche et al., 2006).

### **Mediating Conditions: Federal Mandates, and Inclusion**

#### **Federal Mandates**

Bronfenbrenner's Bioecological Systems Theory is an evolving theory of human development, where the passage of time intersects a complex multifaceted system that influences the overall development of the child (Bronfenbrenner & Morris, 2006; Tudge, Mokrova, Hatfield, & Karnik, 2009). This complex system is known as proximal processes described as Process-Person-Context-Time (PPCT) (Bronfenbrenner & Morris, 2006; IT<sup>3</sup> Research Center, 2013; Tudge et al., 2009). Proximal processes are further illustrated through child and family connections to and within the multi-layers of the system. The microsystem, consist of the experiences of the children and the family together. Mediating conditions for the purpose of this research include federal laws and inclusion practices because it is through these structures for which childcare for children with special needs are available.

Recognizing the discrepancies of childcare services for young children, laws were created to establish equal educational rights regardless of ability in the United States and many locations across the world. These laws date back to the 1950s with the United Nations (UN) passage of the Declaration of Rights of the Children and United States' passage of the Handicapped Children's Early Education Assistance Act in the 1960s. These laws brought an international spotlight on the need for early care and education programs for children (Hardin & Hung, 2011; Peterson et al., 2004; U.S. Department of Health, Education, & Welfare, 1968).

The U.S. laws established the first federally-funded experimental research known as First Chance Networks, which ultimately paved the way for current early intervention services for children with or at risk for developmental disabilities by improving educational practices, parent involvement activities, and program evaluation. The passage of these early laws led to current federal law for children with special educational needs called the Individuals with Disabilities Act commonly referred to as IDEA (Pub. L. No. 108-446) (U.S. Department of Education Office of Special Education Special Education Programs, 2006c).

IDEA states that education is a fundamental right of all children, also known as Free Appropriate Public Education (FAPE) in the child's Least Restrictive Environment (LRE) (U.S. Department of Education, 2006c; U.S. Department of Health, Education, & Welfare, 1968). Although IDEA is complex in its requirements for equitable educational services for children with special needs, for this study the law will be viewed through the early intervention and or inclusion services provided through an Individual Educational Program (IEP) (U.S. Department of Education, 2006b, c). While the IEP is designed to provide services to children ages three to twenty-one, the reauthorization of IDEA included specific language to address infants and toddlers under the age of three (Peterson et al., 2004; U.S. Department of Education, 2006b). These mandates required all states to develop Part C Early Intervention programs designed to identify and provide services for infants and toddlers under the age of three, with developmental disabilities or at risk of developmental problems and provide services through an Individual Family Service Plan (IFSP) (Macy & Hoyt-Gonzales, 2007; Oklahoma State Department of Health, 2013; Peterson et al., 2004). An IFSP, much like an IEP, follows many of the same regulations for privacy and clearly defines protocol for serving children until they

transition to the local educational agency (Oklahoma State Department of Health, 2013; U.S. Department of Education, 2006 b, c, d).

## **Inclusion**

Inclusion is another centerpiece of the special education law, a practice that has been around for many years and has taken on many different faces. Inclusion is conceptually defined as educating children with disabilities in their natural setting or LEA, with the goal of allowing children with disabilities to feel a sense of membership within the environment. Furthermore, it provides children with equal access to opportunities, ability to fully participate, and sufficient supports necessary to be successful (DEC/NAEYC, 2009). In the most recent years, new laws and regulations such as No Child Left Behind (NCLB) (U.S. Department of Education Office of Special Education Special Education Programs, 2007) have stretched current practices of inclusion with the goal to educate disabled peers in environments of their typically developing peers, hence the term natural or Least Restrictive Environment (LRE). These provisions gave parents more service delivery options of services for their children, allowing them options for where their children could play and socialize with typically developing peers (Clawson & Luze, 2008; DeVore & Russell 2007).

In addition to the service delivery options the goal of Part C Early Intervention was to reach children and families at a much younger age to establish continuity between service agencies for the young child (Peterson, et al., 2004). Oklahoma's Part C Early Intervention Services are provided through SoonerStart (Oklahoma State Department of Health, 2013). SoonerStart works with local parents to provide services for children birth to three with disabilities. Some of the services SoonerStart provides include developmental services from certified child development and developmental specialists

as well as testing and services from related service providers such as speech therapists, occupational therapists, and physical therapists.

### **Early Intervention: Quality Early Intervention Services Promote Infant/Toddler Development**

The 1980s inclusion of amendments to federal law regulating educational services for children with disabilities brought an influx of attention to early intervention services for infants and toddlers with biological or environmental risk of developmental delays (Black, 1991; Boavida, Espe-Sherwindt, & Borges, 1999; Stahmer & Mandell, 2006). Although new attention to early intervention services emerged in the 1980s, the concept and practice was far from new. In fact the first laws advocating for early education services began in the 1960s, followed by the advent of Head Start (Black, 1991; U.S. Department of Health, Education, & Welfare, 1968). The core of early interventions is to provide specialized services and enrichment opportunities that have been identified as meeting federal criteria and qualify of services (Black, 1991; Peterson et al, 2004). Boavida et al. (1999) asserted the primary principles of early intervention should include services and outcomes focused on the family, in addition to families being the lead decision makers for their child's service needs.

Early Intervention programs first began with a focus on both biological and environmental risks of the children and the families. Biological risks included those mental and physical disabilities identified at birth or soon thereafter. Biological risks often require lifelong intervention for the new infant along with a great deal of support for the family (Black, 1991). Initially, services are often designed to support the family as they progress through the stages of the grief cycle as they gain knowledge and accept their child's disability (Boushey, 2001). Environmental risks include those posed to

children and families who live and function in environmentally challenging settings such as those posed by living in orphanages or poverty (Black, 1991).

What Works Clearinghouse (2014) described early intervention services as services provided in center-based settings specifically for children age three to five. This description of early intervention focused on curricula and practice for children age three through five with and without disabilities who have not yet entered kindergarten. The research further examined developmental outcomes of children stating primary purpose of early intervention services should be to enhance cognitive and languages skills.

Beyond defining early intervention services, the federal mandates were designed to define and measure the quality of early intervention services, and while this measurement continues to be a challenge current accountability pressures of NCLB have become inclusive of early childhood and special education services (Aytch et al., 1999; U.S. Department of Education Office of Special Education Special Education Programs, 2007). NCLB currently requires highly qualified early childhood professionals to examine and enhance the quality of childcare and education for young children (Clawson & Luze, 2008; Cottingham et al., 2000; Winton, et al., 2008; Zellman & Perlman, 2008). RTT-ELC is another government mandate established to force each state to evaluate their current educational focus on early childhood programs and best practice (U.S. Department of Education, 2011; U.S. Department of Health & Human Services, 2012; U.S. Department of Health & Human Services, 2014).

### **SoonerStart**

As previously mentioned IDEA mandated each state to develop early intervention services for children birth to age three who qualify for special education services under the federal law and meet eligibility for the disability category of Developmental Delay



(DD). Oklahoma's Part C Early Intervention Services are provided through SoonerStart (Oklahoma State Department of Health, 2013). SoonerStart is a federally-funded component of IDEA and works with local parents to provide services for children birth to three with disabilities. Some of the many services provided include developmental screenings and testing, direct family support and services from related service providers such as speech therapy, occupational therapy, and physical therapy. All services are provided by specialized specialists in the early childhood, child development, or special education field.

SoonerStart provisions gave parents more opportunities of service deliveries for their children, options that supported more natural settings and opportunities in which their children could play and socialize with typically developing peers (Clawson & Luze, 2008; DeVore & Russell, 2007; Stahmer & Mandell, 2006). In addition to service delivery options, the goal of the law was Part C Early Intervention which would reach children and families at a much younger age fostering collaborative continuity between service agencies and families with young children (Peterson, et al., 2004; Stahmer & Mandell, 2006). According to state and federal law, children who qualify for SoonerStart, have a medical diagnosed syndrome from birth such as Down syndrome or other medical condition such as Autism. Children can also be referred by someone in the child's environment such as family member, friend, or even the child's doctor. After a child is referred for testing, they are assigned a resource coordinator who coordinates the multidisciplinary assessment process for the infant and family. In order to qualify for early intervention or DD services in Oklahoma the infant/child must have a 25% delay or greater in two or more areas of the five assessed areas of development; cognitive,

language, social emotional, motor and adaptive skills or a 50% delay or greater in one area of development (Oklahoma State Department of Health, 2013).

### **Head Start/Early Head Start**

Head Start, as established earlier, was first funded in the 1960s with the goal to provide equitable services to families in poverty and to young children with disabilities. Children identified as having a developmental delay and or at risk of developmental delays due to poverty were identified and enrolled in Head Start and other similar programs. The current interest in early childhood education programs and services across the country, including Oklahoma, has resulted in greater state and federal funding for programs, placing greater responsibility on individual program leadership, guaranteeing the best curriculum models that meet the needs of the targeted cliental and community are effectively in place (Essa et al., 2008; Winton et al., 2008).

Head Start programs are to provide comprehensive services for the whole family with specific services for infants/toddlers and children from pre-birth to age five. The programs are designed to take all children as long as their families meet the eligibility requirements. The centers are mandated regularly and expected to meet Head Start Performance Standards, one standard which requires 10% of their enrollment to include children with disabilities who qualify for Part C early intervention services (Peterson et al., 2004; Early Head Start Research and Evaluation Project, 2006). Head Start was given a great deal of latitude in how they meet the required 10% special needs requirement. In some cases previously identified children enroll in the program making up a small portion of the overall percentage required by the performance standards. The remaining children are typically identified through the referral process of the programs.

Early Head Start Research and Evaluation Project (2006) reported speech language disabilities as the most frequently identified category of services children in the programs qualify for, with mobility, vision, and hearing being the next largest areas of service need. There is virtually no evidence of services provided to infants/children with more significant disabilities. In fact, research conducted by Peterson et al. (2004) reported finding from a sample of 2093 children, in which only 250 of the children had diagnosed disabilities consisting of developmental delays, cognitive delays and language delays. This research finding recognizes the current literature gap for available research for infants and toddlers with disabilities.

### **Reaching for the Stars a Quality Rating and Improvement System**

The first QRIS program was developed and implemented in Oklahoma nearly two decades ago. Currently some variation of the program is in existence or being piloted in states across the US (Elicker et al., 2013; Norris et al., 2003; Tout, 2013). While the clear need for high quality ECE programs have been established and the implementation of QRIS programs is underway, it is important to identify what the QRIS program means. To recap, QRIS was designed as a standards based method of assessing global program quality through five essential components 1) quality standards, 2) process of monitoring standards, 3) process of supporting quality improvement, 4) provision of financial incentives, and 5) dissemination of information of program quality to the parents and community (Elicker et al., 2013; Harrist et al., 2007; Norris et. al., 2003). The objective of the program was to improve child outcomes for all children, with the focus being kindergarten readiness (Child Trends, 2010; Elicker et al., 2013; Norris et. al., 2003; Tout, 2013; U.S. Department of Education, 2011).

In 1996, Oklahoma began to undergo a process of welfare reform, striving to provide better services for children and families receiving welfare benefits. Oklahoma Child Care Services' (OCCS) Reaching for the Stars initiative was the answer to that reform. First launched in February of 1998, the Reaching for the Stars program, commonly known as *STARS*, provided a state developed and adopted Quality Rating and Improvement System (QRIS) (Norris et al., 2003; Oklahoma Department of Human Services, 2014; Zellman & Pearlman, 2008). Because *STARS* was the first of its kind, Oklahoma was considered the leader in early care and education as well as childcare licensing across the states.

Today more than 40 states have some form of QRIS program to regulate childcare services providers in their state (Oklahoma Department of Human Services, 2014; Winton et al., 2008). Since the conception and implementation of the program, the system has undergone multiple revisions, which further define regulation requirements that programs are required to follow (Zellman & Pearlman, 2008). After nearly a twenty-year history in Oklahoma, the term *STARS* and QRIS is common language in ECE programs across the state. However, as any assessment method designed to improve or communicate ECE practices within the state, there is some question to its validity for all children across the state (Harrist et al., 2007, Norris et al., 2003). Further stated, the current system needs to be examined to ensure it is adequately supporting the childcare programs and in turn ensuring access and availability of all children across the state. The QRIS system originated from a policy initiative, extensive research of literature, and best practices considered quality within the field of early childhood. In Oklahoma, few early childhood experts from the research field were consulted during the development stages of the QRIS program. Rather it was ECE providers from across the state who were

established as the primary contributors to the project (Norris et al., 2003; Elicker et al., 2013; Zellman & Pearlman, 2008). The program was designed as a multi-component rating system used to promote and improve the quality of care and education services that providers across the state were giving to children and families in their programs. The system strived to increase professional development and parental awareness of positive early care practices (Korjenevitch & Dunifon, 2010; Karoly et al., 2013; Oklahoma Department of Human Services, 2014; Winton et al., 2008).

In order to minimize confusion of terms in this study *Reaching for the Stars* and STARS will be considered as the same concept and will be primarily referred to as STARS. The STARS program grew from the minimum state licensing requirements. It was developed for all childcare providers across the state. Home and center-based programs are included, regardless of whether or not they receive state or tribal subsidy. Financial reimbursements are given as incentives for centers that seek and achieve higher STAR Levels. The tiered reimbursements currently range from \$15 for one star to \$31 per child per day for three star programs. Although slight, it is an increase from the 2002 rate of \$29 per day for a three star program. In addition to child reimbursement incentives, there are salary and center incentives designed to support teacher's educational levels (Norris et al., 2003; Oklahoma Department of Human Services, 2014; Zellman & Pearlman, 2008). Reimbursement rates for serving children with some disabilities ranges are even higher, as noted below. While children with mild disabilities typically need some support because modifications are limited, there is no additional rate increase; however, there is a reimbursement increase for children with moderate and severe disabilities. The rate for children with moderate disabilities generates an \$8 per

day increase and a \$14 per day increase for children with severe disabilities (Oklahoma Department of Human Services, 2014).

The system design encompasses quality indicators and utilizes a four-tiered approach. With each tier or level of mastery a center achieves, it receives a STAR Certification. The star levels include one star, one star plus, two star, or three star. All licensed facilities within the state are required to participate, and state licensing workers conduct annual stars reviews during site visits (Norris et al., 2003; Oklahoma Department of Human Services, 2014; Zellman & Perlman, 2008).

The following is a detailed description of the most current criteria for each of the four STAR levels that were revised and put into effect on July 1, 2012. One STAR certification is given to all newly opened centers that are approved through the state childcare licensing regulations (see Summary Table 1). Upon licensing approval, centers are given an initial license/permit for six months. The requirement for a center to acquire state approval to open demands 100% compliance in the STAR's program. While it is highly recommended through the STAR's system and the licensing offices for facilities to seek higher STAR's Certification, it is not required.

To achieve the One STAR Plus Certification centers must meet the One STAR criteria and increased administrative practices including program evaluation, increased professional development requirements, improved learning environments, and increased parent engagement. Currently administrative practices and program evaluation require the facility to register the Oklahoma Center for Early Childhood Professional Development (CECPD) as a direct care organization (childcare center). Participation and registration is established through submitted application and approval of the Oklahoma Professional Development Registry (OPDR) governed by CECPD (Center for Early

Childhood Professional Development, 2014; Korjenevitch & Dunifon, 2010; Oklahoma Department of Human Services, 2014; Zellman, & Perlman, 2008).

