

# UC Berkeley

## UC Berkeley Electronic Theses and Dissertations

### Title

EARLY CHILDHOOD EDUCATORS' BELIEFS ABOUT INCLUSION AND PERCEIVED SUPPORTS

### Permalink

<https://escholarship.org/uc/item/3ct042sh>

### Author

VERNE, LISA MARIE WADORS

### Publication Date

2013

Peer reviewed|Thesis/dissertation

EARLY CHILDHOOD EDUCATORS' BELIEFS  
ABOUT INCLUSION AND PERCEIVED SUPPORTS

By

Lisa Marie Wadors Verne

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Joint Doctor of Philosophy

with San Francisco State University

in

Special Education

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Bruce Fuller

Professor Marci J. Hanson

Professor Todd LaPorte

Fall 2013



## Abstract

Early Childhood Educators' Beliefs about Inclusion and Perceived Supports

By

Lisa Marie Wadors Verne

Joint Doctor of Philosophy in Special Education in the

Graduate Division

of the

University of California, Berkeley

and

San Francisco State University

Professor Bruce Fuller, Chair

Young children with special needs have been educated in early childhood settings with typically developing peers for over 40 years. Successful educational inclusion in the least restrictive environment requires appropriate aids and supports (Individuals with Disabilities Education Act, 2004).

Although researchers have studied many aspects of preschool inclusion, little investigation has been conducted on the link between early childhood education teachers' beliefs about inclusion and implementation supports. This study was designed to examine the connection between preschool teachers' beliefs about including children with special needs in their classrooms and the supports that they receive to facilitate that inclusion. In total, 218 Head Start and private early childhood educators were surveyed on their beliefs about inclusion and the quality of inclusive practices. Through a quantitative correlational design, I used the *My Thinking about Inclusion Scale* (MTAI; Stoiber et al., 1998) to score the teachers' overall beliefs about inclusion and the *Quality of Inclusive Experiences Measure* (QIEM; Wolery, Pauca, Brashers, & Grant, 2000) to analyze the level of support for inclusion that the teachers received.

Results indicated that overall, early childhood educators are favorable to inclusion and differences were not found between the two groups of educators. However, educators who self-reported high quality levels of support for inclusion reported more favorable beliefs about including students with special needs. In addition, teachers who reported receiving more in-service training for inclusive practices also indicated more favorable beliefs regarding including students with special needs in educational settings. Overall, results indicated that there was a significant relation between beliefs and supports; teachers who had more favorable beliefs about inclusion had more supports for inclusion.

## Table of Contents

Chapter		
1	INTRODUCTION .....	9
	Beliefs about Inclusion .....	9
	Support for Inclusion .....	10
	Purpose of the Study .....	10
	Rationale for Participant Selection .....	11
	Head Start Preschool Programs.....	11
	Private Preschool Programs .....	11
	Research Questions .....	12
	Summary .....	12
2	REVIEW OF THE LITERATURE .....	14
	Individuals with Disabilities Education Act.....	14
	History of Special Education Law .....	14
	Inclusion .....	15
	Preschool Systems .....	17
	Head Start Programs.....	18
	Private Preschool Programs.....	19
	Teachers’ Beliefs about Education and Learning .....	19
	Teachers’ Beliefs about Inclusion .....	20
	Training and Supports for Inclusion .....	23
	Perceptions about Teaching Children with Special Needs .....	24
	Summary .....	25
3	METHOD .....	27
	Recruitment .....	27
	Research Design .....	32
	Data Collection and Procedures .....	32
	Independent Variables .....	33
	Dependent Variables .....	34
	Early Childhood Educator Study Survey .....	34
4	RESULTS .....	36
	Research Questions .....	36
	Comparison of Teachers’ Beliefs about Inclusion .....	36
	Beliefs about and Reported Quality of Supports for Inclusion..	44
	Beliefs about Inclusion and Training .....	45
	Relationship between Supports for and Beliefs about Inclusion.	47
	Summary .....	48
5	DISCUSSION .....	49
	Beliefs about Inclusion .....	50
	Beliefs about Inclusion and Quality of Inclusive Practices .....	51
	Training and Beliefs about Inclusion .....	51
	Supports and Beliefs about Inclusion .....	52
	Limitations .....	52
	Sample .....	52

Measure .....	53
Implications .....	54
Future Research .....	54
Summary .....	54
REFERENCES .....	55
APPENDICES	
A Study Introduction Letter .....	61
B Recruitment Flyer .....	62
C Survey Tool .....	63

## List of Tables

Table		
1	Teachers' Personal Demographics.....	30
2	Teachers' Professional Demographics .....	31
3	Demographic Chi-Square .....	33
4	Inclusion Beliefs Survey Mean .....	36
5	Average Score on the MTAI .....	37
6	Principal Components Correlation: Core Perspectives .....	38
7	Inclusion Belief Survey Mean: Core Perspectives .....	39
8	Core Perspectives Average Subscale .....	40
9	Principal Components Correlation: Expected Outcomes Behavior.....	40
10	Inclusion Belief Survey Mean: Alternate Expected Outcomes .....	41
11	Alternate Expected Outcomes Subscale .....	42
12	Inclusion Belief Summary Mean: Expected Outcomes .....	42
13	Expected Outcomes Average Subscale .....	43
14	Principal Components Correlation: Classroom Practices .....	43
15	Inclusion Belief Summary Mean: Classroom Practices .....	44
16	Quality of Inclusive Measures t-Test .....	45
17	Teachers' Special Needs Training .....	46
18	Chi-square Special Needs Training .....	46
19	MTAI QIEM Training Program Regression .....	47
20	MTAI QIEM Support Program Regression .....	48

## Acknowledgements

I would never have been able to finish my dissertation without the guidance of my committee members, help from friends, and support from my family and husband.

First I would like to thank all of the teachers who participated in this study and administrators who helped in the recruitment of classroom participants. I also would like to thank my loving family and friends, without whose support this graduate degree would not have been possible. Jeff, my husband and best friend, has been has been a source of encouragement and strength. His reassurance and applause helped me stay on track through the good times and bad. He watched the kids and took care of the house when I had deadlines approaching and is an incredible father. My children Grace and Lillian have also been instrumental to my professional and personal growth. Watching them grow and participate in their own preschool programs gave me insight into challenges general education early childhood educators face on a daily basis. My parents, Ken and Barbara Wadors were and continue to be a support for my educational endeavors. Not only did they encourage me to follow my dreams but also edited my work, asked questions and helped me always see that finish line. My sister Mary and brother-in-law Ramon, thank you for offering to babysit when Jeff was out of town as well as always being available to listen to me when I had to think out ideas. Additionally my sweet niece Amelia and nephew Owen whose mere existence influenced my choice to attend two very academically challenging and well respected universities.

I would like to express my deepest gratitude to my advisor at San Francisco State University, Dr. Marci Hanson, for her excellent guidance, caring nature and subject knowledge that provided me with an exceptional opportunity to learn and grow in my practice. I would also like to thank my University of California, Berkeley advisor, Dr. Bruce Fuller, who guided me through the world of education policy. Lastly I would like to thank Dr. Todd LaPorte. Through your classes and our discussions I will never be able to look at organizations in the same light. In addition to the guidance by all of my committee members, your dedication, encouraging words, thoughtful critiques, shaped not only this study but also my future endeavors.



## Curriculum Vitae

**Lisa Marie Wadors Verne**

160 Connecticut Street, #9  
San Francisco, CA 94107  
(415) 310.4082  
lwadors@berkeley.edu

### EDUCATION

- Ph.D. School of Education, Special Education and Policy, University of California, Berkeley and San Francisco State University Joint Doctoral Program, 2013
- M.A. Early Childhood Special Education, Santa Clara University, 2005
- Credential Early Childhood Special Education Credential Birth – Five, Santa Clara University, 2004
- B. S. Business Administration, Marketing, Villanova University, 1996

### RESEARCH EXPERIENCE

- 3/11 – 11/11 Web coordinator, writer and editor for the Institute of Human Development Website, University of California, Berkeley
- 4/09 – 12/09 Interviewer and data analyst on a study exploring parent involvement in early childhood education in conjunction with Special Quest Consulting Group, under Linda Brekken.
- 9/08 – 12/09 Interviewer on a study looking at parental beliefs about children with disabilities with professor Susan Holloway, UC Berkeley School of Education
- 5/08 – 6/09 Data collector/interviewer; Tribes Study, West Ed., Oakland CA.
- 6/07 – 12/09 Graduate assistant for PEECS Grant with Dr. Alise Paillard, San Francisco State University, Special Education Department

### TEACHING EXPERIENCE

- 9/11 – 2/13 Guest Lecturer on Early Childhood Development (Marriage and Family Therapy) Notre Dame De Namur University
- 2/11 Guest Lecturer - SPED 757 (Visual Impairment: Special Populations), San Francisco State University
- 1/11-5/11 Substitute Preschool Teacher, Slippery Fish Co-op, San Francisco CA

9/10 – Present      Guest Lecturer - CAD 600 (Child and Adolescent Development Internship Seminar), San Francisco State University

1/09 – 12/12      University Supervisor - SPED 730 (Student Teaching), San Francisco State University

1/09 – 5/09      Instructor - SPED 774 (Positive Behavior Support), San Francisco State University

10/08 – 10/09      Guest Lecturer - SPED 780 (Assessment Program Evaluation Early Childhood Special Education), San Francisco State University

9/08      Guest Lecturer - SPED 774 (Positive Behavior Support), San Francisco State University

7/08 – 8/08      Instructor - SPED 803-02 (Cultural and Language Diverse Communities Special Education), San Francisco State University

4/08      Guest Lecturer - SPED 770 (Mild/Moderate Disabilities), San Francisco State University

11/06      Guest Lecturer - EDUC 236 (Family Systems and Resources), Santa Clara University

8/05 – 8/07      Special Education Non-Categorical Preschool Teacher, San Mateo/Foster City School District, San Mateo, CA.

8/05 – 8/07      Mentor/Site Supervisor - Santa Clara University, Student Teacher Program

8/04 – 8/05      Special Education Inclusion Preschool Teacher, Oakland Unified School District, Oakland, CA.

4/03 – 8/04      Senior Therapist, Foundation for Autistic Childhood Education and Services, Redwood City, CA.

**TECHNOLOGY EXPERIENCE**

Education Program Manager	Benetech Global Literacy, Palo Alto, CA.
Client Services Manager	I2 Technologies, Dallas, TX.
Marketing Communications Manager	RightWorks Technology, San Jose, CA.
Marketing Director	KRQQ, Tucson, AZ.
Promotions Director/On-Air	MAX 95.7, Philadelphia, PA.
Promotions Assistant/Production	Y100, Media, PA.

## **LEADERSHIP**

- 6/11-8/11 Berkeley Fellows, Preparing Future Faculty, University of California, Berkeley
- 10/10 – 8/12 President, Board of Directors and Executive Director, Slippery Fish Co-op Preschool, San Francisco, CA
- 1/10 – present University of California, Berkeley, student representative for University of California Center for Research on Special Education, Disabilities and Developmental Risk
- 5/06 – present Santa Clara Mentor for graduate students pursuing a career in special education
- 11/06 Guest Speaker on “Childhood Matters” radio program San Francisco, CA
- 1/01 – present Volunteer/Management Team, Special Olympics, Northern California

## **CONFERENCE PRESENTATIONS**

- 12/13 Equity, Opportunity and Inclusion for People with Disabilities, *Route 66: One Route to the Common Core Success*
- 11/13 International Dyslexia Association, *Advocating for Accessible Technology in the Classroom: What parents can do*
- 10/13 Closing the Gap, *Benetech Global Literacy – Solutions for the Digital Age. Support for Students with Print Disabilities Through Digital Access to the Common Core Curricula*
- 7/13 Office of Special Education Programming Project Director Conference, *Preparing Educators for the Future of Accessible Educational Materials*
- 7/13 Office of Special Education Programming Leadership Conference, *Accessible Technology at home, in the classroom, for life*
- 4/13 Council for Exceptional Children, *Teaching Those Who Teach*

## **MEMBERSHIPS**

- 8/07 - Present Council for Exceptional Children – Division of Early Childhood

# CHAPTER 1

## INTRODUCTION

Nationally, 47% of children aged 3-5 years attend early education programs prior to kindergarten (Annie E. Casey Foundation, 2012). In 2006, approximately 315,000 preschool-aged children with special needs were educated in regular early education programs for at least 80% of the time (days of the week and or percentage of the day) (US Department of Education, 2008). This is a 2.73% increase in preschool students with disabilities in regular classrooms over the decade before.

While special education preschool enrollment rates vary by state, California reported that 4% of children attending preschool in California have disabilities (U.S. Department of Education, 2008). The Annie E. Casey Foundation estimated that in 2012, California had 1,023,077 children who were 3-5 years old. According to *2012 Kids Count Data Book: State Trends in Child Well-Being*, California serves 48% of all 3- to 5-year-olds in preschool programs. Therefore it is estimated that 20,000 children with special needs are being educated in California preschools each year.

The passage of Public Law 94-142 (Education for All Handicapped Children Act) in 1975 and subsequent amendments of the law (IDEA – Individuals with Disabilities Education Act re-titled PL 108-446 IDEIA – Individuals with Disabilities Education Improvement Act) have provided support for over three decades for preschool-aged children with special needs to receive educational services (Guralnick, 2001a). According to that law, children with qualifying disabilities are entitled to a free and appropriate public education (FAPE) in their least restrictive environment (LRE) (Wright & Wright, 2009).

Part B of IDEA governs the provision of special education and support services for children aged 3-22 years. Within this federal law, children with disabilities are to be educated with their general education peers with appropriate aids and supports in place. Removal of children with disabilities from the regular education environment occurs only when the use of supplementary aids and services cannot meet the individualized needs of the child. As a result, states and local communities have developed and are executing programs geared to address the needs of young learners (3-5 years) with disabilities in programs that also serve typically developing students (Guralnick, 2001b). While it is clear that classroom teachers need a variety of supports to facilitate inclusion of children with special needs, a foundational question when investigating perceived supports is this: Does a teacher believe that children with special needs should be included with their typically developing peers, and do those teachers feel that they have the appropriate supports to facilitate inclusion?

### **Beliefs about Inclusion**

The term *inclusion* means different things to different people. Some interpret *inclusion* to simply mean *access* to the same curricular activities as their typically developing peers while others interpret *inclusion* to mean that children with special needs not only have access to curriculum but are also meaningfully and physically integrated into the community. These discrepancies have been debated in the literature and in practice for years. Teachers' beliefs about educating children with disabilities, and their beliefs about inclusion, may affect how inclusion should be implemented and how children with special needs are educated (Lieber et al., 1998; Stoiber, Gettinger, & Goetz, 1998).

Researchers have determined that teachers in part develop their pedagogy based on their beliefs of how children learn and that their interactions with students are directly affected by their ability to construct theories of how the minds of these students work (Olson & Bruner, 1996). As a result, teachers' beliefs about educating children with special needs and teachers' attitudes about learning can have a considerable influence on determining the placement of a child in inclusive settings (Bailey & Winton, 1987; Odom & McEvoy, 1990).

### **Support for Inclusion**

Werts, Wolery, Snyder, and Caldwell (1996) identified the crucial supports needed to include students with substantial disabilities (aged 5-12) in general education classrooms. Based on surveys administered to a national sample of general and special education elementary teachers (kindergarten through sixth grade), they found that the majority agreed that training, access to specialists, and help in the classroom were needed for successful inclusion of children with special needs. Training about including and teaching children with special needs was identified as a necessary support. However, studies on teachers' beliefs show that teachers rarely change their belief about how children learn regardless of the amount of in-service training that they receive after they start teaching (Olson & Bruner, 1996). Conversely, literature about teachers' beliefs about inclusion shows that teachers who have had a positive experience with a child with special needs tend to have a better feeling about educating children with special needs in their classroom (Eiserman, Shisler, & Healey, 1995).

### **Purpose of the Study**

This study explored the belief system about inclusion of early childhood educators in an effort to identify the link between beliefs and supports for inclusion for preschool-aged children. It is important to note that one cannot infer from this study that more high-quality resources lead to "stronger" beliefs about inclusion or that teachers who believe that inclusion is positive seek out more resources. However, I hypothesized that there is a correlation between the varying levels of support for early educators and their beliefs about including children with special needs in their general education classrooms.

Teachers' beliefs about inclusion may affect how they construct expectations for children with special needs (Bailey & Winton, 1987). Those beliefs may influence teaching processes in the classroom that can have an effect on outcomes for children with special needs in regular education settings, such as low expectations leading to low performance (Schommer, 1994). Although studies have explored how teachers construct their beliefs about how children with special needs learn in the K-12 school system, few studies have looked at early childhood education (preschool) teachers' beliefs about inclusion (Smith & Shepard, 1988) and even fewer have looked at such teachers in inclusive settings (Lieber et al., 1998). Research also has explored the supports needed to successfully include children with special needs in general education classrooms preschool through high school (Buell, Hallam, Gamel-McCormick, & Scheer, 1999).

As a response to the lack of a shared national definition of *inclusion*, the Division of Early Childhood (DEC) and the National Association for Educating Young Children (NAEYC) developed a joint position statement that defined a common understanding of what inclusion means and what supports are needed to achieve inclusion practices (DEC/NAEYC, 2009). They determined that a strong infrastructure of systems-level supports such as professional

development and coordinated specialized services must be in place to support teachers providing services to these children in inclusive settings.

Although researchers have investigated both teachers' beliefs about inclusion and supports for inclusion, limited research has been conducted that investigates the link between the two, and no known studies examine the connection between beliefs and perceived supports for preschool teachers. This study investigates the connection between early childhood education teachers' beliefs about including children with special needs in their classrooms and the training and supports that they receive to help facilitate that inclusion.

### **Rationale for Participant Selection**

Young children in California are educated in a variety of settings. For this study I chose to focus on two systems that serve the majority of preschool children: Head Start and private preschools.

#### **Head Start Preschool Programs**

Since 1972, Head Start programs have been required to reserve 10% of their enrollment for children with special needs. The 2007-2008 Head Start Program Information Report indicated that more than 12% of the one million Head Start students had either entered the program with a disability or delay or were diagnosed while they were enrolled in the program (Brekken & Corso, 2009). Head Start's infrastructure was designed to provide support for inclusion (e.g., mental health services, family services, and professional development for staff) (Brekken & Corso, 2009) and has been seen as a national model for providing inclusive opportunities to children with disabilities and their family (Brekken and Corso, 2009). Although there is a new grant to support the ongoing Head Start initiatives including inclusion, previously the organization was granted monies specifically for the Head Start Center for Inclusion. This center, developed by the Office of Head Start, provides tools and training materials for teachers to support quality inclusion of children with special needs in their classrooms (Head Start Center for Inclusion, n.d.).