Center directors are required to use the Oklahoma Core Competencies to conduct annual staff evaluations and develop annual professional development plans for each staff member. Facilities are additionally obligated to provide staff with employee handbooks outlining center policies and employee's rights. Other forms of program evaluation include making licensing regulations and site visit compliance reports available to parents and visitors, conducting an annual health and safety checklist of the program and facility, as well as conducting annual staff and family surveys and questionnaires designed to promote program effectiveness (CECPD, 2014; Oklahoma Department of Human Services, 2014).

Professional development changes call for directors and staff to participate in additional professional development hours per year. The current provisions is two college credits or thirty hours of childcare training for directors and two college credits or twenty hours of childcare training for staff. The goal is for the staff to work towards a master teacher status. Master teacher must complete the coursework for a Child Development Associate (CDA) or higher degree in early childhood or a child development field. Staff must also train in the Early Learning Guidelines (ELG), learning standards created by the state for early childhood programs, establishing best practice, and care for children (CECPD, 2014; Korjenevitch & Dunifon, 2010; Norris et al., 2003; Winton, et al., 2008; Zellman, & Perlman, 2008).

When considering improved learning environments the regulations incorporate adult/child ratios, established by state licensing requirements, and ensuring there is at least one master teacher per every twenty children enrolled in the facility. Furthermore,

programs are to utilize early learning standards, increase teacher training, and post weekly lesson plans as part of their daily instruction. Daily schedules are designed to ensure teachers read to children for a minimum of fifteen minutes per day. Learning environments are designed with ample space with a minimum of six key learning centers including an art center, block center, reading area, dramatic play area, manipulative center, free space, and music/movement center. Along with learning centers, there must be expansive designated indoor and outdoor play space for large motor play and activity. Children under the age of two should not be exposed to television or other forms of screen time including computers and or computer games (CECPD, 2014; Norris et al., 2003; Oklahoma Department of Human Services, 2014).

Increased parent engagement is one of the fundamental goals of the STARS program and requires facilities to create and maintain multiple forms of ongoing two-way communication with families, including open door policies where families are welcome anytime. Facilities should keep families informed of the center's events, together with the children's wellbeing. One method of informing families includes established family resource areas with a variety of community based services, including general parenting materials available. Parents should be a vital part of building the program through involvement in parent advisory boards or program policy development (CECPD, 2014; Norris et al., 2003; Oklahoma Department of Human Services, 2014).

There are actually two ways to achieve Two STAR Certification. First, the facility can improve beyond the requirement of the One STAR and the One STAR Plus criteria to additionally meet all of the Two STAR criteria. The second way of achieving Two STAR Certification is to meet the requirements for One STAR Certification and receive national accreditation through an approved accrediting body such as the National



Association for the Education of Young Children (NAEYC). If the program is a Head Start Program, the program can meet Head Start Performance Standards (CECPD, 2014; Norris et al., 2003; Oklahoma Department of Human Services, 2014).

The established criteria of the Two STAR Certifications include the same requirements as the other STAR requirements. However, the professional development criterion is renamed as the qualification criteria; this area evaluates the staff qualifications of the center which must meet minimum requirements to achieve the Two STAR level of certification. Taking a further look at the criteria areas beginning with administration, includes the addition of policy and procedure manuals, facility mission and vision statement, organizational structure, established professional code of conduct, and a discipline policy. The Two STAR criterion also requires a minimum of two annual staff meetings where time is designated for the staff to analyze the quality and efficiency of the program (CECPD, 2014; Norris et al., 2003; Oklahoma Department of Human Services, 2014).

The newly renamed qualification criterion further defines professional development and master teacher qualifications by outlining increased certification requirements of CDA and beyond. For this STAR level, an increase in required annual training hour's increases from twenty to thirty. The goal of these criteria is to move teachers to higher levels of education. An example of this transition requires teachers who do not have a CDA to complete necessary training to acquire that certification. Teachers who already hold a CDA are required to take classes and training towards a Certificate of Mastery or an Associate's degree. A teacher who already has an associate's degree is required to be working toward a Bachelor's degree. All administrators and

teachers in a Two STAR center must remain current with their CECPD membership (CECPD, 2014).

At the Two STAR level, requirements of the learning environments include the addition of two learning centers, one for math and one for science. Teachers are also required to engage in physical play and activity at least one time per day. Family engagement involves two annual parent teacher conferences, which include providing parents with written documentation of their children's progress. While previous STAR levels require parent resources be made available, Two STAR certification requires centers to maintain a more stringent community resource list and materials as well as help families locate services within the community (CECPD, 2014; Oklahoma Department of Human Services, 2014).

Two STAR program evaluations require programs to establish written yearly goals derived from staff and family surveys, safety checklists, and assessments conducted by licensing regulations from the Oklahoma Child Care Services (OCCS). Written goals include policy revisions, professional development, and educational goals of staff. Programs that are not nationally accredited are to be accessed by the QRIS program annually for OCCS by trained personnel from one of three agencies OCCS, Resource and Referral (R&R), or CECPD, (Norris et al. 2003; Zellman & Perlman, 2008). In Oklahoma, the assessment tool most commonly utilized to assess the STARs program is the Early Childhood Environmental Rating Scale-Revised (ECERS-R) (Harms, Clifford, & Cryer, 2005). The Classroom Assessment Scoring System (CLASS) (LaParo, Hamree, & Pinta, 2012) is used in Head Start Programs. For programs that are nationally accredited, assessments are conducted according to the accreditation entity. However, annual STARs visits are still conducted in accredited programs with the

expectation that all that all required documentation must be completed prior to the visit (Oklahoma Department of Human Services, 2014).

Three STAR Certification requires centers to meet all criteria of the first three STAR levels. In addition, Three STAR Certification requires centers to seek national accreditation. At previous levels, national accreditation was recommended, but still optional. The only exceptions to being nationally accredited centers are the Head Start Programs. Rather than national accreditation, these programs, must maintain compliance with established national Head Start Performance Standards. While the STAR Levels can seem complex, OCCS staff provides ongoing support through resources and training for centers. Support is provided for newly established centers through well-established centers seeking to increase or maintain their STAR level (Oklahoma Department of Human Services, 2014).

**Table 1. Overview of Oklahoma's Reaching for the Stars Program**

Level	Voluntary/ Mandatory	Requirements	Components Rated	Evaluation Frequency
One STAR	Mandatory for license	1 STAR- automatic with license	Min. License Requirements	3 Times yearly
One STAR Plus	Given two years to reach 2 STAR level or dropped back to One STAR Status	Apply and Meet 2 STAR Criteria	Above plus teacher and director training, weekly lesson plans, interest areas, daily reading program, parent involvement	Annual
Two STAR		Apply and Meet 2 STAR Criteria Or National Accreditation	Above plus teacher credentials, salary compensation, program evaluation including ERS	Annual, Plus ERS every 4 years
Three STAR		Apply and Meet 2 STAR Criteria And National Accreditation	Above	Annual plus ERS every 4 years, or National Accreditation

Adapted from Zellman & Perlman (2008).

Although recent mandates for quality ECE services for all children have become a national discussion, the question remains as to whether or not QRIS programs are fully sustaining and promoting outcomes for all children in our state or across our nation. There is a great deal of research that promotes the idea that quality ECE correlates to positive child outcomes and development of children (Harrist et al. 2007; Korjenevitch & Dunifon, Norris et al., 2003; 2010; U.S. Department of Health & Human Services, 2014; Zellman & Perlman, 2008). There is also a great deal of QRIS research that suggests a significant lack of valid findings that the programs are accomplishing what they were designed to accomplish (Elicker et al., 2013; Tout, 2013). The research further suggests the reason for the lack of valid evidence include the current status of each state's program.

The problem is that each state is in a different stage of development ranging from program re-valuation, to initial implementation, or even initial development of their program. Other research suggests there is a lack of linked services across the US or even within a given state (Elicker et al., 2013, Early Childhood Data Collaborative, 2014; Tout, 2013). Finally, using the broad definition of quality and the implication that all children receive quality ECE services, there is a significant lack of available QRIS research for children with disabilities (Burchinal et al., 2013; Harding & Hung, 2011; Knoche et al., 2006; U.S. Department of Health and Human Services, 2014).

### **Shortfalls of Quality Early Intervention Services**

#### **Law- Federal Funding**

While federal policy has led to increased early interventions services, which in turn has led to earlier identification of infants/toddlers with developmental disabilities across the country, there continues to be many challenges to the system (Stahmer &

Mandell, 2006). Challenges include the increased number of children and families in the system, the lack of universal eligibility and systematic programming under the federal mandates, and a lack of adequate funding across the states. Recently the Obama administration has promoted significant financial incentive for states that focus on promoting healthy early learning experiences through their push and implementation of RTT-ELC (U.S. Department of Health & Human Services, 2014).

The goal of the incentives is twofold; first states need to implement or develop QRIS programs designed as evaluative measure of global quality of ECE programs within their states (Elicker et al., 2013; Tout, 2013; U.S. Department of Health and Human Services, 2014). Second, to establish quality ECE standards designed to promote child outcome and promote kindergarten readiness. However, one shortfall of this initiative is that while the focus is to promote quality across all ECE programs, financial incentives are primarily focused on federal funded programs such as Head Start and Early Head Start (U.S. Department of Health & Human Services (2012).

### **Early Intervention- Limited Services**

Although early intervention services have promoted benefits to infant/toddler development, programs continue to be challenged by the diverse needs of the families, the integration of multidisciplinary services, and the lack of qualified professionals in the field (Black, 1991; LeLaurin, 1992; Redden et al., 2001; Stahmer & Mandell, 2006). Other challenges to the system involve transition services for children and families when changing from one service agency services or program to another such as transferring from the . Head Start to the public school system (Redden et al., 2001). Many of the services such as parent involvement programs, provided through service agencies and

programs suddenly vanish as children leave these programs. Public School settings just do not have the funds, training, or infrastructure to promote better continuity.

While the discussion in this paper has focused on the promotion of early intervention services, LeLaurin (1992) highlighted disadvantageous aspects of the programs and services. Among the common concerns about early intervention services are the service models and designs available to children and families. The belief service that models are not universal for all children and families; an approach for one family may be harmful to another family. Some concerns are that programs may actually be more restrictive to families. While another concern is that services for children with disabilities may be much more limited consisting of only a few hours per month, while typically developing peers are able to receive much more intervention (LeLaurin, 1992). It is crucial to recognize while the system is evolving so are the needs of the families within the system, and that a singular system approach will not work for everyone in the system.

### **Loopholes in Early Childhood Programs and Services**

While the research has outlined laws that mandate services for children with disabilities, the services in childcare settings for infant/children with significant disabilities are virtually nonexistent. While some childcare centers provide limited services for children with milder disabilities, children with significant disabilities are more often at home with their parents or relatives and receive minimal services (Hardin & Hung, 2011). Furthermore, the federal programs such as Head Start and Early Head Start, designed to serve children who are at risk, are only required to have 10% of their enrollment be children with diagnosed disabilities. These programs typically include only children with milder disabilities (Peterson et al., 2004) further confirmed inclusive

programs are not always inclusive and frequently fail to serve children with more significant disabilities (Cross et al., 2004).

### **QRIS- Fails to Measure Subgroups**

Recent mandates for quality ECE services for all children have become a national discussion; the question remains to whether or not QRIS programs are fully sustaining and promoting quality and enhanced outcomes for all children in our nation. Quality services for children with special needs is related to three underlying factors: experience and attitudes of childcare providers (Buell et al., 1999), costs associated with inclusion practices and equipment associated with children with more significant needs (Odom et al., 2001), and training and implementation of services (Wesley, 1994). While research promotes the idea that quality ECE correlates positive child outcomes and development of children, there is also a great deal of QRIS focused research that suggests a significant lack of valid findings that the programs are accomplishing what they were designed to accomplish (Elicker et al., 2013; Tout, 2013).

The research further suggests the reason for the lack of valid evidence is that each state is in a different stage of development ranging from program re-valuation, to initial implementation, or even initial development of their program. Other research suggests the lack of linked services across the US or even within a given state (Elicker et al., 2013, Early Childhood Data Collaborative, 2014; Tout, 2013). Finally, using the broad definition of quality and the implication that all children receive quality ECE services, there is a significant lack of available QRIS research for children with disabilities (Burchinal et al., 2013; Harding & Hung, 2011; Knoche et al., 2006; U.S. Department of Health and Human Services, 2014).

## **Developmental Outcomes of Inclusive Practices**

As continually discussed throughout the current literature, high quality ECE services are considered to promote higher cognitive development, achievement scores, and social emotional ability for infants/toddlers and young children (Belsky et al., 2007; Burchinal et al., 2013; Karoly et al., 2013). The research further supports associations between quality and child outcomes for infants/toddlers, and children in poverty, or at risk of poverty, typically developing children, and even school readiness (Belsky et al., 2007; Burchinal et al., 2013; Elicker et al., 2013; Knoche et al., 2006; Tout, 2013; U.S. Department of Health and Human Services, 2014). However, research on the level of quality experienced by children with disabilities is virtually non-existent and even more limited is available research on the subgroup of infants/toddlers with disabilities.

The lack of available literature clearly is a current gap within the literature for infants and toddlers and for children with special needs. This gap suggests that while variables of quality promote growth and development, is quality really the same for children with and without disabilities (Belsky et al., 2007; Booth & Kelly, 1998; Burchinal et al., 2013; Karoly et al., 2013). Hardin and Hung (2011) stated access is an essential element of academic and social development especially for children with special needs. However, quality access is often unequal for these children. Hardin and Hung (2011) also stated that specialized services are often part of quality early childhood programs and are essential to development for special needs children. However, few children with special needs receive those services as compared to their non-disabled peers (Knoche et al., 2006).

Inclusion practices for children with disabilities in childcare and preschool programs with non-disabled peers have been more common across the country.



However, Huang and Diamond (2009) reported that teachers' attitudes toward disabled children play a major role in determining success of the implementation. Furthermore, key to the practice of inclusion is remembering that inclusion is a practice. It is not a placement for special needs children, and effective learning is not achieved by simply putting a child in an inclusive placement. Effective learning comes from collaborative practices (Vakil et al., 2008).

This literature review has included a review of QRIS definitions of quality, and an overview of federal laws. However, the question remains as to how these factors fit together. Specifically analyzing Oklahoma's QRIS program, the questions that remain are 1) Is the state established QRIS a sufficient indicator of quality for childcare programs? and 2) Are QRIS programs currently ensuring availability of quality services for all children regardless of ability level or disability status? The review of current literature states high quality ECE services promote higher cognitive development, achievement scores, and social emotional ability, and are correlated to highly trained staff, low staff turnover, as well as low adult/child (Belsky et al., 2007; Burchinal et al., 2013; Karoly et al., 2013). Although QRIS systems have been instituted across the US as an accountability system aimed at promoting quality childcare service, the research has shown a great deal of variability in quality from one center to another as well as from one classroom to another (Karoly et al., 2013). Furthermore, a system designed to promote best practice through incentives has become high stakes for those centers at risk of losing funding based on their quality rating.