#### **Private Preschool Programs**

Private preschool programming is a compilation of different types of preschool structure and pedagogy. These schools may be part of a larger group of non-profit, for profit, or other non-government agencies (e.g., Kinder Care) where there is consistency in the programming and pedagogy across sites or they may be independent schools that create their own pedagogy (e.g., a co-op). Some settings may be in stand-alone buildings while others may be in the basement of a church. These schools cannot discriminate against a child based solely on the child's disability (Americans with Disability Act, 1990), and children with special needs are often included in these programs. Training for teachers varies depending on the program and the teachers' previous experience. Also many schools may not be equipped (i.e., have training, facilities and/or specialized equipment) to meet the needs of special learners.

Through personal and practical experience as a special education preschool teacher, a university supervisor to Master's and credential-level early childhood special education students, the mother of two preschool-aged children attending preschool, and the former president and chairman of the board for a co-op preschool in San Francisco, I have seen numerous and varied preschool settings where students with special needs attend. I have seen teachers in both Head Start and private preschools instruct students with special needs in their classroom and discussed

their qualifications and supports. Using my experience paired with in-depth research about the beliefs of teachers with special needs children included in typically developing classrooms, I hypothesized that there may be a difference in the beliefs about including children between the two groups of teachers,. Furthermore I hypothesized that teachers with more support for including children with special needs in typical early childhood settings will have more positive beliefs about inclusion. For this study, I considered both pre- and in-service training as well as access to specialists and other professionals as supports for inclusion.

### **Research Questions**

1. Are there differences between Head Start and private preschool teachers' beliefs about educating children with special needs in early childhood classroom settings?
  - a. Are there differences between Head Start and private preschool teachers' "core perspective," their morality of inclusion (as defined by the *My Thinking about Inclusion Scale*, Stoiber et al., 1998) beliefs about educating children with special needs in early childhood classroom settings?
  - b. Are there differences between Head Start and private preschool teachers' "expected outcome", how the child will perform both social and academically (as defined by the *My Thinking about Inclusion Scale*) beliefs about educating children with special needs in early childhood classroom settings?
  - c. Are there differences between Head Start and private preschool teachers' beliefs about "classroom practices", how they instruct (as defined by the *My Thinking about Inclusion Scale*) for educating children with special needs in early childhood classroom settings?
2. Is there an association between early educator's beliefs about inclusion and the reported quality of inclusion (as defined by the *Quality of Inclusive Education Measures [QIEM]* Wolery, Pauca Brashers, & Grant, 2000) by program type?
  - a. Are there differences between Head Start and private preschool teachers' beliefs and the reported quality of inclusion as measured by the QIEM?
3. Is there an association between early educators' beliefs about inclusion and the training they received?
  - a. Are there differences between Head Start and private preschool teachers' beliefs and the number of college-level classes about educating children with special needs they have completed?
  - b. Are there differences between Head Start and private preschool teachers' beliefs and the in-service trainings on inclusion that they reported?
4. Is there an association between early educators' beliefs about inclusion and the general support they received?
  - a. Are there differences between Head Start and private preschool teachers' beliefs and the available supports for inclusion they reported?

### **Summary**

It is estimated that over 20,000 preschool children (age 3-5) with special needs are educated in California preschools each year. While federal laws have been designed to ensure that these children are educated with their non-disabled peers, research shows that teachers' beliefs about inclusion affects the way students with special needs are educated. In addition

there is evidence that there are crucial supports needed to include students with disabilities in general education settings. Building on this research, I developed four hypotheses that investigate possible links between beliefs about and support for inclusive preschool classrooms.



## CHAPTER 2

### REVIEW OF THE LITERATURE

Teachers' beliefs about inclusion affect how they construct expectations for children with special needs (Bailey & Winton, 1987). These decisions influence teaching processes in the classroom, which have an effect on outcomes for those children in regular education settings (Schommer, 1994). For example, students in classrooms with teachers who have high expectations usually demonstrate more positive outcomes (Powell & Beard, 1986). Researchers have also determined that the support a teacher receives also affects inclusion in the classroom (Buell et al., 1999). Although researchers have investigated both teachers' beliefs about inclusion and the support they receive for inclusion, limited research has been conducted that investigates the link between the two, and there are no known studies that have examined the connection between beliefs and perceived support for preschool teachers.

In order to understand the relationship between beliefs about and the supports for inclusion, I will first present an overview of special education law to lay the foundation for discussing inclusion in schools. Next I will discuss the literature that defines inclusion as well as the benefits of and current options for preschool inclusion. I will then present information about the two preschool systems selected for this study. Part two of this chapter discusses the literature on teacher's beliefs about inclusion and the support needed to implement it in their classrooms. Lastly I will present research on teachers' perceptions of their ability to teach children with special needs. The goals of this review are to understand; (1) the shared definition of preschool inclusion (2) how teachers construct their beliefs about teaching children with special needs, and (3) the role of supports for inclusion.

#### **Individuals with Disabilities Education Act**

The Individuals with Disabilities Education Act (IDEA) is a federal entitlement program that provides support for children with disabilities in public and nonpublic schools. The most comprehensive education law in the world, it was developed not only to address the basic academic requirements for individuals who qualify but also to provide support to meet the children's fundamental needs. IDEA, formerly called PL 94-142 or the Education for all Handicapped Children Act of 1975, requires public schools to make available to all eligible children with disabilities a free appropriate public education (FAPE) in the least restrictive environment (LRE) appropriate to their individual needs.

#### **History of Special Education Law**

In 1968, the federal government passed PL 90-538, the Handicapped Children's Early Education Assistance Act. This targeted preschool-aged children with special needs and established early education programs. While P.L. 90-538 can be seen as one of the influencers to IDEA, the concepts of FAPE and LRE were not introduced for many years. Two influential court cases in 1971 and 1972 significantly influenced special education law. In the case of *Pennsylvania Association of Retarded Citizens (PARC) vs. Commonwealth of Pennsylvania* (1971), the federal district court in the Eastern District of Pennsylvania concluded that every *mentally challenged* child in Pennsylvania was entitled to a free and appropriate public education. The following year, in *Mills v. Board of Education* (1972), a federal district court in

the District of Columbia found that a school district cannot exclude any exceptional children from public education, even if the school district has insufficient funds to provide such services.

Despite these monumental court decisions, Congress determined that millions of American children with disabilities, more than half of the children with special needs, were still not receiving an appropriate education. As a result, Congress created the first strictly education-oriented law, the Education for All Handicapped Children Act (1975). Additional court cases, including Board of Education of Hendrick Hudson Central School District vs. Rowley (1982), set the standard for amendments that influenced the latest iteration of the Individuals with Disability Education Act (2004), the successor to the Education for All Handicapped Children Act.

Arguably the most important concepts extracted from IDEA are the two definitions from which *inclusion* is derived: free appropriate public education (FAPE) and least restrictive environment (LRE). Simply stated, FAPE is the condition of special education and services administered at the public's expense (*118 STAT. 2654 PL 108-446, 2004*), while, LRE seeks, to the greatest extent possible, to educate children with disabilities together with typically developing peers in the school they would attend if they were not disabled (*N.R. v. Kingwood Township*).

In 1986, Congress enacted PL 99-457, the Education of the Handicapped Act Amendments of 1986, to assist states in establishing a widespread system of early intervention services for children with disabilities aged 3 to 5 and their families. It was Congress's intent to improve the development of toddlers with disabilities, thus minimizing the need for special education services through the use of early intervention. In 1991, PL 102-11, the Individuals with Disabilities Education Act Amendments of 1991 recognized the need to start intervention services earlier and developed a plan to ensure comprehensive early intervention services to young children and their families.

The current iteration of IDEA is broken into two parts. Whereas Part C of IDEA (formally Part H of EHA PL 94-142) is meant to govern the early intervention programs for infants and toddlers (birth to 2), Part B of IDEA provides guidelines for the education of preschoolers (aged 3 to 5) with qualifying disabilities. Within this federal law, there is a strong presumption that children with disabilities will be educated with their non-disabled peers with appropriate aids and supports in place. Special classes, separate schooling, or other removal of children with disabilities from the regular education environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot meet the individualized needs of the child. A major part of Part B is that professionals must follow IDEA's presumption that children with disabilities must be educated in their LRE to the greatest extent possible. They should have access to the general education curriculum, extracurricular activities, or any other program that non-disabled peers would be able to access; and the student should be provided with supplementary aids and services necessary to achieve educational goals if placed in a setting with non-disabled peers. As a result, states and local communities have developed and are executing programs geared to address the needs of young learners (aged 3-5) with disabilities in programs that also serve typically developing students (Guralnick, 2001b).

### **Inclusion**

IDEA mandates that children be educated in their LRE, and for many students with disabilities, the LRE may be in the same classroom as their peers without special needs. The

term used to describe this concept, *inclusion*, believed by some to be a fundamental right, is a complicated notion flawed by ambiguity and interpretation. That is why it is important to understand how practitioners interpret *inclusion*. The discussion about inclusion, particularly preschool inclusion, is not new. Researchers and organizations (DEC/NAEYC, 2009; Odom, 2002) that are concerned with the education of young children with special needs continue to publish policy briefs, summaries, and position statements about the benefits of inclusion (Frank Porter Graham Child Development Institute, 2009). While the benefits of inclusion are clear, the interpretation of inclusion often is not.

One commonly held understanding about the meaning of *inclusion* is that it implies participation in a broad range of community settings (Beckman et al., 1998). Salend (2001) described the concept of inclusion as a place where all students are given the services and accommodations needed to learn in a collaborative and supported environment. Additionally, in the 2002 book *Widening the Circle*, Odom and colleagues constructed synthesis points from longitudinal data to help influence the nature of inclusion practices today. The following points were developed as a result of the study: inclusion promotes belonging and participating in a diverse society (extending to families, communities, and neighborhoods in which children grow up); programs, not children, must be “ready for inclusion” (successful programs viewed inclusion as effective for *all* children); collaboration and specialized instruction are key components of effective programs (the individual needs of children must be addressed in inclusive programs); and inclusion can benefit children with and without disabilities.

While these descriptions about inclusion may help practitioners implement quality inclusive programs, many schools, teachers, and administrators tend to define *inclusion* differently (Odom, 2002). Some practitioners attempt to define inclusion as an equal ratio of children with and without special needs in the classroom (Odom & Speltz, 1983) while others identify inclusion only when the ratio reflects the “natural” population (e.g., children with disabilities represent 5-6% of the class). Still others believe that a “blended” class, where one-third of the children have special needs and the rest are typically developing, meets the definition of full inclusion. Many people believe that the most important dimension of inclusion is that both children with and without special needs should be educated in the same classroom rather than only in certain activities throughout the day (Odom, 2000). Although there is no one definition, inclusion is thought to be the idea that diverse children, both those with and without special needs, will benefit both socially and academically by actively participating in learning opportunities with normally achieving students (Banarji & Dailey, 1995).

As a response to the lack of a shared national definition of *inclusion*, the Division of Early Childhood (DEC) and the National Association for Educating Young Children (NAEYC) developed a joint position statement that defined a common understanding of inclusion and what supports are needed to achieve inclusion practices (DEC/NAEYC, 2009). This explanation was not developed as an assessment or evaluation of inclusion but rather as a blueprint for identifying the crucial components necessary to ensure a high-quality inclusive program. The policy statement described the following terms: *access* (providing access to a wide variety of opportunities, settings, activities, and environments); *participation* (increasing supports to help the child participate in the activities, settings, and opportunities); and *supports* (professional development, coordinated services, and use of incentives) to help families, teachers, administrators, policymakers, and others develop and improve early childhood services for all children (DEC/NAEYC, 2009). Although this document is comprehensive, the statements made by DEC/NAEYC in the brief are policy statements open to interpretation by the implementers

and are not a legally mandated “how to” guide to inclusion. In addition to the shared definition, research about inclusion illuminates two salient points: children with disabilities must attend the same classroom as typically developing children, and there must be numerous opportunities for children with disabilities to participate in activities and daily routines with peers (Odom, 2000).

Evidence suggests that inclusion is the optimal learning environment for most children with disabilities. Research on academic outcomes shows that children with disabilities perform as well in inclusive settings as they do in segregated settings on standardized developmental measures (Lamorey & Bricker, 1993; Odom & Diamond, 1998; National Professional Development Center on Inclusion, 2007), and studies on social outcomes show that children with disabilities have more positive social interactions with peers in inclusive settings (Hundert, Mahoney, Mundy, & Vernon, 1998). Furthermore, studies that investigated behavioral outcomes found that the behavior of children with disabilities was positively affected by their typically developing peers (Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996); specifically, children with disabilities learned new skills by seeing them demonstrated by other children. Most important for preschool inclusion, children developed a greater sense of belonging when they participated in early educational settings where all children are respected and valued (Kunc, 1992; Odom & Diamond, 1998).

Although typically developing peer models are necessary in order for children with disabilities to benefit from inclusion, this learning environment is valuable for both children with and without special needs (Diamond & Innes, 2000). Inclusive settings have a positive effect on children’s attitudes (Peck, Carlson, & Helmstetter, 1992) and on their willingness to interact with children with disabilities (Okagaki, Diamond, Kontos, & Hestenes, 1998). What’s more, typically developing children in inclusive settings develop an increased knowledge of disabling conditions (Diamond & Hestenes, 1994). As adults, those who participated in classrooms that also included children with special needs tended to regard people with disabilities as valuable members of society (Bernstein, 1993).

While research about inclusion shows that there are positive effects for both children with and without special needs, many barriers still exist that inhibit the implementation of inclusion in preschool classrooms, and universal access to inclusive classrooms, for many, is far from a reality (National Professional Development Center on Inclusion, 2007). Local school districts do not always offer preschool classes to typically developing children aged 3-5; therefore, the inclusion of children with special needs becomes complex (Lieber et al., 2000; Odom et al., 1999). As a result, some children with special needs are placed in segregated classrooms when typically developing classes do not exist. Along with the lack of programs, the different organizational structures inherent in preschool programs make it difficult to systematically promote inclusion so inclusive programs are often located in community centers or Head Start programs (Odom, 2000) and they vary in their delivery of services. Additionally, some research suggests that early childhood educators may not be adequately prepared to meet the needs of special learners in inclusive environments (Brekken & Corso, 2009). While there are many types of preschool programs in the United States, the next section discusses two of the systems where children with special needs are included with their typically developing peers.

### **Preschool Systems**

According to a national survey, 70% of early childhood programs include children with disabilities (U.S. Department of Education, 2008). To become a preschool teacher, applicants are required by most states to have at a minimum an associate’s degree (educationportal.com,

2010); however, programs such as Head Start require teachers to hold a minimum of a bachelor's degree in early education or similar studies (Head Start Act, Section 648A, 2007). There are 1,200 post-secondary institutions that offer associate degrees (60% of total) and bachelor degrees (40% of total) in early childhood education, and approximately 36,000 students graduate from these programs each year (Hyson, Tomlinson, & Morris, 2008). Notwithstanding these statistics, few preschool teachers receive the kind of training and support necessary to teach special learners (Sandall et al., 2003).

To address this concern, some organizations provide supplemental support for teachers working with students with special needs. Pre-service or in-service trainings may be offered in the form of a workshop or professional meeting and usually do not lead to credits towards an advanced degree (Zaslow, Tout, Halle, Whittaker, & Lavelle, 2010). To assess the link between training and quality programming, Fukkink and Lont (2007) conducted a meta-analysis of the research that examines associations between training and observed early childhood program quality. Despite the limited body of correlational research, they concluded that overall, training improves the competencies of educators.

While not all programs offer pre-service or in-service training, each state has its own requirements for becoming a preschool teacher and provides licensing that regulates training (United States Department of Labor and Statistics, n. d.). In addition to subject matter proficiency, preschool teachers must demonstrate strong communication skills and the ability to understand the students' educational and emotional needs (United States Department of Labor and Statistics, 2010).

For the purpose of this study, it is important to understand the preschool landscape in California. Compared to many other states, California has one of the most culturally and economically diverse populations of children under age 5 (California Department of Education, 2010). Additionally, 59% of all preschool-aged children in California attend center-based programs (Annie E. Casey Foundation, 2012). Preschool teachers are required to have a Child Development Teacher Permit. In order to obtain this permit, a person must have a minimum of 24 Early Childhood Education or Child Development credits or 16 general education credits and 525 hours working in a childcare center **or** an associate's degree (or higher) in Early Childhood Education or Child Development and 3 units of supervision in an early childhood setting (State of California Employment Development Department, n.d).

According to the State of California, all teachers in both public and private settings are required to obtain this license in order to be a lead teacher in a classroom. Although we know that children with special needs are enrolled in both public and private settings, there is no requirement for special education training for traditional preschool teachers. This study focused on two systems that include preschool children with special needs: one that has historically invested in professional development for inclusion, Head Start, and one that training for inclusion varies by program, private programs.

### **Head Start Preschool Programs**

Head Start, a federally funded initiative, was developed in 1965 to provide preschool and other social services to low-income children and their families. Since 1972, Head Start programs have been required to reserve 10% of their enrollment for children with special needs. Head Start programming is based on income eligibility and programming is not available in every community; however, in 2008, the U.S. Department of Health and Human Services reported that 16% of all preschool aged children identified as having a qualified disability were served though

Head Start programming in the 2007-2008 school year. That roughly translates to 114,102 children nationwide attending Head Start programs.

Head Start has created a number of supports for successful inclusion including infrastructure, training resources, coordination with parents, and partnerships with other community services (Brekken & Corso, 2009). The office of Head Start developed the Head Start Center for Inclusion, which provides tools and training materials for teachers to support quality inclusion of children with special needs in their classrooms. According to the Head Start Center for Inclusion (n.d.), each month Head Start personnel are provided with information and tools on specific topics to support inclusive practices in the classroom. The multi-modal resources are designed to provide an in-depth look at topics in 15 minutes through PowerPoint presentations, research briefs, tools for teachers and coordinators, and video clips. Additionally, the organization maintains an online library of resources for teachers and families. Head Start has a long history of inclusion of children with special needs in typically developing classrooms and serves as a model for creating high-quality early childhood education programming (Brekken & Corso, 2009).