Although there is a great deal of research discussing quality childcare services and the need for quality services for special needs children, the gap in the literature is evident. There is a lack of research defining quality and availability of services for

special needs children. While variables of quality include promoting growth and development, is quality really the same for children with and without disabilities (Belsky et al., 2007; Booth & Kelly, 1998; Burchinal et al., 2013; Korjenevitch & Dunifon, 2010; Karoly et al., 2013). After reviewing the available research using quality as an indicator, the literature gap concludes quality for early childhood programs is examined differently when considering quality programs for typically developing children and quality programs for children with special needs. Quality services for children with special needs are related to three underlying factors: experience and attitudes of childcare providers (Buell et al., 1999), costs associated with inclusion practices and equipment associated with children with more significant needs (Odom et al., 2001), and training and implementation of services (Wesley, 1994). Parents have added to this discussion with their accounts of limited access to quality childcare centers due to the centers inability or unwillingness to care for their children because of their disabilities (Essa et al., 2008; Huang & Diamond, (2009).

With the increase of inclusion practice identified by the progress and success of students with and without disabilities, there is also the other side of the issue. Progress does not come cheap. There are many obstacles to providing services for children with significant disabilities in preschool settings. The idea of change was among the most difficult obstacles for children. Many teachers and/or administrators may not see the positive impacts of inclusion of severely disabled children; therefore, they may not allow the opportunity to be given to either the disabled child or his nondisabled counterpart (Booth & Kelly, 1998; Hardin & Hung, 2011; Knoche et al., 2006).

Two of the most common concerns addressed by research with childcare services for children with significant disabilities include challenges for teachers to meet both

educational needs and the range of medical needs (Putten, Valskamp, & Schuivens, 2011), and teacher training (Silverman et al., 2010). Many teachers and administrators feel that they did not have enough training or experience to teach students with disabilities or they did not want to try. What teachers and administrators did not understand is that the same skills are taught to disabled students. However, for children with disabilities to learn the necessary skill there must be adequate adaptations to the curriculum. In quality early childhood settings few adaptations truly need to be made, because the appropriate academic curriculum for this age group is learned through play and socialization within their peer group (Burchinal et al., 2013; Copple & Bredekamp, 2009; Hardin & Hung, 2011; Knoche et al., 2006).

QRIS programs have established quality while state and federal laws have been mandating equal access of services for all children regardless of ability (NAEYC, 2011). However, Cottingham et al., (2000) reported that despite the significance of quality childcare programs the reality of care has been rated mediocre. Furthermore, the virtual nonexistence of childcare programs for children with special needs was of no surprise if childcare programs primarily serving typically developing children were considered mediocre. Examining three different literature sources this chapter revealed high-quality childcare is essential to the development of all children regardless of ability level. The literature continued by examining laws designed to regulate quality for children with special needs. The chapter revealed that regardless of laws, there are substantial shortfalls to the macrosystem that encompasses childcare services. The following chapter, chapter three, outlines the methodology for which this research study was conducted.

### **Chapter 3: Methodology**

The purpose of this research study was to examine Oklahoma's QRIS program *Reaching for the Stars*, with a particular focus on the access, availability, and implementation of quality services for young children with special needs. This study was guided by the following primary question: Does Oklahoma's QRIS program ensure quality, access, and availability of services for all young children in Oklahoma including those with mild and severe disabilities? The following research questions derived from current ECE research and practice, along with federal policy, were explored in this study.

1. Are young children with disabilities served in quality ECE programs as measured by QRIS ratings?
2.
  - a. Do incentives from state and or tribal subsidies impact the number of children with mild and severe disabilities receiving services?
  - b. How do subsidies impact the capacity of a center to serve children with disabilities?
3. What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities?

#### **Research Design**

This research study used a mixed-methods design. The mixed-methods approach is a practice of collecting both quantitative and qualitative data in order to fully examine and understand the research problem the study seeks to answer (Bazeley, 2013; Creswell, 2008; Gay et al., 2006). Research studies using a mixed-methods design typically seek comprehensive knowledge and understanding of a given phenomena. The combination of quantitative and qualitative data collection allows for a more in-depth investigation and a richer analysis of the research question (Gay et al., 2006). The goal of educational

research is to inform the field; in order to do this researchers are required to draw from a variety of research practices and bodies of evidence. It is for this reason that mixed-methods research practices are becoming more commonly used (Gay et al., 2006).

Gay et al. (2006) defined quantitative research a collection of numerical data used to analyze, predict, or explain a given phenomenon. Conversely, Gay et al. (2006) defined qualitative research as a collection of comprehensive narrative or non-numerical data used to analyze, predict, or explain a given phenomenon. More commonly stated, educational research using quantitative methods seek to reveal predictable patterns using scientific means. This form of research encourages limited participant contact to reduce skewing data results and limiting researcher bias. Qualitative research is considered to be more emergent and flexible in nature, seeking to discover the quality of a phenomenon (Bazeley, 2013; Creswell, 2008; Gay et al., 2006). This form of educational research relies primarily on participant interactions through observation and interview practices.

Although quantitative and qualitative methods present opposing approaches in guiding a research study, they actually have several similarities. Similarities include research processes designed to identify a problem, address gaps in literature, justify the need for the study, and collect data through a variety of methods including observation, interview, and documentation review. Differences between the approaches evolve from the processes in which each of the similarities seek to identify and answer a given research question (Creswell & Plano Clark, 2007; Gay et al., 2006).

As with all research, mixed-methods approaches are not without challenges. While mixed methods research is still a relatively newer approach, supporters of the method promote it because it gives researchers the ability to perform both quantitative and qualitative methods in a single study (Creswell & Plano Clark, 2007; Gay et al.,

2006). Other advocates of the approach report the methodology to have more superior effects than a singular process, while critics of the method express concern for keeping methodology assumptions separate (Caruth, 2013; Creswell & Plano Clark, 2007).

This study utilized an explanatory mixed-methods (QUAN-qual model) approach to analyze and report data findings (Gay et al., 2006). Employing this approach, quantitative data of Oklahoma's QRIS program obtained from Oklahoma's Department of Human Services (OKDHS) was analyzed along with the results of a survey completed by childcare directors across the state. Quantitative analysis includes, Chi Square, and Analysis of Variance (ANOVA), Qualitative measures include interviews with directors of childcare centers. Qualitative analysis was done through an inductive analysis, triangulating patterns between interview and survey responses.

### **Sample**

The research participants for this study consisted of directors of childcare programs that provided full-day and full-year services for the children and families enrolled in the programs. While the ECE programs of this study varied according to their size and organizational structure, the following characteristics served as inclusion criteria: each center was located in the state of Oklahoma, conform to state childcare licensing regulations, and have met at least one level of the STAR requirements. Relative to organizational structures, programs affiliated with state or national corporations, independently owned and operated, or those affiliated with public school or Head Start programs were included. It was expected that ECE programs utilized a combination of the following funding sources including private pay income, as well as federal, state, and/or tribal subsidies. The participants consisted of the center administrators from each site who completed and returned the survey questionnaires (see Appendix B).

Participants for this mixed methods study were identified by contacting the Oklahoma Department of Human Services (OKDHS) and securing their database of licensed childcare facilities in Oklahoma. The OKDHS data included 1596 licensed childcare centers in Oklahoma as of the fall 2014. Each of the centers had at least a one star rating. The data set was originally reduced by 336 childcare centers because they did not meet the inclusion criteria of the study. For example, centers including part-day and school age programs were excluded. The survey was first administered to 905 participants before eliminating duplicate email addresses and emails that were returned undeliverable. The data set was reduced by a total of 773 to identify a total of 720 unique email addresses that represented the pool of potential participants. The following is the star level demographic of the 720 centers surveyed, 1 STAR-19%, 2 STAR- 63%, and 3 STAR- 18%.

The 720 potential participants were surveyed using Qualtrics, a web-based survey tool. The principal investigator identified complications with surveys being returned unanswerable due to settings on the original survey questions. Participants were unable to answer questions that require a fill in answer or that were designed to allow for more than one answer. As soon as this complication was identified, the survey was retracted and corrected. After correcting the survey, eliminating duplicate emails and emails that returned undeliverable it was re-administered to 720 participants.

Survey participants were given a two week window to complete the survey. In an effort to enhance the response rate, the survey was re-administered for another two weeks. This allowed participants, who had not yet completed the survey, an opportunity to complete it, as well as increase the overall response rate. Initial analysis of the response rate improved from 10% to 15% with a total of 109 participants participating in

the survey. However, the overall response rate is approximately 12% when participants who started the survey but did not complete it were removed from the analysis.

### **Interview Participants**

Analysis of the 109 potential participants indicated only 92 fully completed the web-based survey. Among the 92 participants who completed the survey, 32 childcare directors agreed to contribute further in the research by participating in a phone interview. The 32 possible participants were sorted by star level and region to insure selection of participants from both urban and rural areas of the state and from each of the three established star levels. The potential participant sample provided the following data set; 1 STAR- 2 participants, 2-STAR- 18 participants, 3 STAR-12 participants. The data was further broken down by region and is reported as follows; region 1- 2 participants, region 2-7 participants, region 3- 4 participants, region 5-11 participants

### **Data Collection**

The principal investigator retrieved STARs data via public record laws by contacting the Oklahoma Childcare Licensing offices and making a formal request of records. The obtained records were provide by email in the format of an excel document. OKDHS provided more information than requested by including the following data; the centers case number, facility type, owners name, facility name, address, phone number, facility capacity, license type, effective date, and star level. Although the email addresses were requested this data was not provided. The principal investigator retrieved this data by looking each individual center up on the OKDHS website.

All licensed childcare center administrators were sent a letter electronically detailing the purpose and goals of the research study. This letter included a request for the directors to participate through completing an online survey. The importance of



participating was emphasized by highlighting the policy and practice implications of the potential findings including understanding issues related to access and availability of high-quality childcare for young children with disabilities. This letter included a timeframe for the research, web address for completing the web questionnaire, and the researcher's contact information (name, phone number, and email address).

The survey questionnaire includes a combination of nominal and ordinal questions utilizing a 4 point Likert scale ranging from 4 strongly agree, 3 slightly agree, 2 slightly disagree, and 1 strongly disagree. The survey questions were designed to: 1) gather demographic information such as region of the state the program is located, 2) determine respondent's knowledge and usage of available funding sources, 3) determine respondents knowledge of Oklahoma's STAR levels, 4) determine respondent's knowledge of disability categories served in their programs, and 5) willingness to serve children with special needs and factors that prevent facilities provision of services to children with special needs.

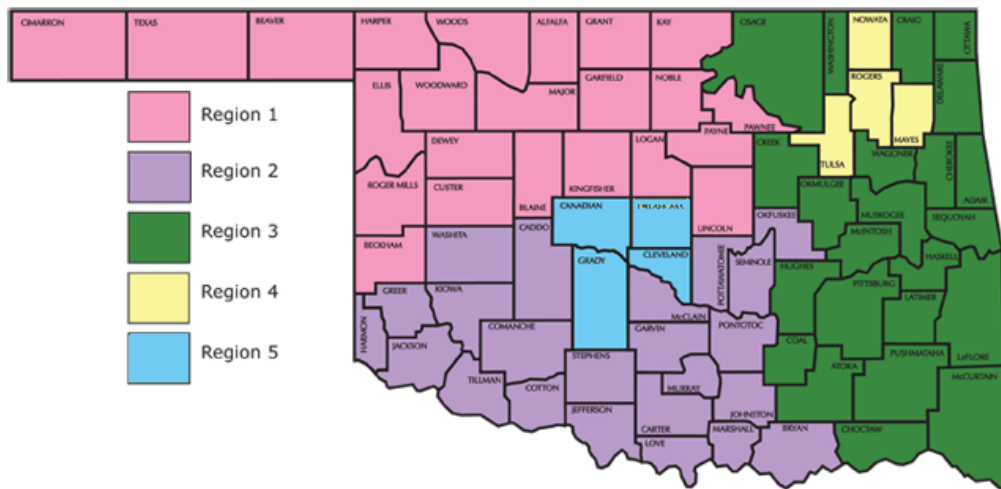
The center directors selected were then called to confirm their interest in participating and asked to provide informed consent. Interview dates and times were scheduled with the principal investigator. The interviews were used to seek additional understanding and clarification of center director's knowledge and perceptions of the STARS program and reasons that encourage or prevent directors from enrolling children with special needs in their programs. Participants were selected through a purposeful selection of returned surveys for centers at each of the four star levels from both urban and rural populations of the state.

Utilizing OKDHS's established regions participants who completed the web-based survey were then divided by region and star level for further analysis. In order to

ensure the purposeful selection of childcare centers from both urban and rural populations of the state, the state was divided into five regions (see figure 4). One to four centers from each of the different star levels and from each of the regions were selected for phone interviews. The graphic on the following page is a visual representation of current DHS regions within the state. OKDHS has 6 established regions by which childcare centers are divided. These regions are divided by grouping address zip codes. Due to limited region sizes or limited available data, for the purpose of this study OKDHS regions 5 and 6 were combined to form one region labeled, region 5 and 1 STAR and 1 Plus STAR levels were combined to form one category labeled, 1 STAR.

Additionally, child count data was taken from the Oklahoma State Department of Special Education website to look at the distribution of children with disabilities across the state. This data allowed the principal investigator to consider threats to validity and reliability. The most current data available was for the 2012-2013 year. According to the available reports there were approximately 2275 children, birth to three receiving SoonerStart services across all five regions of the state (SoonerStart Early Intervention Program Site Data Profile, 2013).

**Figure 4. Map of Oklahoma by Regions**



Adapted from Oklahoma Department of Human Services. (2014).  
<http://www.okdhs.org/programsandservices/cc/prvdrs/>

### **Data Collection Timeline**

Data collection began upon successful completion and approval of the principal investigator's dissertation prospectus and approval from the University of Oklahoma's Institutional Review Board (IRB). This process included the formal request to access records from Oklahoma Department of Human Services (OKDHS). The letter detailing the research study and the importance of participating was electronically sent to center directors in late January to inform them of the research and to elicit the directors' participation in the study.

Survey participants were given a two week window to complete the survey. One reminder to complete the survey was emailed out four days before the close of the survey windows. At the close of the survey the first analysis of the data revealed a 10% response rate. While this response rate was within acceptable response rates for web-based surveys, the response rate was low (Fan & Yan, 2010; Languilles, Williams, & Saunders, 2011; Nulty, 2008). Following survey protocol, it was appropriate to re-administer surveys seeking to increase response rates (Fan & Yan, 2010; Languilles et

al., 2011; Nulty, 2008). Therefore, the survey was re-administered to participants who had not yet completed it. The survey was again opened for a second two week window. At the close of the second survey window in March, the response rate increased to 15%. Phone interviews were conducted through February and March.

**Figure 5. Data Collection Sequence**



### **Quantitative Data Procedures**

Data analysis was organized by research questions through a mixed-methods analysis approach. Table 2 provides an overview of the data analysis for each of the research questions. All quantitative analysis was conducted using SPSS software applying Chi Square, and ANOVA, as the quantitative measures of descriptive statistics (Fields, 2009; Lomax & Hahs-Vaughn, 2012; Sprinthall, 1982; Stevens, 2002). Qualitative analysis was conducted through inductive analysis (Add qualitative cite here). More details for each research question is provided below.

**Table 2. Analysis Chart**

Question	Procedure	Analysis		
<p>1. Are young children with mild and severe disabilities served in quality ECE programs?</p> <p>Question- Are there differences in access of quality ECE services across the four STAR levels for children disabilities.</p> <p>Source: STARS Data- OKDHS, Oklahoma Child Count data</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info</p> <p>Tally the number of children with mild and severe disabilities served in each STAR category.</p> <p>Access Oklahoma State Department of Special Education website to retrieve available Child Count data</p>	<p>Chi Square</p> <ul style="list-style-type: none"> <li>(Number of infants/toddlers with disabilities) X (Star Level)</li> <li>(Preschool children with disabilities) X (Star Level)</li> </ul>		
<p>2. Do incentives from state and or tribal subsidies impact the number of children with mild and severe disabilities receiving services?</p> <p>Source: STARS Data- OKDHS, Oklahoma Child Count data</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info.</p> <p>Analyze data from childcare directors surveys</p> <p>Access Oklahoma State Department of Special Education website to retrieve available Child Count data</p>	<p>Chi Square</p> <ul style="list-style-type: none"> <li>(Number of infants/toddlers with disabilities) X (Subsidy)</li> <li>(Preschool children with disabilities) X (Subsidy)</li> </ul>		
<p>2b Do subsidies impact the capacity of a center to serve children with disabilities?</p> <p>Source: STARS Data- OKDHS, Oklahoma Count data</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info.</p> <p>Analyze data from childcare directors surveys</p> <p>Access Oklahoma State Department of Special Education website to retrieve available Child Count data</p>	<p>ANOVA</p> <ul style="list-style-type: none"> <li>(Professional Development-survey question 23) X( Subsidy)</li> <li>(Resources-survey question 24, 25) X (Subsidy)</li> </ul>		
<p>3. What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities?</p> <p>Source: STARS Data- OKDHS, Oklahoma Child Count data</p> <p>Survey Data, Phone Interview Transcripts</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info.</p> <p>Analyze data from childcare directors surveys</p> <p>Conduct interviews with childcare directors from purposeful sample representation of each STAR level</p> <p>Transcribe Phone interviews</p> <p>Establish codes and meta codes looking for patterns within research questions.</p>	Level 1 Analysis	Level 2 Analysis	Level 3 Analysis
		<p>-Establish codes</p> <p>Limitations,</p> <p>Cost, Facilities,</p> <p>-Reread transcripts</p>	<p>-Establish Meta codes</p> <p>-Establish Patterns within transcripts</p>	<p>-Inductive analysis</p> <p>-Triangulate Patterns within the STAR level, Survey, and Phone interview data.</p>

*Research Question One-* To what degree are young children with disabilities served in quality ECE programs, was examined by tallying the number of children with disabilities served at each level of Oklahoma's QRIS. Chi square analysis was conducted to determine if the frequency of occurrence of young children (infants, toddlers, and preschoolers) with disabilities were served at the three star levels of QRIS. The goal was to analyze the frequency of access and availability of quality childcare services provided to infants/toddlers and preschoolers with disabilities

**Table 3. Chi Square Analysis Table 1**

	Number of Children	
	Infants/Toddlers with Disabilities	Preschool Children with Disabilities
One STAR		
Two STAR		
Three STAR		

*Research Question Two-a.* Do incentives from state and or tribal subsidies impact the number of children with disabilities receiving services, utilized a Chi Square analysis. Chi Square was conducted to determine if differences exist in the use of state and tribal subsidies and the number of young children (infants/ toddlers and preschoolers) with disabilities served at the three levels of QRIS. Table 4 is an example of how the Chi Square analysis was conducted.

**Table 4. Chi Square Analysis Table 2**

	Number of Children	
	Infants/Toddlers with Disabilities	Preschool Children with Disabilities
Subsidy Type		

*Research Question Two-b.* Do subsidies impact the capacity of a center to serve children with disabilities, was analyzed through three different one-way ANOVA's. Following is a description of how each ANOVA was conducted. The ANOVA's will only change by the grouping of survey questions together to represent two different dependent variables, professional development and resources. The first analysis will examine the relationships between subsidies and the following dependent variable, survey question 23 (the teachers in my childcare facility have adequate training to meet

the needs of children with disabilities). The second set of one-way ANOVA's were grouped together to form the dependent variable, resources. This variable is made up of survey question 24 (related service providers [occupational therapist, physical therapist and speech therapist] have opportunities to work with children in my childcare facility), and survey question 25 (my childcare facility was provided adequate resources about disability services in the state). Main effects and interactions were examined and reported through descriptive statistics for each of the analysis.

**Table 5. ANOVA Analysis 1**

	Professional Development		
	1 Star	2 Star	3 Star
Subsidy Type			

**Table 6. ANOVA Analysis 2**

	Resources		
	1 Star	2 Star	3 Star
Subsidy Type			

### **Qualitative Data Procedures**

*Research Question Three.* What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities, were employed for research question three. Inductive analysis, a Qualitative approach, is commonly used in qualitative studies. Thomas (2003) defined inductive analysis as a way to summarize extensive data into a brief format, a way to create associations between research questions and data, and a way to identify patterns within the data. For this research study, qualitative data was collected through phone interviews of a purposeful sampling of

childcare directors from each of the three STAR levels (Bazeley, 2013). Following the interviews the data were transcribed and the interview transcripts were analyzed through three levels of analysis summarized in Table 8. Level 1 includes rereading transcripts to establish preliminary codes such as; limitations, cost, and facilities. Level 2 analysis advances to establishing meta-codes and pattern codes within the transcripts. Level 3 analysis includes inductive analysis and triangulation of patterns within the STAR levels, survey questions, and phone interviews. This approach allowed the investigator to map out specific patterns within the responses childcare directors gave to the interview questions (see Appendix G).

**Table 7. Levels of Analysis**

Level 1 Analysis	Level 2 Analysis	Level 3 Analysis
-Establish codes Limitations, Cost, Facilities, -Reread transcripts	-Establish Meta codes -Establish Patterns within Transcripts	-Inductive analysis -Triangulate Patterns within the STAR level, Survey, and Phone interview data.

The inductive analysis of research question three identified patterns by analyzing open-ended interview questions with childcare directors and some of the questions from the director's surveys. A series of 10 questions (see Table 9) were developed a priori.



**Table 8. Interview Questions**

Number	Question	Subset of Questions
1.	How knowledgeable are you about the STARS/QRIS program?	What would make you more knowledgeable about STARS/QRIS
2.	What support does your center receive from STAR technical support staff?	How helpful are these services?
3.	What motivates you to stay at your current STAR level?	Is your program accredited? If so by which organization?
4.	How involved is your program in the STARS program?	Would you like to be more /less involve?
5.	How do you use state or tribal subsidy to promote child outcomes?	
6.	What is your knowledge level regarding children with special needs?	
7.	Do you serve children with mild or severe disabilities?	If so why or why not?
8.	How comfortable are you with serving children with special needs?	
9.	What support would your center need to serve children with mild or severe disabilities?	Do children with special needs in your program have access to related service providers?
10.	What prevents if anything your center from providing services to children with special needs?	

Patterns were analyzed between research questions and interview questions. The following table presents the visual representation of how the questions were combined. Utilizing this form of analysis allowed the research to be triangulated between the four analysis formats: Chi square, ANOVA, and inductive analysis. It was projected this triangulation of data would lead to a richer and more detailed understanding of the research questions and the reason why a mixed-methods approach was the best analysis for this study.

**Table 9. Interview Analysis**

Research Question	Interview Question
2- Do incentives from state and or tribal subsidies impact the number of children with mild and severe disabilities receiving services?	3- What motivates you to stay at your current STAR level?  5- How do you use state or tribal subsidy to promote child outcomes?
2-b- How do subsidies impact the capacity of a center to serve children with disabilities?	6-What is your knowledge level regarding children with special needs?  7- Do you serve children with mild or severe disabilities?  9- What support would your center need to serve children with mild or severe disabilities?  10- What prevents, if anything, your center from providing services to children with special needs?
3- What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities?	6- What is your knowledge level regarding children with special needs?  7- Do you serve children with mild or severe disabilities?

### **Ethical Considerations**

Upon successful completion and committee approval of the dissertation proposal, the study was submitted to OU's IRB for review and approval. IRB approval was granted in January at which time the study was conducted as approved. In addition to study approval, the principal investigator has also completed IRB training and holds a valid CITI certificate.

QRIS-STARS data was retrieved via public record laws by contacting the Oklahoma Childcare Licensing offices and making a formal request for the desired documentation. All licensed childcare center administrators were sent a letter detailing the research study and the importance of participating, including, an informed consent

form, a time frame of research, web address for completing the web questionnaire, and researcher's contact information including name, phone number, and email address. Each program was given an identification number and each interviewee was assigned a numeric pseudonym, known only by the principal investigator. All data has been retained on a password protected computer at the principal investigator's home office. Documents will remain in secure storage for up to three years or as long as required by IRB regulations.

### **Summary**

This chapter outlined the methodological rationale and procedures for which this study was conducted. Utilizing a mixed-methods approach with a random sample of both childcare centers at each STAR level and childcare directors the research examined how the QRIS system in Oklahoma ensures quality, access, and availability of childcare services for all children including those with mild and severe disabilities.

## **Chapter 4: Data Analysis and Study Findings**

The purpose of this research study was to examine Oklahoma's QRIS program, *Reaching for the Stars*, with a particular focus on the access, availability, and implementation of quality services for young children with special needs. This study was guided by the following primary question: Does Oklahoma's QRIS program ensure quality, access, and availability of services for all young children in Oklahoma including those with disabilities? The following research questions were explored in this study.

1. Are young children with disabilities served in quality ECE programs as measured by QRIS ratings?
2. a. Do incentives in the form of state and or tribal subsidies impact the number of children with disabilities receiving services?  
  
b. How do subsidies impact the capacity of a center to serve children with disabilities?
3. What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities?

This chapter is divided into two sections, quantitative and qualitative analysis.

### **Quantitative Data Analysis and Findings**

The quantitative data for this study was obtained from a web-based survey which 720 childcare directors across the state were asked to complete. A total of 109 childcare directors completed the survey. Quantitative analyses were done using the Statistical Package for Social Sciences (SPSS). Descriptive statistics were computed to summarize characteristics of participating centers and directors. Inferential statistics were used to analyze data to address each research question.

The following is a descriptive summary of the 109 participants who completed the survey. Of the 109 participants, 85 were female (78%), 5 were male (5%), and 19 (17%) responded anonymously, not providing any identifying information. The results further revealed 64 (59%) of the participants were 40 years of age or older. Based on their responses, 67 (61%) participants were classified as directors and another 17 (16%) participants self-reported themselves as childcare facility owners. While 50% of participants reported having previous childcare administrative experience, 43% of the director's reported 1-6 years of experience and 17% of those directors had 2-4 years of experience. Additionally, 25 (23%) of the participants report their highest level of education as a Bachelor's degree in a field other than Early Childhood Education, while only 9 (8%) report had a Bachelor's degree in Early Childhood Education. The results further revealed 8 (7%) participants with a Master's degree in Early Childhood Education and 17 (16%) participants with a Child Development Associate's certificate as their highest level of education.

Participating childcare facilities reported a range of length of time offering childcare services in Oklahoma. The oldest reported childcare center first opened in 1971 and the most recent center opened in 2014. However, the overall majority of the centers reported opening since 2000. Facility demographics revealed approximately 186 infants, toddlers, and preschool children with disabilities being served across the 109 centers that participated in the study. This is roughly 8% of the total population of infants, toddlers, and preschool children with disabilities in the state according to a 2012-2013 SoonerStart data report (SoonerStart Early Intervention Program Site Data Profile, 2013).

Center directors reported receiving a combination of funding from private pay, DHS, tribal, and other funding sources. Sixty four (59%) directors reported receiving all

four of the possible funding sources. Additionally, the data revealed 66 (61%) directors reported receiving three of the four funding sources with the combination of funding including DHS subsidy.

The overall distribution of actual participants represented the following star levels and regions; 1 STAR- 9 participants, 2 STAR- 50 participants, 3 STARS- 29 participants, and 21 centers that did not reveal their star level. Additionally, the centers represented the following distribution of regions, region 1-10 participants, region 2- 17 participants, region 3-12 participant, region 4-17 participants, region 5-31 participants, and 22 participants that did not reveal their region (see Figure 4. Map of Oklahoma Regions).

Chi square analysis were used to examine the number of young children with disabilities served at each of the star levels (research question one), and how state and tribal subsidies impact the number of children served at each star level (research question two). Research question two-b, investigated how subsidies impact the capacity of a center to serve children with disabilities, was analyzed through multiple one-way ANOVAs. The one-way ANOVA's were designed to explore how state and tribal subsidies received by childcare centers influence the amount and types of professional development and other resources a center uses to ensure access and availability of childcare services for children with special needs.

### **Research Question One**

To what degree are young children with mild and severe disabilities served in quality ECE programs as measured by QRIS ratings? This question required two different Chi square analyses, one for infants and toddlers with disabilities and the other for preschool children with disabilities. While the following tables revealed there were

differences in the numbers of infants and toddlers with disabilities served across the three different star levels, the Chi square failed to reach statistical significance,  $X^2(6) = 9.68$ ;  $p > .05$  (see Table 10 for details).

**Table 10. Research Question One: Chi Square- Infants/Toddlers**

*Infants/Toddlers with Disabilities \* Which STAR Level best fits you?*

			Which STAR Level best fits you?			Total
			One STAR	Two STAR	Three STAR	
I/T with Disabilities	1-2	Count	7	19	10	36
		% within I/T with Disabilities	19.4%	52.8%	27.8%	100.0%
	3-5	Count	0	5	6	11
		% within I/T with Disabilities	.0%	45.5%	54.5%	100.0%
	7-10+	Count	0	3	4	7
		% within I/T with Disabilities	.0%	42.9%	57.1%	100.0%
	Unsure	Count	2	18	6	26
		% within I/T with Disabilities	7.7%	69.2%	23.1%	100.0%
Total	Count		9	45	26	80
	% within I/T with Disabilities		11.3%	56.3%	32.5%	100.0%

*Chi-Square Tests*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.684 <sup>a</sup>	6	.139
Likelihood Ratio	10.910	6	.091
Linear-by-Linear Association	.865	1	.352
N of Valid Cases	80		

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .79.

The Chi square performed to examine possible associations between the number of preschool children with disabilities being served and the facilities' STAR level was

found to be statistically significant,  $X^2(6) = 16.59$ ;  $p < .05$ . The results showed more preschool children with disabilities were served at centers at higher STAR levels. Specifically 53% of children were served at two star centers and 36% of preschool children with disabilities were served at three star centers, compared to 11% of children served at the one star centers. The following table, Table 11, displays the results for preschool age children.

**Table 11. Research Question One: Chi Square- Preschool Children**

*Preschool Children with Disabilities \* Which STAR Level best fits you?*

			Which STAR Level best fits you?			Total
			One STAR	Two STAR	Three STAR	
Preschool Children with Disabilities	1-2	Count	2	14	10	26
		% within Preschool with Disabilities	7.7%	53.8%	38.5%	100.0%
	3-6	Count	0	6	9	15
		% within Preschool with Disabilities	.0%	40.0%	60.0%	100.0%
	7-10+	Count	4	4	6	14
		% within Preschool with Disabilities	28.6%	28.6%	42.9%	100.0%
	Unsure	Count	3	16	2	21
		% within Preschool with Disabilities	14.3%	76.2%	9.5%	100.0%
Total	Count		9	40	27	76
	% within Preschool with Disabilities		11.8%	52.6%	35.5%	100.0%



### *Chi-Square Tests*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.586 <sup>a</sup>	6	.011
Likelihood Ratio	18.748	6	.005
Linear-by-Linear Association	4.128	1	.042
N of Valid Cases	76		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is 1.66.