### **Private Preschool Programs**

Private preschool programming varies by school and is offered in a variety of settings. Some preschools are very structured and have a clear pedagogy while others allow children to dictate activities for the day.

Private programs include but are not limited to curricular approaches such as Waldorf, High/Scope, Bank Street, Montessori, and Emilio Reggio; they may be non-profit, for-profit or other non-government agencies. Each program has a unique philosophy and caters to the needs of young learners.

Private schools are subjected to compliance with Title III of the American with Disabilities Act (ADA) and cannot exclude children with special needs unless they pose a health or safety risk for themselves or other children in the school. All programs must make reasonable modifications to integrate a child and his or her family into the program unless by doing so, it would create a fundamental alteration in programming (Americans with Disabilities, 1990). In spite of the ADA requirement to accept children with special needs in private programming, training for teachers varies depending on program and the teacher's experience.

### **Teachers' Beliefs about Education and Learning**

Researchers have determined that teachers develop their pedagogy based on their beliefs of how children learn and their interactions with students, which are directly affected by their ability to construct theories of how the minds of these students work (Olson & Bruner, 1989). Research conducted on teachers' beliefs and classroom practices concluded that beliefs are constructed through a combination of experience, values, and ideologies (Garner & Alexander, 1994; Stoiber et al., 1998); and these beliefs are directly linked to educational practices (Anders & Evans, 1994).

*The Handbook of Research on Teaching* (Powell & Beard, 1986) included a vast review of literature that established a link between teachers' beliefs and their actions. That review summarized over 100 studies to support the claim that teachers' thought processes encompass their theories and beliefs about learning. Additionally, Powell and Beard's (1986) review of the literature showed that K-12 general education teacher attitudes towards students affected student achievement. Clark and Peterson (1986) and Powell and Beard (1984) conducted studies in

general education classrooms, but few studies have looked at early childhood education teachers with respect to their attitudes towards students with special needs (Smith & Shepard, 1988) and even fewer at early childhood inclusive settings (Lieber et al., 1998). In fact, little empirical effort has been invested in evaluating and describing teachers' practices related to their beliefs about educating children with special needs in inclusive settings (Brinker, 1995). Research that has looked into early childhood inclusion, however, has found that similar to the work done with general education teachers, a variety of factors such as beliefs about inclusion, school policy, and supports for inclusion influence the teacher's acceptance of inclusion (The National Professional Development Center on Inclusion, 2007).

### **Teachers' Beliefs about Inclusion**

While researchers have explored teacher's beliefs about inclusive practices in K-12 settings, little work has been done in the area of early childhood settings (Peck et al., 1993). This lack of research is surprising since we know from studies that teachers' attitudes and beliefs about inclusion have had a considerable influence on determining placement of children in inclusive settings (Odom & McEvoy, 1990). Accordingly, what a teacher believes about inclusion is subject to his or her belief of how inclusion should be implemented and how he or she constructs expectations for children with special needs. The "how inclusion must be implemented" refers to how the teacher understands the term *inclusion* and the "expectations for children with special needs" refers to whether the teacher believes that children with special needs can have a meaningful learning experience in an inclusive environment. Thus, a teacher's belief about inclusion affects how children with special needs are educated (Lieber et al., 1998).

These decisions influence teaching processes in the classroom, which have an effect on outcomes for children with special needs in regular education classrooms (Schommer, 1994) and, specifically, on how inclusion is implemented (Stoiber et al., 1998). As previously stated, there are examples in the literature of how teachers construct their beliefs about educating children with special needs in the classroom; however, few studies have looked specifically at preschool teachers' beliefs about inclusion (Smith & Shepard, 1988).

Eiserman, Shisler, and Healey (1995) used qualitative research methods to investigate teachers' and directors' attitudes towards inclusion. Children in the classrooms were diagnosed with a variety of disabilities, and the measure investigated the teachers' perceived supports for educating these children. The researchers surveyed 220 preschool service providers, in both public and private programs in the Pensacola, FL area, who normally did not serve children with special needs. Each respondent was asked to fill out the Attitudes towards Mainstreaming Scale – Revised. This 18-item Likert scale instrument was developed to assess teachers' attitudes about mainstreaming children with disabilities in regular classrooms. Surveys were distributed to the directors and teachers along with a letter describing the study and consent forms.

The results of the study indicated that the overall belief was that *some* children with special needs should be included in regular education classrooms. Those children who had been diagnosed with mild disabilities were thought to have the potential to be successful when educated with their non-disabled peers. Students who had moderate disabilities, like intellectual disabilities and behavioral disorders, were seen as less likely to succeed; and those diagnosed with severe disabilities, such as autism and multiple disabilities, received the fewest favorable responses when respondents were asked if these children should be included. The results of the

Eiserman et al. (1995) study corroborated previous studies that reported that attitudes about inclusion differed based on the child's disability (Siegel, 1992).

Respondents were also asked about their perceived ability to serve children with special needs in their classrooms. (It should be noted that at the time of the study, no formal inclusion strategies had been developed at any of the settings in which the respondents resided.) Similar to the results about beliefs, specifically that *some* children should be included, teachers felt that they would be better equipped to educate children with mild disabilities as opposed to those with more severe disabilities. In addition, their perceived ability to serve children with needs was contingent on changes to their present practices. They reported a need for additional resources including access to materials and consultation with specially trained educators. As a result, the link between the providers' beliefs and perceived abilities signified that there needs to be a balance between how they feel they should teach and what they perceive themselves able to do. If they do not agree with the philosophy of inclusion, they may view it as unsustainable or demonstrate frustration at not being able to provide the services needed. These findings underscored the importance of aligning the teacher's belief systems with the spirit of inclusion in order to ensure that students in inclusive settings will receive differentiated teaching to meet their individual needs (Eiserman et al., 1995).

Stoiber, Gettinger, and Goetz (1998) developed their own scale for investigating the beliefs about early childhood inclusion called *My Thinking about Inclusion*. This 28-item comprehensive measure is composed of three subscales: *core perspectives*—beliefs that permeate one's perception of a concept (Alvermann & Commeryas, 1994); *expected outcomes*—beliefs that permeate perceptions and influence educational practices and outcomes (Ames & Ames, 1989; Schommer, 1994); and *classroom practices*—the impact on classroom life and instructional practices. Participants were recruited from 10 early childhood education programs serving both children with and without special needs in Wisconsin. The respondents included teachers (both regular and special educators), paraprofessionals, and support personnel (e.g., speech pathologists or administrators). Stoiber et al. (1998) concluded that related to inclusion, beliefs "are formed by practitioners on the basis of their personal experience and, more importantly, are used to develop expectations about how a child might function in a classroom or about the outcomes of inclusion" (p. 109). Furthermore, the authors argued that the individuals' beliefs about inclusion may determine how inclusion is implemented.

The results of the study revealed that both the special and general education teachers held more positive beliefs about inclusion than the paraprofessionals. The authors suggested that this result might be linked to the amount of education, training, and years of experience each group possessed. Teachers who had earned Master's degrees, participated in more training, and/or had been teaching longer had more positive thoughts about inclusion than did their peers with a high school degree, limited training to support children with special needs, and/or were novice teachers.

Similar to the Eiserman et al. (1995) study, respondents in the Stoiber et al. study (1998) indicated that those with mild disabilities, such as speech and language delays and or mild cognitive disabilities, would likely succeed in inclusive settings whereas those diagnosed with autism or challenging behaviors would need more accommodations to succeed in the same setting. When considering including the latter group into their classes, practitioners felt that they would be less prepared to accommodate these students well in their program. Moreover, the investigators "found repeated evidence that education and experience affect the ways individuals think about inclusion" (Stoiber et al., 1998, p. 77).



Lieber et al. (1998) reported similar results in their study, which extended beyond the beliefs of the teachers to explore how these beliefs were enacted in the classroom. Part of a larger study directed by the Early Childhood Research Institute on Inclusion (Odom, 2002), researchers examined inclusive settings in rural, suburban, and urban settings across the United States (Lieber et al., 1998). Twenty-nine teachers were observed in 23 classrooms in 14 different programs. Many of the teachers had a college degree in education or a related field and reported that they had considerable experience teaching young children.

Researchers observed teachers in their classroom for periods of 6 to 24 weeks and collected qualitative and quantitative data on students, teachers, and staff. Teachers' beliefs about inclusion were collected through field journals, interviews, and observations; results of the study identified three major themes about inclusion.

The first theme fell under the *definition of inclusion*. Based on the responses of the teachers interviewed, Lieber et al. (1998) concluded, "The predominant belief was that inclusion meant that everybody was a member of the group" (p. 93). All students were seen as an equal part of the whole group. This was demonstrated by activities that had all students doing the same activity during the same part of the day. Where the teachers differed was in their belief of how the children learned from the activities. In one group, the teachers taught the same thing to all of the students and reported that students would take from the activity what they could. If the child with a disability could not keep up with the rest of the class, he or she would be removed to complete an easier task. In this "melting pot" view of how children learn, group activities were not adapted to meet the individual needs of the student. There was an expectation that all children should fit into a predetermined way of learning, and if they did not fit this mold, it was not the responsibility of the teacher to accommodate that. The other group of teachers, when faced with a student who could not keep up with the class, adapted the activities so that all students with different ability levels could participate in the activity. In this more "pluralistic" model, teachers reported that they believed that there was more than one way to do something. The difference in teaching methods was determined by the teacher based on his or her belief about how a child should learn.