### **Research Question Two-a**

Do incentives in the form of state and tribal subsidies influence the number of children with disabilities receiving services? This question was also explored through two different Chi square analyses. The first Chi square was performed to determine if there was a relationship between the number of infants and toddlers with disabilities served and DHS and tribal subsidies received by childcare centers. The second Chi square sought to determine the same relationship; however, for preschool children with disabilities.

The first Chi square explored the association of the number of infants and toddlers served and the use of subsidies. The Chi square failed to reach statistical significance,  $X^2(3) = 3.92$ ;  $p > .05$ , indicating no association of subsidies and services for infants and toddlers (see Table12 for details).

**Table 12. Research Question Two: Chi Square-Infants/Toddlers***Infants/ Toddlers with Disabilities \* Subsidy*

			subsidy		Total
			no	yes	
I/T with Disabilities	1-2	Count	13	23	36
		% within I/T with Disabilities	36.1%	63.9%	100.0%
		% of Total	16.3%	28.7%	45.0%
	3-5	Count	3	8	11
		% within I/T with Disabilities	27.3%	72.7%	100.0%
		% of Total	3.8%	10.0%	13.8%
	7-10+	Count	1	6	7
		% within I/T with Disabilities	14.3%	85.7%	100.0%
		% of Total	1.3%	7.5%	8.8%
	Unsure	Count	4	22	26
		% within I/T with Disabilities	15.4%	84.6%	100.0%
		% of Total	5.0%	27.5%	32.5%
Total		Count	21	59	80
		% within I/T with Disabilities	26.3%	73.8%	100.0%
		% of Total	26.3%	73.8%	100.0%

*Chi-Square Tests*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.917 <sup>a</sup>	3	.271
Likelihood Ratio	4.056	3	.256
Linear-by-Linear Association	3.661	1	.056
N of Valid Cases	80		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.84.

The Chi square performed to calculate the relationship between the number of preschool children with disabilities being served and the presence of subsidies also failed to reach a statistical significance,  $X^2(3) = 1.40$ ;  $p < .05$  (see Table13 for details).

**Table 13. Research Question Two: Chi Square- Preschool Children***Preschool Children with Disabilities \* Subsidy*

			subsidy		Total
			no	yes	
Preschool Children with Disabilities	1-2	Count	6	20	26
		% within Preschool Children with Disabilities	23.1%	76.9%	100.0%
		% of Total	8.0%	26.7%	34.7%
	3-6	Count	3	11	14
		% within Preschool Children with Disabilities	21.4%	78.6%	100.0%
		% of Total	4.0%	14.7%	18.7%
	7-10+	Count	5	9	14
		% within Preschool Children with Disabilities	35.7%	64.3%	100.0%
		% of Total	6.7%	12.0%	18.7%
	Unsure	Count	4	17	21
		% within Preschool Children with Disabilities	19.0%	81.0%	100.0%
		% of Total	5.3%	22.7%	28.0%
Total		Count	18	57	75
		% within Preschool Children with Disabilities	24.0%	76.0%	100.0%
		% of Total	24.0%	76.0%	100.0%

*Chi-Square Tests*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.399 <sup>a</sup>	3	.706
Likelihood Ratio	1.324	3	.724
Linear-by-Linear Association	.002	1	.965
N of Valid Cases	75		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 3.36.

Additional analyses were performed to identify the relationship between the number of young children with disabilities served at each star level and DHS funding.

For infants and toddlers the results were not statistically significant. However, this same

test for preschool children with disabilities was found to have a statistically significant relationship,  $X^2(10) = 18.40$ ;  $p < .05$ . The results suggested the relationship between the amounts of services for preschool children with disabilities was influenced by the DHS subsidy centers receive.

**Table 14. Research Question Two: Chi Square- DHS Subsidy**  
*Chi-Square Tests*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.399 <sup>a</sup>	10	.049
Likelihood Ratio	20.215	10	.027
Linear-by-Linear Association	5.644	1	.018
N of Valid Cases	76		

a. 13 cells (72.2%) have expected count less than 5. The minimum expected count is .47.

### **Research Question Two-b**

How do subsidies impact the capacity of a center to serve children with disabilities? Research question two-b was divided into two dependent variables, professional development and resources. The independent variable consisted of two levels those receiving subsidies and those not receiving subsidies.

*Professional Development* was comprised of a single survey question; the teachers in my childcare facility have adequate training to meet the needs of children with disabilities (question 23). A one-way ANOVA was conducted to determine if the teachers in the childcare facility had adequate training to meet the needs of young children with disabilities differed by subsidy level. As evident from the ANOVA table below, there were statistically significant differences between group means as determined by one-way ANOVA  $F(1, 84) = 5.30$ ,  $p < .05$ ). Utilizing a 4 point Likert scale, the mean scores of centers that did receive subsidy was 2.29 with a standard deviation of .96. The mean for teachers in childcare facilities that reported not receiving

subsidy was 1.71 with a standard deviation of .90 ( $d = .59$ ). These findings suggested that centers receiving more subsidies had a greater capacity to meet professional development needs and, in turn, offer more services for children with special needs.

**Table 15. ANOVA for Professional Development Variable**

*The teachers in my childcare facility have adequate training to meet the needs of children with special needs*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.303	1	5.303	5.882	.017
Within Groups	75.732	84	.902		
Total	81.035	85			

*Resources* was comprised of two survey questions; related service providers (occupational therapist, physical therapist and speech therapist) have opportunities to work with children in the childcare facility (question 24) and my childcare facility was provided adequate resources about disability services in the state (question 25). The first one-way ANOVA was conducted to determine if related service providers (occupational therapist, physical therapist and speech therapist) have opportunities to work with children in the childcare facility differed by subsidy level. As evident from the one-way ANOVA table below, there were no statistically significant differences between group means as determined by the one-way ANOVA  $F(1,84) = .532, p > .05$ ). The 4 point Likert scale results reported the mean scores for related service providers that did have adequate opportunities to work in childcare settings was 1.23 with a standard deviation of .63. The mean for related service providers that report not receiving adequate opportunities was 1.05 with a standard deviation of .22 ( $d = .32$ ).

**Table 16. ANOVA for Resource Variable 1**

*Related service providers (occupational therapy, physical therapy, speech therapy) have opportunity to work with children in centers*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.532	1	.532	1.688	.197
Within Groups	26.491	84	.315		
Total	27.023	85			

The second one-way ANOVA was conducted to determine if childcare facilities were provided adequate resources about disabilities services in the state differed by subsidy level. As evident from the ANOVA table below, there were no statistically significant differences between group means as determined by the one-way ANOVA  $F(1,84) = 3.63, p > .05$ ). The Liker scale means of centers that did have adequate resources was 2.43 with a standard deviation of 1.15. The mean for facilities that reported not receiving adequate resources was 1.95 with a standard deviation of .92. ( $d = .43$ ).

**Table 17. ANOVA for Resource Variable 2**

*My childcare facility was provided adequate resources about disabilities services in the state*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.632	1	3.632	3.024	.086
Within Groups	100.891	84	1.201		
Total	104.523	85			

The quantitative results revealed a mixed pattern indicating that more preschool children were served in centers with higher star levels, but the same was not true for infants and toddlers. Also, subsidy had a bigger impact for preschool age children than infants and toddlers.

## **Qualitative Data Analysis and Findings**

From the pool of returned surveys, 10 centers were chosen to participate in phone interviews. While all 10 centers initially agreed by phone to participate, one center chose to withdraw from the study prior to participating in the phone interview due to center constraints including failure to acquire authorization to participate from proper administrative personnel. Thus, 9 of the 10 centers participated in the interview stage of the research. The distribution of actual participants represented the following star levels and regions; 1 STAR- 1 participants, 2 STAR- 4 participants, 3 STARS- 4, region 1-2 participants, region 2- 2 participants, region 3-1participant, region 4-3participants, and region 5-3 participants (see Figure 4. Map of Oklahoma Regions).

For this study center directors were the desired respondents. The individual participant demographics reveal all 9 of the participants were female and 7 of the 9 of the directors were 40 years old or older. All but one of the directors reported their title to be center director. One self-reported to be a childcare facility owner. Seven of the directors reported being a director at their current location for 4 or more years, with 6 of the 9 reporting previous childcare experience. Level of education varied for the nine directors with the lowest level of education being reported by one as having only a high school diploma, three reported having a Child Development Associate, one reported having a Bachelor's degree in a field other than early childhood, four reported having a Master's degree with one of those in a field other than early childhood education. The directors reported their centers opening across a range of 4 decades. The oldest center reported opening 1970, and the most recently opened center began operations in 2013. Funding sources varied across the nine Director's reports with 8 receiving private pay funds, 7

receiving DHS funds, 3 receiving tribal funds, and 4 receiving other funding sources. Most received income from multiple funding streams.

### **Research Question Three**

Research question three asked: What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities? Semi-structured phone interviews were conducted with nine childcare center directors. Ten interview questions were designed and asked in order to collect center directors' knowledge level of Oklahoma's childcare system with specific regard to the STARs program, childcare subsidies, and services for children with special needs. To be eligible to participate in the phone interviews center directors had to have completed the web-based survey as well as indicated they would like to participate further.

Interviews lasted between 7:48 min and 21:34 minutes with 14:12 being the average length of the interviews. All phone interviews were conducted by the principal investigator. Audio recordings were collected and transcribed. Transcripts were analyzed to identify patterns between research and interview questions. The transcripts were first charted in a table by interview question and interviewee response. The principal investigator read through the responses of each participant one question at a time. Patterns within the text of each participant's response were marked and used to develop codes. Patterns were also established by studying responses between survey question responses and interview question.

The second pattern analysis was analyzed between research questions and interview question responses using the same technique. For this analysis a table was developed as a visual representation of how research question aligned with interview questions, (see table 9. Interview Analysis). The principal investigator looked for



patterns and connections with what the research questions were asking through what interview participants revealed during the interviews. In order to gather this information, research and interview questions were paired for further investigation. Research question 2 was examined with interview questions 3 and 5. Research question 2-b was examined with interview questions 6, 7, 9, and 10. Finally, research question 3 was examined with interview questions 6 and 7. Utilizing this form of analysis allowed the research to be triangulated between the three analysis formats: chi square, ANOVA, and inductive analysis. Triangulation of the data leads to a richer and more detailed understanding of the research questions and the reason why a mixed-methods approach is the best analysis for this study.

Research question 2 and interview questions 3 and 5 sought to find out what motivates center directors to achieve certain star levels, how center directors use state and/or tribal subsidy to promote child outcomes. This data indicated that centers all had motivating factors for acquiring a particular star level, and while financial incentives were part of that equation it was not always the determining factor. Some of the reasons given were for higher compensation rates, accountability, and the ability to advertise a center at a given quality based on the star rate. However, the majority of the directors also indicated limitations of the financial reimbursement program. This hindrance will be discussed further as an emergent theme.

Interview question 5 asked for how center directors used financial incentives to promote child outcomes, including paying teacher salaries, training cost, and classroom materials. Regardless of current funding sources all of the directors indicated a need for additional funds. All of the directors discussed receiving a variety of funding types most notably, DHS and tribal subsidy while 2 directors discussed diverse funding resources

that included grants, military subsidies and money they received from the state department of education. Regardless of funding sources or reimbursement rates, the interview data documented ways the directors are using what funds they do have to support the needs of the children in their program. Director 10 (D10) expressed this with the following statement “Everything that we have we put right back into our business. Every time that we have a little extra I try to get something new.” This sentiment was repeated throughout all of the interviews and added to the rationale for limited financial reimbursements as an emergent theme of this study.

An examination of patterns between research question two-b and interview data for questions 3, 6, 7, 9, and 10 sought to find a baseline understanding of how knowledgeable and what experience center directors and their staff have had with serving children with mild and severe disabilities. An objective of these questions was to determine whether centers serve children with disabilities at all and what supports they have and or need in order to continue to serve children.

Center directors indicated limited to very extensive knowledge when discussing children with special needs. In fact, all center directors, regardless of their knowledge level of children with special needs, eagerly discussed how they were currently or had previously served children with special needs. It was this knowledge of how children with mild and severe disabilities have been and are currently being served in the state that leads to a second emergent theme, limitations of funding. While there was history of services for children with special needs, this history also reinforced a lack of available services. It was this lack of services that was reinforced by the lack funding and, consequently, resulted in a lack of valuable training. Many center directors expressed struggles with funding and training. D8 expressed “I have a master’s degree in special

education. I am qualified, but not necessarily my staff. In a typical full-day childcare setting the funding is just not there.” Additionally, D1 also stated when asked what it would take to serve more children with special needs

To be honest it would be very difficult because my staff is not trained for children with special needs nor do we have the equipment that we would need, but mainly the training and knowledge. I mean you have got these little guys who were on feeding tubes and the things of that nature and so we would have done it because I wouldn’t turn those children down but again it would be very difficult for us.

These statements reinforce center directors’ desires to meet the needs of the children with and without disabilities while at the same time expressing their frustration with the current system of support and the ongoing limitations of funding.

Patterns within the data revealed three primary emergent themes. The first theme, history of services for children with special needs, included support of stars technical support, training, and funding. The second emergent theme identified limitations of financial reimbursements, which included lack of funding. The third theme was the director’s motivation to attain and/or maintain a specific star level.

**History of services.** Oklahoma has had a long history of childcare services. A history that has included many changes all seeking to improve the overall care and wellbeing of children in childcare settings. The biggest of these changes came with the invention of the STARS program and the ongoing regulations and regulation changes that encompass the program (Oklahoma Department of Human Services, 2014). While center directors felt this program added value, expressed when multiple directors, D1, D6, D8, D9, all made statements that agreed with D1 statement that the program is “a very good attempt to make sure there is quality of care, that it holds the centers more accountable than regular DHS through regulations that they should be doing for the child and the center as a whole.”

Directors also expressed concern about the current structure and the lack of support, including program support, training, and funding. D1 shared her concern, “one problem that I have with the program is that you would have your DHS regulations, stars requirements, maybe your fire codes, your health, I mean one entity was not familiar with the other especially DHS stars.” D1 also expressed an overall lack of training or support from their STAR’s technical support staff. When asked how supported they felt the, two directors D5, and D3, responded:

Not so much, there’s not much that we have asked of them. The interface between stars, between the registry, and DHS licensing can be challenging at times and all of the systems don’t always work the way they think they are going to work so a lot of times head starts just do what we can on our own.

D3 continued to express problems of the system when she described the turnover of technical support staff stating

They have a hard time keeping a person in our area, Now the stars person that I had last year, she was a great assistant helping our program with the registry, but right after that it changed and I couldn’t even tell you who the person is now.

While the overall concerns expressed from the center directors were a lack of training and funding, the directors reported feeling these two things went hand in hand. The directors shared difficulty paying their bills and did not have additional funding for training. D3 explained “just pays our salaries and our bills. It goes the same as our other parents pays.” D5 continued this stating that when centers served children with special needs “theoretically you should be able to be reimbursed at a higher rate in reality that's very difficult to get approved.” Additionally, D10 discussed the difficulty of gaining a star level based on the accreditation requirement and the cost associated with achieving accreditation. Beyond the requirement of accreditation, the same director points out one of her challenges with the program and the lack of funding was the constant training of staff,

There are a few things that make it very difficult for us because about the time we get our people trained that have had early childhood then they decide they want to go to the public school. So and we educate a lot of people.... So that is what my hope is that we can some way make more money to be able to pay our pay our teachers more.