The second and third themes explored the benefits of inclusion on *typically developing* (theme 2) and *atypically developing* (theme 3) students (Lieber et al., 1998). Although the teachers all felt that inclusion gave both groups of students the opportunity to learn about human differences, the manner in which they addressed these differences varied considerably. Some teachers explicitly pointed out the differences in the students with disabilities whereas others ignored these differences until a student asked a question about someone. Some teachers used the specific disability as an opportunity to learn more about other people whereas others believed that it was better to minimize these differences in an effort to demonstrate that different or not we are all people.

Another finding (Lieber et al., 1998) illustrated teachers' beliefs about how students with disabilities benefited from inclusive services. There was agreement among all of the respondents that children with special needs would acquire skills by interacting with more competent peers. The methods in which this was enacted, however, varied dramatically. This was demonstrated in the ways that teachers facilitated interactions. In one set of classrooms, the teachers did not encourage contact between children with and without disabilities because access to the same environment met the needs of inclusion. Teachers on the other end of the spectrum, however, felt that pairing typical and atypical children in all activities met the inclusion criteria. Lieber et al.

(1998) discovered that these beliefs were formed early in the teachers' professional experience and were unlikely to change even when presented with opposing information.

### **Training and Supports for Inclusion**

In addition to the teachers' beliefs about inclusion, another set of research measures looked at the supports for inclusion. Research shows that in order to provide high-quality inclusion, teachers, specialists, and parents must collaborate (Brekken, 2009).

Werts, Wolery, Snyder, and Caldwell (1996) published a study that identified the crucial supports needed to include students with substantial disabilities in general education classrooms. Surveys were sent to 2100 kindergarten through sixth-grade elementary teachers to identify their perceptions of needing supports and resources for including students with special needs in their classroom. The respondents were separated into three groups: those who had no students with disabilities, those with some students with mild disabilities, and those with some students with severe disabilities. Based on the surveys administered to this national sample of teachers, the researchers found that the majority agreed that training, access to specialists, and help in the classroom were needed for successful inclusion of children with special needs and that these needs were related to the severity of the disability.

The National Professional Development Center on Inclusion (2011) developed a report titled "Research Synthesis Points on Quality Inclusive Practices," which identified models of collaboration: technical assistance, consultation, coaching, mentoring, collaborative problem solving, and communities of professional learning communities. Included in this report was an article by Sherridan, Welch, and Orme (1996) that summarized the findings of collaboration research from 1985-1995. In addition to looking at specific questions about the amount of research conducted in this area over the decade and the common methodology, the authors investigated the research about teacher outcomes through collaboration and teaming. Articles were selected both by the team and a computer that searched online databases and yielded a sample of 292 articles on consultation or collaboration. Nearly three-fourths of the studies examined reported that students of teachers who participated in collaborative efforts had more positive outcomes (i.e., positive social and academic outcomes). Additionally, these teachers reported that they needed more support, both in materials and consultation with specialists. While collaboration with other professionals proved to benefit teacher outcomes, it is important to identify other supports for teachers who instruct students with special needs in traditional classrooms.

Buysse, Wesley, and Keyes (1998) of the Frank Porter Graham Center at the University of North Carolina, Chapel Hill conducted a study to better understand the supports and barriers associated with early childhood inclusion. Their sample included 201 early education and intervention professionals (ranging from administrators to special education teachers) and 287 parents of children with special needs. All participants were assessed through *Barriers and Supports to Early Childhood Inclusion*, a rating scale that investigates 34 barriers that could inhibit the implementation of inclusive services. Participants were first asked to define *inclusion* and then rate the degree to which the items represented on the measure represented a barrier to inclusion based on their beliefs. Despite the limitations to the sample (results might not be generalizable nationally and a low survey return rate), the study's results yielded an understanding that program quality, community resources, and coordination of services seemed to be the strongest barriers to inclusion. The first finding suggested that classroom facilities, class size, teacher-to-child ratio, and teacher training discourage enrolling children with special needs

in typical classrooms. The second factor indicated that limited community resources made inclusion challenging. The next factor described service coordination and integration as a challenge for inclusion. The final factor noted the philosophical differences in beliefs about inclusion between general and special education teachers. The researchers reported that background variables, such as race, education, and employment status, contributed to barriers to accessing support for inclusion. Parents with higher education, parents employed part time, and White parents reported more barriers to inclusion than parents with less education, parents unemployed or employed full time, and African American parents. While the authors could not explain the difference in perception by race, one explanation about the difference in education levels suggests that parents with more education were more aware of the resources for inclusion and may have encountered more barriers in finding appropriate placements for their child. Additionally parents who were employed part time reported that logistics (transportation and finances) affected access to inclusive programming. Overall, parents of children in inclusive environments reported more supports for inclusion than parents of children in segregated classrooms.

Educators who participated in the study also showed differences in perceptions for inclusion support. The researchers found that administrators reported lower barriers to and higher supports for inclusion compared to service providers. This finding could reflect the difference between coordinating and administering services.

### **Perceptions about Teaching Children with Special Needs**

Teachers who believe that their ability to affect change is limited by external factors, such as a child's disability, usually have less motivation to find more effective teaching techniques (Ashton & Webb, 1986; DiBella-McCarthy, McDaniel, & Miller, 1995). In an effort to improve educational experiences for children with special needs, the State of Delaware developed a comprehensive system of personnel development (Buell et al., 1999). Buell et al. (1999) surveyed 289 general and special education teachers in the state to understand teachers' perception of their ability to positively affect students in inclusive settings. The authors explored the K-12 teachers' understandings of inclusion and had the teachers rate their efficacy in teaching this population. In all measures, the results showed that teacher training was linked to the teachers' ability to work with children with special needs since their level of efficacy was closely related to the pre-service training that they had received. Since this was one state's needs assessment, designed to help the Delaware Department of Education tailor its personal preparation program, it is important to look at other studies that have yielded similar results.

Buysse, Wesley, Keyes, and Bailey (1996) discovered that a teacher's sense of efficacy was directly linked to the severity of the child's disability. In a study that interviewed 52 general education early childhood teachers serving children with special needs, the researchers used two measures to assess the attitudes of the teachers teaching in inclusive environments. The first was a detailed interview to assess the teacher's comfort level with educating an individual child with special needs. The second measure was a rating scale to determine the teacher's beliefs about the benefits and drawback to inclusion. The study included teachers who averaged 10 years teaching experience and were currently teaching students with diagnosed disabilities. Each of the teachers had access to a special education consultant. The teachers' educational backgrounds varied from a high school diploma to a Master's degree. Two-thirds of the people in the sample were Caucasian and the remainder were African American subjects. After analyzing the results of the interview and rating scale, Buysse et al. (1996) found that the

teacher's comfort level in teaching children in an inclusive classroom diminished when the child had profound disabilities in the areas of muscle tone and of behavior. Further studies by Buysse et al. (1998) confirmed that a teacher's perception of his or her ability to educate a child with special needs is directly tied to the child's functioning level, perceived support, and training. One interesting finding by Buysse et al. (1998) was that teachers with higher levels of education (i.e., college degrees) were less comfortable serving children with special needs than those with an associate's degree or high school education.

**Skills and knowledge of meeting the needs of the special learner.** Although the literature on inclusion indicates that the majority of general education teachers support inclusion and believe that inclusion benefits students with disabilities (Hallahan & Kaufman, 2003), Singh (2006) argued that pre-service training is essential to prepare teachers to work with elementary children with special needs. In a study that provided 22 elementary general education teachers with an Introduction to Special Education class, the author administered pre- and posttests that investigated teachers' perceived readiness to educate children with special needs. After comparing the results of both tests, the researchers found that in the posttest, 80% of the teachers felt prepared to educate children with mild disabilities compared to only a small number in the pre-test. While the findings in this study may not generalize to preschool teachers' perceptions of preparedness, the findings are significant in supporting training for educators.

In a study in England, Sadler (2002) determined that several factors influenced the inclusion of children with special needs. Eighty-nine preschool (aged 3-5) inclusion teachers participated in this 3-year study to determine their knowledge, attitudes, and beliefs about treating children with moderate to severe language impairments. Seventy percent of the teachers had taught children with special needs prior to the study, and all were required to complete the questionnaire each of the three years they participated in the study. Ninety percent of the teachers reported no special training to prepare them to teach a special learner. At the time of the study, none of the teachers felt "very confident" about teaching children in this population. The teachers received support and training through the study, both from the intervention and from notes from the student's previous teachers. As a result, the primary finding indicated that teachers who taught students who had speech and language delays possessed positive attitudes about inclusion. Even though they did not have speech and language training, they reported that they were able to learn how to interact with the children through hands-on experience and books.

Similarly, Lieber et al. (2000) reported that teachers learned how to work with children with special needs more effectively when they visited other programs practicing inclusion. Although not a major finding for the study, the authors reported that teachers did not learn through formal structured programming but rather through informal observations of peers who were including children with special needs. The teachers in the study were able to see how their peers interacted with students and then applied those techniques in their own classrooms.

### **Summary**

A substantial body of literature shows that teachers' beliefs about teaching and learning influence student outcomes. In addition there is an understanding that that supports for inclusive practices affects how teachers' implement inclusion in the classroom. While these

two areas are well defined, no one has looked at these two areas together, specifically around preschool inclusion. Although inclusion of students with special needs in early childhood settings has been occurring for over 40 years, the definition of inclusion is not universal. Similarly, while the benefits of inclusion are clear, the interpretation of preschool inclusion is not. One possible cause is that early childhood educators are not always required to complete special education training. Another reason is that how teachers construct their beliefs about inclusion is tied to their experience with children with special needs, and their own values and ideologies. Lastly, teachers' beliefs about inclusion are tied to their ability to affect change. If they believe that they are not equipped to meet the needs of a special learner, they may have less motivation to find more effective teaching techniques. Supports also play a role in preschool inclusion. Studies show the benefits of collaboration between teacher, parents, specialists, and administrators.

## CHAPTER 3

### METHOD

To identify connections between early childhood educators' beliefs about inclusion of children with disabilities in their classrooms and the supports that they receive, I surveyed both private and Head Start preschool teachers in the Greater San Francisco Bay Area. The intent of the study was to better understand the teachers' views about inclusion, identify the supports they receive in the programs in which they teach, and determine if there was a connection between the teachers' beliefs and the received supports, such as pre-service and in-service training.

Through a quantitative correlational design, I explored the connection between beliefs about, experience with, and supports for inclusion. I used the *My Thinking about Inclusion Scale* (MTAI; Stoiber et al., 1998) to score the teachers' overall beliefs about inclusion. Variables for experience were derived from demographic questions (years teaching early childhood education, highest education level, special needs training, and number of children with special needs in the class) as well as questions about training they received that pertained to special education and specific disabilities in their students from the *Quality of Inclusive Experiences Measure* (QIEM; Wolery, Pauca, Brashers, & Grant, 2000). Questions from the QIEM were also used to analyze the level of support that the teachers received. These questions asked about support from the administration, specialists, and additional adults in the classroom.

To determine if there was a difference between beliefs about and support for inclusion between the Head Start and private preschool groups, I conducted a review based on the answer to the questions on both the MTAI and QIEM. These two groups had been selected because the majority of preschool-aged children in California are educated in one of these two types of programs.

Through this analysis, I conducted *t*-tests and ANOVAs to discover any differences between the two types of programs. First, I compared the overall beliefs about inclusion taken from the 28 Likert-scale questions on the MTAI. Next, I ran a correlation and an ANOVA to see if there was an association between groups and the training that they received (demographic and QIEM) and supports for inclusion (QIEM) and their beliefs about inclusion (MTAI). Last, I ran a MANOVA to investigate the level of significance between groups on their beliefs about inclusion (MTAI) and the overall quality of their programs as determined by the QIEM.

#### Recruitment

For recruitment of the Head Start teachers, I consulted the Head Start Agency Roster for California for the contact information of administrators in each county. Emails containing an overview of the program (Appendix A) were sent to 45 grantees. Despite multiple attempts to contact the administrators, 17 counties did not reply to the request to participate. Thirteen program administrators declined to participate. Of those 13 programs, one administrator explained that her teachers only taught during the harvest season to migrant students and they would not be working during the data collection phase of the study. Three other administrators explained that their teachers were involved in other studies, and one center had had a reorganization of their staff and did not want to take on any additional obligations. The remaining eight Head Start programs declined and did not provide a reason.

As a result, 15 program administrators agreed to distribute surveys to their teachers and provide them with the opportunity to participate voluntarily in the study. Administrators either

consented to provide contact information for their staff or agreed to forward an email or flyer that explained the study. Six of the county administrators provided email addresses for their staff totaling 64 teachers, while three additional county programs provided their directors' email addresses. In these three counties, 24 directors were contacted through the survey tool and asked to forward the link to the survey to all of their teachers. Those who were sent an invitation from the survey tool to participate were emailed a brief description of the study (Appendix A) and given a link to access the survey. Reminders to participants were sent to the teachers monthly for five months. The remaining six program administrators who agreed to pass on the survey information were sent a copy of the study flyer (Appendix B). The directors agreed to print out the flyer and distribute the survey information to their teachers.

Reminders were sent to the administrators every other month three times to increase teacher participation. One administrator conveyed that her staff did not have a good response rate when surveys were sent electronically, so paper copies were printed and distributed to her staff. Over half (17) of those surveys were returned completed. As a result, 113 people associated with Head Start accessed the survey while 94 Head Start teachers completed it and 9 partially completed it (up to question 36).

In an effort to match geographic areas, private preschools were selected and invited to complete the survey after the Head Start program in their county agreed to participate. Preschool administrators were identified using the California Childcare Resource and Referral Network. Email invitations were sent directly from the survey tool to 447 private preschool administrators. One school opted out of the study, and the addresses for 67 programs were undeliverable. After the initial emails were sent to recruit participants, reminder emails were sent to the private preschool administrators monthly for five months asking them to complete the survey. The final response yielded 128 responses to the survey from private preschool teachers with 93 completed surveys and 22 partially completing the survey (up to question 36).

**Participants.** Early childhood education teachers for children aged 3-5 years who were teaching within 100 miles of the Greater San Francisco Bay Area were sent invitations to participate in this study via email or they were sent a link to the survey through their administrator. Invitations were sent to 447 private preschool programs and 45 Head Start grantees. Many of the private schools only had one teacher; however, some counties had up to 60 Head Start teachers. Because the survey was sent through email, it is unclear how many teachers were actually contacted.

The selected geographic region includes urban, suburban, and rural settings; and their programs serve children and their families who come from a wide variety of ethnic and socioeconomic groups. Due to the confidential structure of the survey reporting, I was unable to capture specific ethnic (percentage of students in specific ethnic groups), socioeconomic (household income level, education, and occupation), and geographic (percentage of respondents from rural, urban, or suburban settings) statistics because I do not know which schools are actually represented in this sampling.

Participants were recruited from either Head Start or private preschools. Head Start teachers were specifically targeted because of the federal and legislative support the program receives for children with diagnosed disabilities. The second group, private preschool teachers, was selected because private schools serve a majority of preschool children. They may be independent organizations such as co-ops or religious and neighborhood schools; they may or may not follow a structured curriculum and philosophies in programs such as Montessori, Reggio Emilia, or Waldorf.

The survey tool was sent via email to teachers within the identified geographic area. Although close to 500 programs were contacted about the survey, the response rate was difficult to calculate because I did not receive confirmation that the emails were opened and viewed. Of the 492 email addresses that were sent the invitation, 72 emails bounced and two programs elected not to participate. Additionally, 17 Head Start programs did not respond to the invitation to participate and 13 administrators were not interested in participating.

A total of 187 people completed the entire survey, and 31 additional respondents completed the full MTAI measure (questions 9-36) portion of the survey so that those data could be used in comparing the beliefs about inclusion in the two groups (Head Start and private programs). The final sample included 115 private preschool teachers and 103 Head Start teachers, for a total of 218 teachers; 93 private and 94 Head Start teachers completed the entire survey, for a total of 187 completed surveys.

While the demographic data of teacher characteristics were not used in answering my research questions, it is important to understand the differences and similarities of the two sample groups. Table 1 includes information about age, gender, and ethnicity of the teachers.

The ages of the teachers in both samples ranged from younger than 20 to older than 60. The samples were similar except that more Head Start teachers were in the 40-49 year range whereas more of the private school teachers were in the 30-39 year range. Additionally 97% of the total sample was female; the Head Start group had one male and the private group had five males who responded to the survey. Respondents were asked to report their identified ethnicity. Overall the Head Start and private school groups were similar; however, the Head Start group had more Asian teachers and the private schools had more White teachers.



Table 1

*Teachers' Personal Demographics*

	<b>Head Start</b>	<b>Private</b>	<b>Total</b>
	(n =103)	(n =115)	(n =218)
	Frequency (%)	Frequency (%)	Frequency (%)
<b>Age</b>			
<20-29 years old	14 (14%)	13 (11%)	27 (12%)
30-39 years old	18 (17%)	38 (33%)	56 (26%)
40-49 years old	35 (34%)	21 (18%)	56 (26%)
50-59 years old	29 (28%)	28 (24%)	57 (26%)
60+ years old	7 (7%)	15 (13%)	22 (10%)
<b>Gender</b>			
Male	1 (1%)	5 (4%)	6 (3%)
Female	102 (99%)	110 (96%)	212 (97%)
<b>Ethnicity</b>			
White	24 (23%)	46 (40%)	70 (32%)
Black	9 (9%)	4 (3%)	13 (6%)
Hispanic (any race)	13 (13%)	10 (9%)	23 (11%)
Asian (any race)	24 (23%)	6 (5%)	30 (14%)
American Indian	1 (1%)	0 (0%)	1 (.5%)
2 or more races	30 (29%)	42 (37%)	72 (33%)
Declined to answer	2 (2%)	7 (6%)	9 (4%)

Table 2 shows the professional demographic experience including highest degree completed, number of courses completed in special education, years teaching in early childhood educational centers, and percentage of children with special needs in their classroom. The majority of teachers in this study (48%) reported holding a bachelor's degree while the next highest group (33%) had completed post-bachelor's coursework. Of the Head Start group, 63% had completed their bachelor's degree and 24% had done post-bachelor's study. Of the private group, 37% had a bachelor's degree and 42% had done post-bachelor's study.