Overall, center director's reported that while they did not have an opposition to providing care for children with special needs, they had concerns for doing what was right and in the best interest of children.

I don't have any objection to it but I do have to feel like I don't have the tools and the resources to do what I need to, to serve a child well. I don't want to take on a child or a family and do them an injustice by not having the tools and resources to be able to actually help them. (D4)

Even though directors reported a range of limited to extensive knowledge about children with disabilities, all nine of them have had and/or are currently serving children with mild and severe disabilities in their programs. The directors reported that serving children with disabilities was important to them. "Our primary focus is for children with emotional disturbances. There were not any facilities in our area that could deal with a child that needed additional assistance with their emotions and help them in that area" (D6).

Although the center directors struggled to provide appropriate services due to the lack of support, funding, and teacher training, D7 identified that when they did provide the necessary services there were many potential positive outcomes

The outcomes for us are not only for the children but also for the students families and for our staff as well. The typically developing children and the atypically developing children in their programs were making progress. "We believe that is good for the children with the needs but it is also good for those with normative development. And we have a strong commitment to that and we have had for many years.

Three directors (D6, D7 and D8) also reported helping children and families find necessary community supports "parents to connect us with their service providers

because in the state of Oklahoma if they are over three they are no longer eligible for SoonerStart, instead they receive services from their local school district ” (D8). Once they received the “necessary documentation so I can visit with the speech language therapist so that we can work on some of the same things here” (D6).

The health department contracted so we have the psychologist, child development specialist and the speech language pathologist through them we also have a mental health agency that we contract with for some additional mental health services and they can provide some services individually in the centers and they can also go to the homes do home-visiting in the evenings to work with the family on issues that work are needing to be working with individual children (D5).

Overwhelmingly, it was evident from the interview data that the center directors were doing the best they could to serve a diverse population of children and they were doing this without support, training, and funding they felt they need. Center directors face many daily challenges navigating the system of disconnected regulating agencies. While the directors reported an overall feeling that the stars program was beneficial to insuring accountability and established a level of quality across childcare settings, they felt there was a disconnect between the regulations and support. The current system expected center directors to provide an improved level of quality; however, this same system failed to provide the financial resources directors needed to accomplish this task. This system failure ultimately impacted the number of children a facility could care for, which often resulted in a decreased number of children with special needs.

**Limitations of financial reimbursement.** Limitations of financial reimbursement date back to the inception of the STARs program (Oklahoma Department of Human Services, 2014). This theme emerged because of the overall identification and dissatisfaction with current funding allocations that center directors received and were expected to use to meet all of the needs of their individual childcare facilities. Center

directors reported receiving a wide variety of funding from a mixture of different funding sources including private pay funds from families, DHS subsidy reimbursements, tribal subsidy reimbursements, funding from the state department of education, and in some cases, other forms of funding such as military subsidies.

Regardless of the funding type, the centers star level or even the region a particular center was located, all center directors reported the lack of adequate funding hindered their ability to serve special needs children. Center directors reported there was a reimbursement rate for them if they served children who received DHS service but that funding did not apply to all children. “If the children don’t qualify according to the public school system, DHS is like, you don’t need anything extra for those children so you don’t get a higher rate” (D5). D5 went on to describe how insufficient funding challenged the hiring process stating “It is hard to have sufficient funding to do and hire people that have credentials or have degrees and be able to keep your ratio low and all of that. Sometimes we have the kids that are so challenging they really need a one on one person and I would love to be able to say that we could afford to do that all the time but we can’t.”

When asked what prevented them from serving more children with special needs, the directors also addressed funding associated with staffing, “It would have to be funding because I don’t have the staff I cannot serve the kids. I have to keep the ratio at the max in order to make money” (D3). D5 added, “So if I don’t have the funds to be able to make the ratios smaller to be able to take more children with special needs. If they can work in to the groups that we have then we can take them because I cannot do one on one care.” The issue of funding was a systemic one. Directors were expected to serve all children but, without the financial support, were prevented from meeting their

needs, especially those children with disabilities. D5 also expressed a need to “streamline the process for getting that higher rate of reimbursement because if we as a Head start program find it frustrating I cannot imagine how your average childcare setting finds it.”

Directors further reported that, while there were funds, it was often very challenging to actually receive the increased rate established for children with special needs. The challenge most frequently noted was what the directors referred to as the systems red tape and paperwork. They found the few extra dollars they received less valuable than the time they spent negotiating the system and filling out paper work. For this reason, some directors considered discontinuing services to children who received DHS subsidy. D3 shared her “consideration to completely stop taking assistance because they don’t even pay us what we charge for a regular child. I mean that I don’t even know that it is worth all of the paperwork and all the keeping up with everything.”

While some directors were deciding whether to stop taking subsidy because of the red tape, others were considering if it was worth the extra work to obtain a star level and to receive the additional funds.

We have not taken steps to get additional assistance from the state. That is something I am still looking into to see if I even want to go down that road. Honestly it would depend on the support that the state could provide me whether it would be worth it or not. Because if it is going to be more red tape and paperwork to get a few extra dollars then it’s not going to be worth it. I would rather reallocate funds more and just not have to deal with the paperwork. (D6)

Although the directors were considering the scenario from different perspectives their rational was the same; was the red tape and paperwork a value added to their program or just another drain on their already limited resources?

Limitations to Oklahoma’s current funding reimbursement system were a definite source of contention for most of the center directors. Centers that received state subsidies were required to provide services to all children regardless of ability; however, as many



stated, it was impossible to meet the needs of children with special needs based on the current funding sources. The directors reported being willing to serve children, but willingness was just not enough. If directors did not receive adequate funding they found themselves in a continuous cycle of training staff that eventually sought higher paying positions. Directors also found themselves maxing their class sizes just to pay the bills; thus, limiting the availability to serve children with disabilities because they did not have the manpower or resource to provide the intensive support some children with disabilities needed. Finally, this theme addressed the process and paperwork for seeking higher funds did not offset the time and energy necessary to seek the higher reimbursement. Furthermore, the higher rate, oftentimes, did not provide enough benefit to the program to offset the time invested.

**Motivation of the STAR.** The primary function of the STARs program, as measured by a centers STAR rating, was to improve the quality of ECE services for children across the state (Oklahoma Department of Human Services, 2014). While funding was linked to star levels, it was equally important to evaluate director's motivation to achieve a given star level. One would hypothesize that directors would strive to reach the highest star level in order to obtain the highest reimbursement rate, the data revealed something quite different. Although higher reimbursement rates were mentioned, the overwhelming response from multiple directors indicated that the extra time, money, and paperwork that a director had to do outweighed the importance of achieving a higher star level. Ultimately, the reimbursement rate for the higher star level was too insignificant. D4 explained,

I'm really tired of adding more and more training requirement and things to keep and maintain a star rating. Understand I am mostly a private pay facility. I had 4 kids that got either DHS or tribal pay and the cost for maintaining the two star doesn't really, out weight the cost for me to keep the 2 star with so few kids.

As discussed in the previous themes, the directors expressed a passion for serving children with and without disabilities. What they did on a daily basis was not because of a level of acknowledgement, or star level, but because it was in the children's best interest. In some cases, the center directors decided the star was just not worth pursuing and they relinquished their stars as described by (D4).

What we do is not based on what our star rating is. We don't do things because we have a star behind our name. We do things because we think it is the right thing to do for kids developmentally. We are still doing the same things we did before we just don't have a star behind our name. So we haven't changed our program at all.

There were many factors that contributed to a director's decision of whether or not to advance their program through the stars system, according to the data that decision was almost always related to system bureaucracies, that lead to more work from directors who were already working with very limited budgets and limited resources. While one could argue that directors should seek higher star levels for the funding attached to each level, the reality was many directors could not justify the extra hours of work to navigate the red tape and paperwork for the few dollars they may or may not have received. Regardless of financial constraints, center directors across the state seemed to be doing their best to meet the broadest number of children possible; however, that did not always include high numbers of children with special needs because the funding to do so was not there.

In chapter five, this study will be reviewed and conclusions will be presented based on the study findings. Study limitations will be identified and recommendations for future research will be offered.

## **Chapter 5: Discussion and Conclusions**

The final chapter of this study is divided into 4 sections: a brief review of the major findings of this study, followed by research conclusions, implications of the research, and last some recommendations for further research are provided. The first section summarizes the results obtained for of each of the research questions.

Additionally, this chapter provides qualitative details about how center directors perceive the STARs program in relation to how they served children with special needs, utilize funding, and value the overall usefulness of the STARs program. The second section of this chapter presents the overall conclusion. The third section discusses the implications of these research findings as they apply to the quality of childcare services for young children in Oklahoma as they relate to the STARs program in general. Finally, the fourth section makes recommendations for further research.

### **Research Discussion**

The overall purpose of this study was to analyze Oklahoma's QRIS program, *Reaching for the Stars*, for the access, availability, and implementation of quality services for young children with special needs. More specifically, this research study examined the enrollment of children with special needs at each level of the STAR program. Additionally, the research examined whether financial incentives for centers to provide services for children with disabilities, promote inclusive practices and if those incentives promote quality. Results of this study indicated higher numbers of children with special needs are being served than initially theorized although this number is still relatively low.

This research study sought to investigate how many children with disabilities were currently being served in childcare centers in Oklahoma and if there were

differences in the number of children across the star levels of the state's QRIS program. Utilizing descriptive statistics, of the 109 completed surveys, center directors reported a total of 186 infants, toddlers, and preschool children with formal disability diagnoses were served across the three star levels. These 186 children represented approximately 8% of the total number of children that were identified as receiving services through state early intervention programs. The results showed that the distribution of children being served across star levels was not statistically significant. This means that relatively equal numbers of children with disabilities were enrolled at centers at the various levels of quality as measured by STARS. On one hand, children with disabilities were experiencing the same range of quality as their typically developing peers. On the other hand the incentives do not. If the QRIS was working, the results would have shown more inclusive childcare programs where a greater number of young children with disabilities had access and availability to high quality services across star levels (Burchinal et al., 2013; Harding & Hung, 2011; National Professional Development Center on Inclusion, 2009).

Research question two-a sought to determine the relationship between the numbers of young children with disabilities served and how subsidies were used to promote the quality of childcare services they received. This question was divided into two parts. The Chi square analysis for the number of infants and toddlers with disabilities served and subsidies received did not reveal a statistically significant relationship. However, an additional Chi square was calculated between the numbers of preschool children in childcare centers who received DHS subsidies was found to be statistically significant. This means that 74% of infants and toddlers and 76% of

preschool children with disabilities were served in facilities that received DHS and/or tribal subsidies.

Research question two-b sought to understand how subsidies impacted the capacity of a childcare program. The professional development variable, defined as survey question 23, was found to have a statistically significant relationship with the subsidies childcare centers received. The resources variable, defined as survey questions 24 and 25, both dealt with the amount and types of resources childcare programs received for children with special needs. The resource variable for question two-b was not found to have a statistically significant relationship. This suggests that a director's capacity to provide professional development is linked to the amount of subsidy a director receives. Therefore, more financial support was related to increased professional development opportunities. The same was not true for resource variables.

Research question three sought to determine reasons that encouraged or prevented childcare center directors from serving children with disabilities. Utilizing qualitative analysis, phone interviews were conducted with nine center directors. The results identified three emergent themes, history of services, limitations of financial reimbursements and motivation to seek star levels. These themes were important for examining the history of Oklahoma's QRIS policy intent and present day policy outcomes.

Today's Oklahoma childcare center directors from across the state face many challenges in meeting the needs of children with special needs, challenges that date back to the inception of the stars program. While the data revealed that director's felt there was a benefit to having a global measure of quality that came from the stars program, they also reported that the program did not fully meet their needs (Harrist et al., 2007;

Norris et al., 2003). The stars program helped to ensure accountability and quality across centers; however, directors found meeting the regulations difficult because of systematic breakdowns. They described these breakdowns as the absence of communication between the agencies that regulated the childcare centers and a lack of funding provided to the centers (Elicker et al., 2013; Tout, 2013).

The limitations of funding were the most frequently mentioned issue discussed among the directors. Although the directors reported receiving funding from multiple sources, including private pay, state, and tribal as well as other forms, the funding was not sufficient to pay teacher salaries and provide specialized professional development required to serve children with special needs (Clawson & Luze, 2008; Knoche et al., 2006, Silverman et al., 2010). While there were opportunities to receive increased funding rates for centers that sought higher star levels, directors reported that the amount still was not enough to meet all of their financial needs. For this reason, as well as the red tape and paperwork, directors across the state were evaluating the current star levels and how that star level impacted their ability to provide services (Stahmer & Mandell, 2006).

Silverman et al. (2010) suggested the problem was not having children with disabilities in ECE programs. The real issue was that, before inclusive settings could be successful in promoting child outcomes, there must be a collaborative education model between the universities and the schools or programs. Presently, many university early childhood and elementary teacher education programs require a limited number of mandatory special education courses with a minimal amount of field experience in inclusive programs (Silverman et al., 2010). Furthermore, a joint position statement between the Division of Early Childhood (DEC) and the National Association for Education of Young Children (NAEYC) (DEC/NAEYC, 2009) promoted the idea of

inclusion practices, stating a common understanding of inclusion when clearly established between the members includes families, communities, administrators, and policy makers, hence encouraging a sense of belonging and an environment of respect. While the literature promoted inclusive practice funding limitations as mentioned by the center directors often prevent the ability of offer inclusive settings

### **Discussion of Findings**

The primary quantitative findings presented in chapter 4 revealed more preschool children with disabilities were served in center-based care than infants and toddlers with disabilities. The results further revealed subsidies had the greatest influence on services for preschool children with disabilities. Current research on quality childcare for infants and toddlers with disabilities is essentially non-existent; it could be argued the significance of this result was reflective of the obvious gap in ECE literature (Belsky et al., 2007; Burchinal et al., 2013; Karoly et al., 2013; Knoche et al., 2006).

The lack of significant findings for infants and toddlers was notable because if there were a minimal number of available spaces for infants and toddlers that number would be even more limited for an infant/toddler with a disability. Therefore, leading to the question of where infants and toddlers with disabilities were being served if they were not being served in childcare centers at the same frequency as preschool children with disabilities. This idea leads to a rationale for further studies evaluating specific services and childcare settings for infants and toddlers regardless of ability level.

Finally, the results inferred that care of infants and toddlers may not be impacted across ability levels because developmentally the care was the same for this age group. The failure to meet statistical significance for infants and toddlers would agree with this finding. On the other hand, developmental differences for preschool children required

additional financial support to properly support the development of preschool children with disabilities. The statistical significance result of this finding aligned with documented need for increased funding (Norris et al., 2003; Oklahoma Department of Human Services, 2014; Zellman & Pearlman, 2008). In summary, these findings indicated childcare directors across the state faced an on-going battle to provide the best quality services they could with limited support, training, and funds.

I just want you to know that we're very passionate about serving these children in state, I can't tell you how many times our families are devastated because they can't go to work because they're trying to find placement for this child that is very needy and everybody is afraid to touch them. Centers are afraid they won't be able to do what that child needs or they can't afford to do what that child needs because this child is aggressive and is going to hurt kids they really need someone close by this kid all of the time. That just not helpful those kid end up in licensed care and they go to place to place to place. It's nuts, it's nuts what we are doing in this state it's crazy. (D5)

This statement also reinforced why this research was so important in identifying quality childcare services for all children with and without disabilities in the state.

When considering connections between the quantitative and qualitative findings of this study, they revealed higher quality center directors served more preschool age children with disabilities than infants and toddlers with disabilities. Both forms of data revealed funding as one of the primary contributors to the number of children that received services. Qualitative data revealed more subsidies were needed for preschool aged children with disabilities, while quantitative data revealed that without funding, center directors could not provide adequate services.

The fact that funding is so essential to the access and availability aligned with the purpose for which this study was proposed. Furthermore, this finding indicated discrepancies between the STAR levels and the relationship of funding sources, professional development, and resources available for infants/toddlers and preschool



children in childcare centers in Oklahoma. The only statistical significance was found for preschool children served across star levels and the subsidy received by centers serving higher numbers of preschool children. This led to the conclusion that the older the child, the more support he may need in order to be successfully integrated into ECE settings. The analysis further revealed that, while professional development and resources were both important to childcare centers it was professional development that center director's reported as the most critical to their ability to serve children with disabilities. Center directors reported working within financial constraints; however, when it came to caring for children with disabilities, they were less likely to provide the services if they did not have adequate training to fully understand the given disability and what types of care were required to meet the child's needs.

Burchinal et al. (2013) found high quality care promoted cognitive and social development. The fact that high quality care has been so well documented for the development and well-being of all children, especially for children with special needs; it is critical to ensure children have the necessary access, and availability, to high quality programs. It is important to note that while individual experiences within a given environment are exclusive to each member of the environment; it was these environments that are important to establishing the experiences that promote children's cognitive, social, emotional, and physical growth (Bronfenbrenner & Morris, 2006, IT<sup>3</sup> Research Center, 2013). The research further suggest inclusive ECE programs provide a number of potential benefits including supportive environments, developmentally appropriate practice, peer modeling, and social play for children with and without disabilities (Booth & Kelly, 1998; Buell, et al., 1999; Clawson & Luze, 2008; DeVore &

Russell, 2007; National Professional Development Center on Inclusion, 2009; Vakil et al., 2009).

### **Conclusions**

Today's research, much like that of past generations, indicates a consensus that high quality ECE programs are good for all children regardless of ability or socioeconomic background (Belsky et al., 2007; Burchinal et al., 2013). This belief establishes the significance of this study. The purpose of the study was to identify the need for access and availability of high quality childcare for all children including those with disabilities. While the overall findings of this research contributes to the current gaps in ECE literature, the three most significant findings include the number of young children with disabilities that are being served, services for infants and toddlers, and effectiveness of Oklahoma's QRIS.

The results of this study indicated the numbers of young children with disabilities being served in childcare programs across Oklahoma were consistent with the base rate of services for children with disabilities. This finding was a surprising result to the principal investigator, because the number was higher than what was internally expected. While this number was relatively low, all center directors reported a history of services for children with disabilities. This study provided data that supported the need for increased access to high quality childcare, an emerging implication to this research would include collaboration between Oklahoma's early intervention services (SoonerStart) with Oklahoma's QRIS.

If Oklahoma's early intervention partnered with QRIS, the early intervention program could work through their related service providers to provide professional development support to childcare center staff. The results of this effort could be three

fold, increased direct training and support of childcare professionals, increased number of children with disabilities served in childcare settings, and the development of truly inclusive ECE settings. A system alignment as described here encompasses the essence of Bronfenbrenner's bioecological theory, interlinking the children, families, professionals in an intricate community structure that occurs over time and across multiple environmental settings (Bronfenbrenner & Morris, 2006).

The second significant finding of this research was the identification of services for infants and toddlers. The findings indicated little to no specific regard for infant and toddler care in the state. In fact, this study only found statically significant findings for preschool age children, for both the number of children served and the influence of subsidies. This finding is important because it affects all infants and toddlers, not just those children with disabilities. The fact that the teacher child ratio for infants and toddlers is much lower than preschoolers results in fewer infant and toddlers openings. However, if infants and toddlers are not served at the same rate as preschool children because of center availability, where are infants and toddlers being served? This lack of availability could lead one to conclude that more infant and toddlers are served in family childcare homes or with relatives.

Further research needs to examine environments currently serving infants and toddlers across the state, and whether those environments are the same for infants and toddlers with disabilities. This research needs to include specific types of training necessary for the proper care of infants and toddlers. The research should outline if the training is different from the types of training for preschool children. Finally, the research needs to address how subsidy supports care of infants and toddlers.

The final significant finding of this study related to the efficiency of Oklahoma's QRIS. Oklahoma embarked on the challenge of responding to the lack of a universal quality childcare system across the state. QRIS is a system of standards established to focus on improved quality standards, monitoring standards, quality improvement, financial incentives, and dissemination of information about program quality to parents and the community (Elicker et al., 2013; Harrist, et al., 2007; Norris et al., 2003). However, the findings from this study illustrate the complexities of the system can fail to achieve its desired goal if the program's effectiveness is not closely monitored and reevaluated. Oklahoma's STARS program is an example of how the focus on improved quality care suffers if all the contributors of the system are not in alignment with one another.

Oklahoma childcare providers are doing their best with the limited support they feel the state provides them. However, directors indicated a desperate need and desire for a state wide system overhaul. They expressed a need for revisions to the current STARS program that would adequately reflect the work and commitment they have to all children in the state, regardless of ability level. The over-hall would include aligning regulatory agency requirements and providing adequate training and financial reimbursement.

### **Recommendations for Future Research**

The findings of this study support the need for further research in at least, three potential areas. Specifically, a replication of this study using incentives, for participation to increase the sample size would be an important first step. Additionally, replication of this study with family childcare homes and with specific focus on infants and toddlers

would be beneficial. It is felt this research as well as the aforementioned future research recommendations will contribute to the current gaps in ECE literature.

While response rate for this study was disappointing, primary analysis indicated statistical tests were sufficient. Replicating this study utilizing some form of a participation incentive may result in higher participation rates and more statistically significant relationships between the services provided to young children and the star levels of the centers providing the services.

Although beyond the focus of this study, future studies could include a replication of this study with a focus on services to young children in family childcare homes across the state. The number of family childcare homes was comparable to the number of childcare centers in the state. A comparison study may reveal a better understanding of the total number of young children with and without disabilities served in Oklahoma's childcare system. Because this study focused on childcare centers and director's perceptions of the STARS program in Oklahoma another mixed-method study may include the perspective of access and availability of childcare services from parents of children with mild and severe disabilities.

Additionally research needs to investigate care for infants and toddlers, where are these young children being cared for and the types of training available for caregivers of this age group. This research identified more preschool children being served than infants and toddlers and more receiving services at centers with higher star levels. Research needs to be conducted to determine reasons for this phenomenon. Is there a difference in the types of care provided to infants and toddlers and how subsidies influence caregiver training?

## **Limitations of the Study**

This study reviewed literature from three different research areas which include early childhood, special education, and QRIS research. The review found that despite incentives, children with special were not being served at the same rate as their non-disabled peers in Oklahoma's childcare settings. As such, there were five limitations that stand out as potential barriers to the overall findings of this study. First, Oklahoma's QRIS-STAR rating was one of three sources of information for this study. The other two sources included survey data from childcare center directors and phone interview data. For this study, only childcare center STARS data and center directors were utilized. A limitation would be that the only type of childcare studied was childcare centers and that data from family childcare homes and family home directors, or parents of children with disabilities, were not investigated.

A second potential limitation of this research was that it only focused on one state. While Oklahoma was the first state to design and implement a QRIS program, this is not typical for other states, as Oklahoma did not have anything to model their QRIS program after. Another potential limitation stems from the use of a self-selected sample and the overall response rate. Although the response rate was within an acceptable range for web-based surveys, the rate was on the low end of the spectrum. The fourth limitation is related to the design of the survey questions. While the intention of the survey questions was to seek specific information about the number of children with disabilities being served and the use of subsidies, the overall design of the survey produced interval level data instead of the intended nominal level data.

Finally, the fifth and possibly the most substantial potential limitation was Oklahoma's QRIS policy. The policy was designed with the intent to improve quality of

childcare services, as evident of increased star levels. The current star level percentages of centers identified in this study at each indicate were; 1 STAR-19%, 2 STAR- 63%, and 3 STAR- 18%. These percentages indicate the intent of the policy did not match the impact of the policy. If the policy is not meeting the original intent, then it can be argued, the policy that did not have an explicit focus on children with disabilities, would not be working to meet the needs of these children.

Based on information gained during the literature research currently available on this topic, generalizability for this study is limited to Oklahoma. However, the researcher feels results are representative of quality, access, and availability of childcare services for young children with disabilities across the United States. The star level percentages of this study is representative of the state would support the potential generalizability beyond Oklahoma. The results of this study contribute to the current research literature and ongoing dialogue regarding QRIS programs and services for children with mild and severe disabilities. Despite these limitations this study did contribute a clear understanding of the necessity for quality childcare programs that support the developmental needs of all children especially those with disabilities. This study additionally, contributed a greater understanding of Oklahoma's STARs program and the current effectiveness of the program.

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## Appendix A: Letter

Dear Administrator

My name is Teresa Berg. I am a graduate candidate at the University of Oklahoma-Tulsa. I am conducting a research survey of childcare administrators across the state. The focus of the research is to examine how children with special needs are included in Oklahoma's QRIS system.

In order to gather data on quality and availability of inclusive childcare services, I am interested in your experiences and opinions. I have developed a short questionnaire to gather this data. The results of this data will be used for completion of my dissertation and will be kept confidential.

You were chosen because your facility is currently a licensed childcare center with a one STAR or above status.

In order for the survey results to be as accurate as possible it is very important that each survey be completed via the following web survey tool Qualtrics. Responding should take less than 15 minutes of your time, but will be critical to the success of this research study. I would urge you to visit the following website [qualtrics.com](http://qualtrics.com) and complete the survey by (date). Be advised that by completing this survey you are granting permission to participate in this study.

Following the completion of the surveys 4-6 center directors, from each of the four STAR levels from urban and rural areas of the state, will be requested to participate in the follow up phone interview. Perspective participants will be called to solicit phone interview participation. At the time participants will be requested to complete an informed consent form before continuing on with the research study.

If you are interested in participating in the interviews please notify me by email at the email listed below. Be advised a maximum of 24 participants will be selected for phone interviews.

You may be assured that your response will remain completely confidential. Your name will never be used or added to the questionnaire at any time without your informed consent. If you have questions about this survey, please contact me at 918-260-1514 or by e-mail at [Teresa.A.Berg-1@ou.edu](mailto:Teresa.A.Berg-1@ou.edu)  
Your cooperation is greatly appreciated.

Sincerely,

Teresa Berg,  
PhD Candidate  
University of Oklahoma

## Appendix B: Survey

The purpose of this survey is to gather data on services for young children with special needs availability in Oklahoma's childcare programs. Please read each item carefully and mark the response that best describes your answer. Your responses will be compiled into an overall research report for a dissertation on the quality of childcare as outline by the Reaching for the Stars program. Your individual responses will not be disclosed nor will the fact that you participated in this study. Thank you for your time.

### Section 1:

1. What is your gender? ☐ Female ☐ Male
2. What is your age in years?  
\_\_\_\_\_
3. Which title best fits you?  
☐ Director  
☐ Childcare Facility Owner  
☐ Other
4. Number of years as director at this facility? \_\_\_\_\_
5. Do you have previous administrative experience in childcare? ☐ Yes ☐ No
6. What is your highest education level?  

<input type="checkbox"/> High School	<input type="checkbox"/> Child Development Associate
<input type="checkbox"/> Associate Degree in Early Childhood or Child Development	<input type="checkbox"/> Associate Degree in another field, list name of degree: _____
<input type="checkbox"/> Bachelor's Degree in Early Childhood or Child Development	<input type="checkbox"/> Bachelor's Degree in another field, list name of degree: _____
<input type="checkbox"/> Master's Degree in Early Childhood or Child Development	<input type="checkbox"/> Master's Degree in another field, list name of degree: _____
<input type="checkbox"/> Doctoral Degree in Early Childhood or Child Development	<input type="checkbox"/> Doctoral Degree in another field, list name of degree: _____
7. Year in which your center was first licensed? \_\_\_\_\_
8. Types of funding you receive? Mark all that apply.  
☐ Private pay (parents/families)  
☐ DHS Subsidy  
☐ Tribal Subsidy  
☐ Other: List source \_\_\_\_\_
9. Does your center receive funding from DHS to serve children with disabilities? ☐ Yes ☐ No
10. Which STAR Level best fits you?

<input type="checkbox"/> One Star	<input type="checkbox"/> Two STAR
<input type="checkbox"/> One STAR Plus	<input type="checkbox"/> Three STAR



11. Year in which your center received its most current STAR level? \_\_\_\_\_
12. If Accredited, Name of Accrediting body and year in which your center received its most current accreditation?  
Name: \_\_\_\_\_ Date: \_\_\_\_\_
13. Which age level best describes the ages of children your center serves?  
☐ Infants (under one year of age)  
☐ Infants and toddlers  
☐ Infants, toddlers, and preschool  
☐ Infants, toddlers, preschool, and school age
14. Based on your daily experiences, is your program currently serving children with mild disabilities?  
☐ Yes ☐ No  
☐ Unsure If yes, Number of children with a formal diagnosis. \_\_\_\_\_
15. Based on your daily experiences, is your program currently serving children with severe disabilities?  
☐ Yes ☐ No  
☐ Unsure If yes, Number of children with a formal diagnosis. \_\_\_\_\_
16. Number of infants/toddlers (birth to three) **with** disabilities your program is currently serving.  
☐ 1-2 ☐ 3-4  
☐ 5-6 ☐ 7-8  
☐ 9-10 ☐ More than 10  
☐ Unsure
17. Number of infants/toddlers (birth to three) **without** disabilities your program is currently serving.  
☐ 1-2 ☐ 3-4  
☐ 5-6 ☐ 7-8  
☐ 9-10 ☐ More than 10  
☐ Unsure
18. Number of preschool children **with** disabilities your program is currently serving.  
☐ 1-2 ☐ 3-4  
☐ 5-6 ☐ 7-8  
☐ 9-10 ☐ More than 10  
☐ Unsure
19. Number of preschool children **without** disabilities your program is currently serving.  
☐ 1-2 ☐ 3-4  
☐ 5-6 ☐ 7-8

- ☐ 9-10
 ☐ More than 10  
☐ Unsure

20. If child **does not** have a formal diagnosis mark the number of children with each suspected disability category. Mark all that apply.

- |   |   |
|---|---|
| <input type="checkbox"/> Autism _____                 | <input type="checkbox"/> Blind/ Visual Impaired _____   |
| <input type="checkbox"/> Deaf / Hard of Hearing _____ | <input type="checkbox"/> Developmental Disability _____ |
| <input type="checkbox"/> Emotional Disability _____   | <input type="checkbox"/> Intellectual Disability _____  |
| <input type="checkbox"/> Learning Disability _____    | <input type="checkbox"/> Multiple Disabilities _____    |
| <input type="checkbox"/> Other Health Impaired _____  | <input type="checkbox"/> Orthopedic Impairment _____    |
| <input type="checkbox"/> Speech Language _____        |   |

21. If child **has** a formal diagnosis, mark number of children with the disability category.

- |   |   |
|---|---|
| <input type="checkbox"/> Autism _____                 | <input type="checkbox"/> Blind/ Visual Impaired _____   |
| <input type="checkbox"/> Deaf / Hard of Hearing _____ | <input type="checkbox"/> Developmental Disability _____ |
| <input type="checkbox"/> Emotional Disability _____   | <input type="checkbox"/> Intellectual Disability _____  |
| <input type="checkbox"/> Learning Disability _____    | <input type="checkbox"/> Multiple Disabilities _____    |
| <input type="checkbox"/> Other Health Impaired _____  | <input type="checkbox"/> Orthopedic Impairment _____    |
| <input type="checkbox"/> Speech Language _____        |   |

22. Do children in the program receive other services? (mark all that apply)

- |   |   |
|---|---|
| <input type="checkbox"/> Sooner Start         | <input type="checkbox"/> Speech Therapy   |
| <input type="checkbox"/> Occupational Therapy | <input type="checkbox"/> Physical Therapy |

## Section 2:

Please read each item carefully and mark the extent that you agree or disagree with the following items.

		Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
23.	The teachers in my childcare facility have adequate training to meet the needs of children with disabilities. -----	①	②	③	④
24.	Related service providers (Occupational Therapy, Physical Therapy, and Speech Therapy) have opportunities to work with children in my childcare facility. -----	①	②	③	④
25.	My childcare facility was provided adequate resources about disability services in the state. -----	①	②	③	④
26.	DHS or Tribal Subsidy my childcare facility receives is sufficient to support children with disabilities in my program. -----	①	②	③	④

27.	I receive adequate support from my licensing worker. -----	①	②	③	④
28.	I receive adequate support from my STAR's Specialist licensing worker.-----	①	②	③	④

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Appendix C: Conceptual Framework-Bioecological Model of Quality ECE



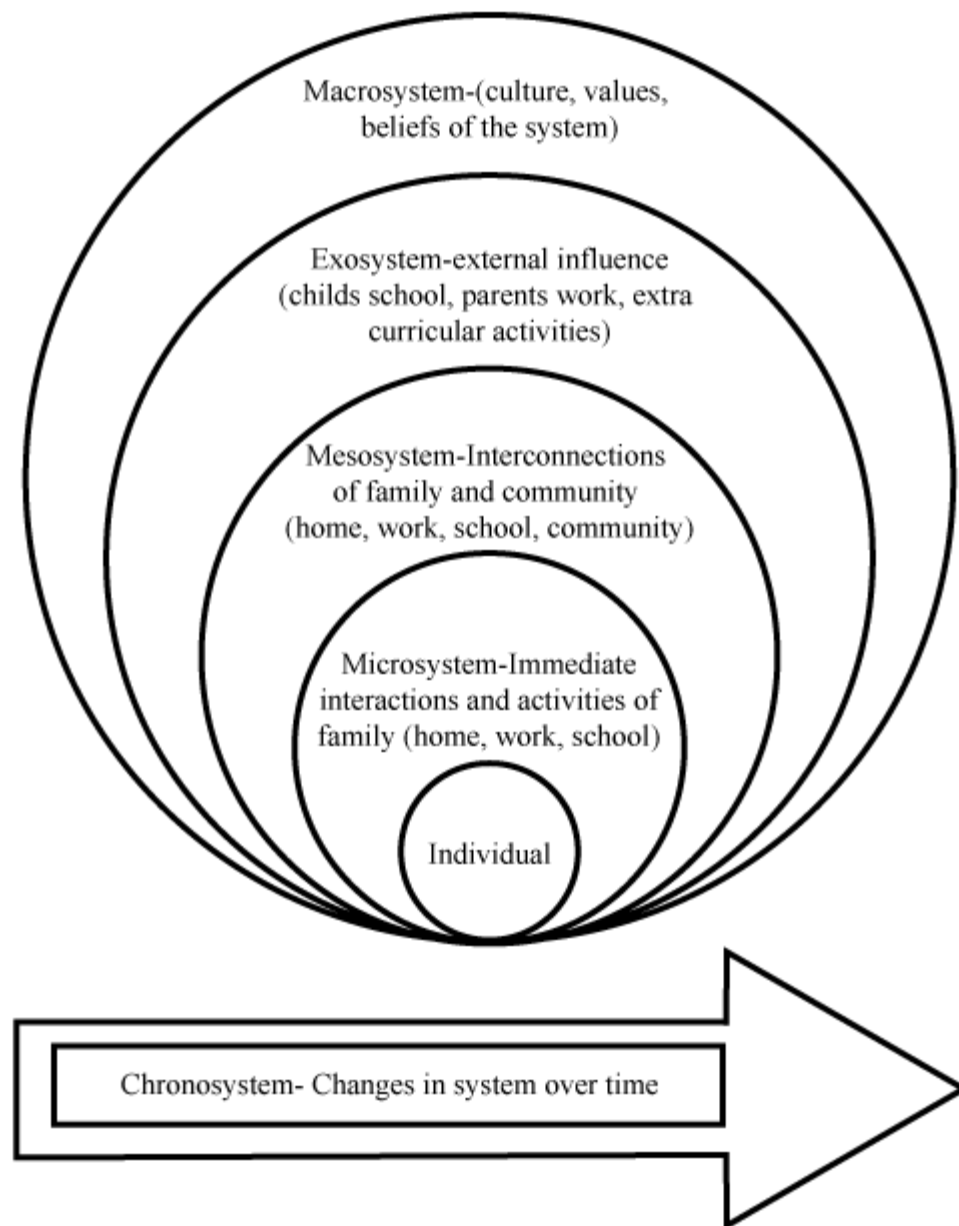
Adapted from Mitchell, A. (2009). Quality Rating and Improvement System:  
As the framework for early care and education reform

## Appendix D: Overview of Oklahoma's Reaching for the Stars Program

Level	Voluntary/ Mandatory	Requirements	Components Rated	Evaluation Frequency
One STAR	Mandatory for license	1 STAR- automatic with license	Min. License Requirements	3 Times yearly
One STAR Plus	Given two years to reach 2 STAR level or dropped back to One STAR Status	Apply and Meet 2 STAR Criteria	Above plus teacher and director training, weekly lesson plans, interest areas, daily reading program, parent involvement	Annual
Two STAR		Apply and Meet 2 STAR Criteria Or National Accreditation	Above plus teacher credentials, salary compensation, program evaluation including ERS	Annual, Plus ERS every 4 years
Three STAR		Apply and Meet 2 STAR Criteria And National Accreditation	Above	Annual plus ERS every 4 years, or National Accreditation

Adapted from Zellman & Perlman (2008).

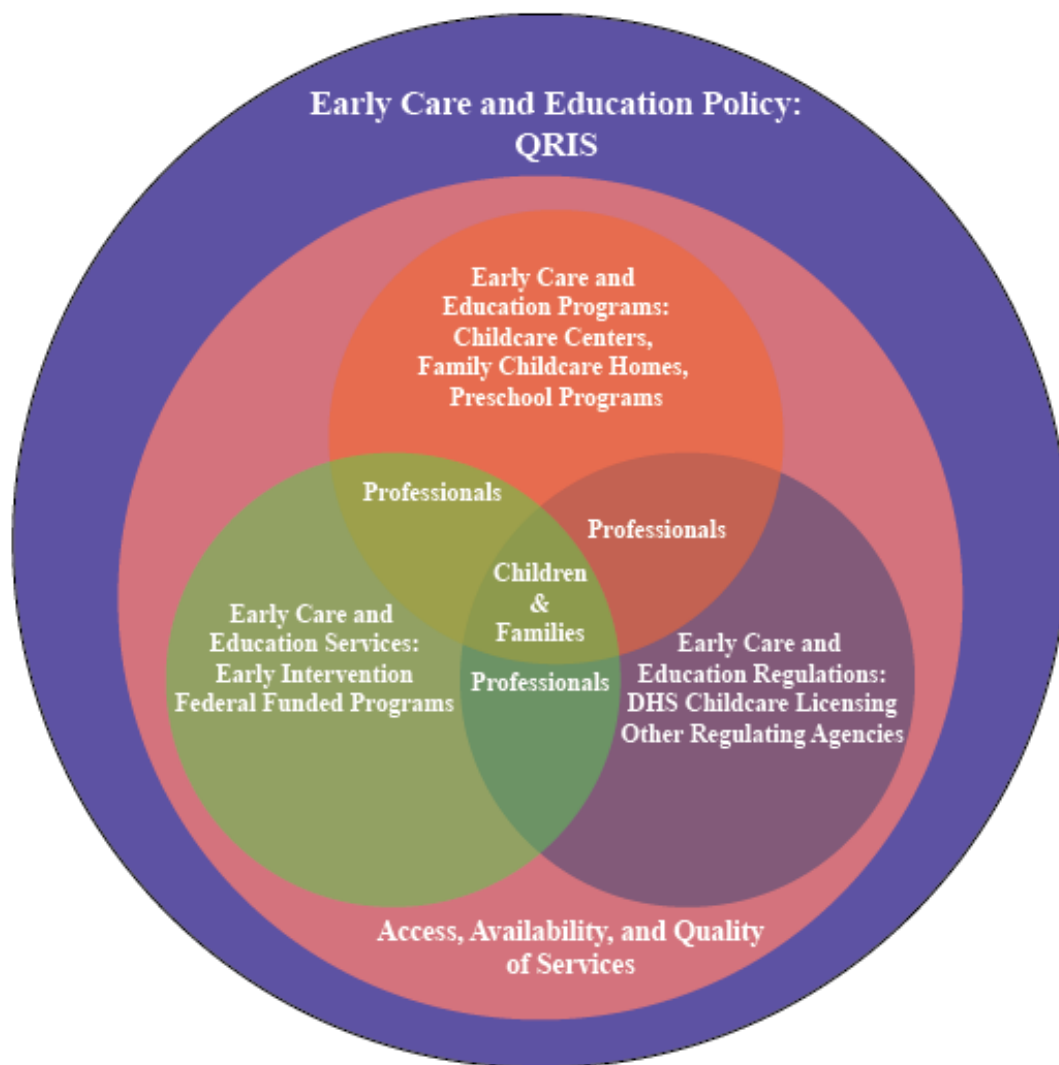
## Appendix E: Bronfenbrenner's Bioecological Systems Theory



Adapted from Bronfenbrenner & Morris. (2006).

## Appendix F: Conceptual Framework-Bioecological Model of Quality ECE

### Programs



## Appendix G: Analysis Chart

Question	Procedure	Analysis		
<p>1. Are young children with mild and severe disabilities served in quality ECE programs?</p> <p>Question- Are there differences in access of quality ECE services across the four STAR levels for children disabilities.</p> <p>Source: STARS Data- OKDHS, Oklahoma Child Count data</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info Tally the number of children with mild and severe disabilities served in each STAR category.</p> <p>Access Oklahoma State Department of Special Education website to retrieve available Child Count data</p>	<p>Chi Square</p> <ul style="list-style-type: none"> <li>(Number of infants/toddlers with disabilities) X (Star Level)</li> <li>(Preschool children with disabilities) X (Star Level)</li> </ul>		
<p>2. Do incentives from state and or tribal subsidies impact the number of children with mild and severe disabilities receiving services?</p> <p>Source: STARS Data- OKDHS, Oklahoma Child Count data</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info. Analyze data from childcare directors surveys</p> <p>Access Oklahoma State Department of Special Education website to retrieve available Child Count data</p>	<p>Chi Square</p> <ul style="list-style-type: none"> <li>(Number of infants/toddlers with disabilities) X (Subsidy)</li> <li>(Preschool children with disabilities) X (Subsidy)</li> </ul>		
<p>2b. Do subsidies impact the capacity of a center to serve children with disabilities?</p> <p>Source: STARS Data- OKDHS, Oklahoma Count data</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info. Analyze data from childcare directors surveys</p> <p>Access Oklahoma State Department of Special Education website to retrieve available Child Count data</p>	<p>ANOVA</p> <ul style="list-style-type: none"> <li>(Professional Development-survey question 23) X( Subsidy)</li> <li>(Resources-survey question 24, 25) X (Subsidy)</li> </ul>		
<p>3. What do ECE program directors report as reasons that encourage or prevent them from serving children with disabilities?</p> <p>Source: STARS Data- OKDHS, Oklahoma Child Count data Survey Data, Phone Interview Transcripts</p>	<p>Contact OKDHS to retrieve open access records of Oklahoma STARS info. Analyze data from childcare directors surveys Conduct interviews with childcare directors from purposeful sample representation of each STAR level Transcribe Phone interviews Establish codes and meta codes looking for patterns within research questions.</p>	<p>Level 1 Analysis</p> <p>-Establish codes Limitations, Cost, Facilities, -Reread transcripts</p>	<p>Level 2 Analysis</p> <p>-Establish Meta codes -Establish Patterns within transcripts</p>	<p>Level 3 Analysis</p> <p>-Inductive analysis -Triangulate Patterns within the STAR level, Survey, and Phone interview data.</p>



## Appendix H: Interview Questions

Number	Question	Subset of Questions
1.	How knowledgeable are you about the STARS/QRIS program?	What would make you more knowledgeable about STARS/QRIS?
2.	What support does your center receive from STAR technical support staff?	How helpful are these services?
3.	What motivates you to stay at your current STAR level?	Is your program accredited? If so by which organization?
4.	How involved is your program in the STARS program?	Would you like to be more /less involve?
5.	How do you use state or tribal subsidy to promote child out comes?	
6.	What is your knowledge level regarding children with special needs?	
7.	Do you serve children with mild or severe disabilities?	If so why or why not?
8.	How comfortable are you with serving children with special needs?	
9.	What support would your center need to serve children with mild or severe disabilities?	Do children with special needs in your program have access to related service providers?
10.	What prevents if anything your center from providing services to children with special needs?	

### Appendix I: Tentative Dissertation and Graduation Timetable

October 24, 2014	Prospectus Defense
October 24- November 20	IRB Approval
November 17-20, 2014	Data Collection Prep
December 1-19, 2014	Data Collection
December 19-Jan 2, 2014	Analyze Data
January 5-30, 2015	Continue Data Collection
February 1-April 20	Analyze Data Write Chapters 4 & 5 Drafts to Chair April 20
April 20-May 20	Revisions of all chapters Revisions to Chair May 20
	Request Authority for Dissertation Defense (Final day 7/24)
June 1, 2015	Dissertation to Committee
June 15, 2015	Dissertation Defense (Final day 8/7)
	File Graduation Application (Final day 7/1)
	Final Day to apply for Degree Check (7/10)
	Deposit Dissertation in the Library (Final day 8/14)
	Graduation Day



**Institutional Review Board for the Protection of Human Subjects**

**Approval of Initial Submission – Expedited Review – AP01**

**Date:** January 15, 2015

**IRB#:** 5000

**Principal**

**Approval Date:** 01/15/2015

**Investigator:** Teresa Ann Berg

**Expiration Date:** 12/31/2015

**Study Title:** EXAMINING HOW QRIS PROGRAMS ENSURE QUALITY, ACCESS, AND AVAILABILITY OF SERVICES FOR ALL YOUNG CHILDREN INCLUDING THOSE WITH MILD AND SEVERE DISABILITIES

**Expedited Category:** 6 & 7

**Collection/Use of PHI:** No

On behalf of the Institutional Review Board (IRB), I have reviewed and granted expedited approval of the above-referenced research study. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Promptly submit continuing review documents to the IRB upon notification approximately 60 days prior to the expiration date indicated above.
- Submit a final closure report at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or [irb@ou.edu](mailto:irb@ou.edu).

Cordially,

E. Laurette Taylor, Ph.D.  
Chair, Institutional Review Board