Teachers were next asked to indicate the number of courses in special education that they had completed. The question was designed to be broad enough to include anything considered special education training. Of the total sample, 73% reported that they had had training in fewer than two special needs classes. Similarly, 83% of private preschool teachers reported fewer than two special needs classes. While the "fewer-than-two" group was the highest for Head Start teachers with 63%, 23% reported that they had had 3-5 courses in special education compared to 10% of the private group.

The majority of all teachers (71%) reported that they had had more than nine years teaching in early childhood centers. Head Start teachers reported that 78% of the respondents had over nine years teaching early childhood compared to 66% of private preschool teachers reporting over nine years of early childhood education experience. Private school respondents indicated that 23% of the teachers had between six and eight years teaching in early childhood education settings compared to 10% of Head Start respondents.

Of the total sample, 50% indicated that less than 10% of the children in their classroom (averaged over three years) had special needs. More Head Start teachers reported having between 10- 20% of children with special needs in their class (55%) compared to 23% of the private teachers.

Table 2

*Teachers' Professional Demographics*

	<b>Head Start</b> (n =103)	<b>Private</b> (n =115)	<b>Total</b> (n =218)
	Frequency %	Frequency %	Frequency %
<b>Highest level of education completed</b>			
High school/some college	16 (16%)	25 (22%)	41 (19%)
Bachelor's	63 (61%)	42 (37%)	105 (48%)
Post-bachelor's	24 (23%)	48 (42%)	72 (33%)
<b>Special needs training (college level) number of courses</b>			
<1-2	64 (62%)	96 (83%)	160 (73%)
3-5	24 (23%)	11 (10%)	35 (16%)
6-8	5 (5%)	1 (1%)	6 (3%)
>9	10 (10%)	7 (6%)	17 (8%)
<b>Years of early childhood experience</b>			
<1-2 years	6 (6%)	5 (4%)	11 (5%)
3-5 years	9 (9%)	11 (10%)	20 (9%)
6-8 years	10 (10%)	23 (20%)	33 (15%)
>9 years	78 (76%)	76 (66%)	154 (71%)
<b>Percentage of students with special needs in classroom (average per year in the last three years)</b>			
<10%	27 (26%)	82 (71%)	109 (50%)
10-20%	57 (55%)	27 (23%)	84 (39%)
21-30%	13 (13%)	3 (3%)	16 (7%)
31-40%	3 (3%)	1 (1%)	4 (2%)
40-50%	2 (2%)	1 (1%)	3 (1%)
>51%	1 (1%)	1 (1%)	2 (1%)

## Research Design

This study used an online tool to anonymously survey the preschool teachers on their beliefs about educating children with special needs in early childhood education programs. Using the online survey method allowed me to gather a large sample of teachers across a broad geographic region. The survey was purposely designed to elicit anonymous responses so teachers could answer the questions about their beliefs without judgment. By structuring the survey to require that all questions be answered, teachers were not able to skip questions, which resulted in fewer missing data.

## Data Collection and Procedures

Teachers received an email invitation to participate, were given the flyer or link by their administrator, or were sent a paper copy of the survey. The survey was designed to be completed in 20 minutes. At the end of the survey, the teachers were given directions to claim their gift card for participation.

The online survey tool collected and stored the data from the surveys. Once the data collection cycle ended, all of the data were exported from the survey tool to an Excel spreadsheet. Survey data with less than 37 questions answered were deleted, and the remaining data were copied and pasted into STATA for analyses.

**Descriptive demographic data.** Chi-square analyses were conducted to determine if there were significant differences between the Head Start and the private preschool teachers with respect to their years of education, percentage of children in their classes with special needs, and years of experience. Differences between groups were noted. Table 3 details the results of the analysis. There were significant differences between Head Start and private preschool teachers in regards to *Highest Level of Education* ( $X^2=1.56$   $p<0.01$ ), *Special Needs Training* ( $X^2=13.81$   $p<0.05$ ), and *Percentage of Children with Special Needs in Classroom* ( $X^2=45.53$   $p<0.000$ ). After calculating *Years of Early Childhood Experience*, it was determined that this factor was not significant ( $X^2=4.79$   $p=0.19$ ). Overall, private preschool teachers reported higher levels of education completed, fewer courses in special education taken, and fewer students with special needs in their classroom.

Table 3

*Demographic Chi-Square*

	Head Start Frequency %	Private Frequency %	Chi-Square
<b>Highest level of education Completed</b>			
High school/some college	16 (16%)	25 (22%)	13.56**
Bachelor's	63 (61%)	42 (37%)	
Post-bachelor's	24 (23%)	48 (42%)	
<b>Special needs training (college level) number of courses</b>			
<1-2	64 (62%)	96 (83%)	15.81*
3-5	24 (23%)	11 (10%)	
6-8	5 (5%)	1 (1%)	
>9	10 (10%)	7 (6%)	
<b>Percentage of students with special needs in classroom (average per year in the last three years)</b>			
<10%	27 (26%)	82 (71%)	45.53***
10-20%	57 (55%)	27 (23%)	
21-30%	13 (13%)	3 (3%)	
31-40%	3 (3%)	1 (1%)	
40-50%	2 (2%)	1 (1%)	
>51%	1 (1%)	1 (1%)	

Note: Numbers represent the actual teachers in the sample: ^p< 0.10 \*p< 0.05, \*\*p< 0.01, \*\*\*p< 0.000

**Independent Variables**

When comparing the Head Start and private preschool teachers' beliefs about inclusion, the number of special needs training classes was the independent variable. For the remaining research questions, I used the QIEM (Wolery et al., 2000) as the independent variable to explore the overall quality, as defined by the QIEM, of programs and the self-reported supports and training that the teachers received to facilitate inclusion in their classroom.

The QIEM was developed to provide a comprehensive assessment of inclusion in individual classrooms. It is composed of seven sub-scales: (1) program goals and purpose, (2) staff supports and perceptions, (3) accessibility and adequacy of the physical environment, (4) participation and engagement, (5) individualization, (6) adult-child contacts and relationships, and (7) child-child contacts and interactions. This study used two scales from the QIEM: (a) program goals and purposes (attitude of the school toward inclusion), and (b) staff supports and perceptions (support for teaching staff). The standardized scales were administered via questionnaire as part of the larger instrument. In this scale, scores for program goals and classroom support were calculated based on responses in the following areas: training and staff development, general supports, teaming/specialists, family support, and in-class help. The QIEM measure is intended to be used in combination with other measures of program quality and calls

for further research to validate its use as an inclusive program quality measure (Odom et al., 2011).

### **Dependent Variables**

As dependent variables, the teachers' beliefs about inclusion were measured using the 28-item comprehensive measure, *My Thinking about Inclusion* scale (Stoiber et al., 1998). The measure comprises three subsections that reflect the belief domains related to inclusion based on a comprehensive review of the literature about inclusion: core perspectives, expected outcomes, and classroom practices.

*Core perspectives* (Stoiber et al., 1998), the idea that beliefs permeate our perception of a concept, is grounded in research that highlights the importance of favorable beliefs about inclusion as a link to successfully including children with special needs in typically developing classrooms (Odom & McEvoy, 1990). This subscale measures an individual's values relating to educating all children (Eiserman et al., 1995) and focuses on the concept that children with diagnosed disabilities have the right to be educated with their typically developing peers.

*Expected outcomes* (Stoiber et al., 1998) extends the idea that beliefs permeate perceptions by exploring how these beliefs influence educational practices and outcomes (Ames & Ames, 1989; Schommer, 1994). Research on student outcomes has shown that positive teacher expectations are linked to higher student achievement (Schommer, 1994).

*Classroom practices* (Stoiber et al., 1998), the impact on classroom life and instructional practices, was developed to investigate beliefs concerning early childhood inclusion. Research has shown that beliefs about how children learn determine the way teachers respond to children, how they design their classroom, and how they adapt materials to support varying learning styles (Anders & Evans, 1994). The dimension of classroom practices attempts to explain how inclusion affects day-to-day decisions in inclusive classrooms.

The authors of the MTAI (Stoiber et al., 1998) reported that the total belief scale and the three subscales were examined for internal consistency using Cronbach's alpha. The total scale had an internal consistency of .91; core perspectives, .80; expected outcomes, .85; and classroom practices, .64.

### **Early Childhood Educator Study Survey**

The 68-question Early Childhood Educator Study survey (Appendix C) was constructed from the MTAI and QIEM tools and edited for this study, with additional demographic questions added. The first section asked 8 demographic multiple-choice questions, the second section contained 28 5-point Likert scale questions, and the final section included 32 multiple-answer questions.

In the first section, participants were instructed to answer eight demographic questions composed of two subsets: personal demographics and professional demographics. The personal demographics questions focused on the personal characteristics of each participant: age, ethnicity, and gender. For age and gender, participants selected the best answer (i.e., male or female). For the question about ethnicity, teachers were instructed to select all that apply. The other five questions asked about professional characteristics: highest level of education completed, years of teaching, number of special education classes completed, percentage of children with special needs in their classroom, and the type of program (i.e., Head Start or private) that they worked for. The teachers could only select one answer per question. In the next section, about beliefs, participants were asked to complete the 28-question MTAI survey. They were instructed to indicate their degree of agreement for statements using a 5-point scale (1 =

strongly accept, 2 = agree, 3 = undecided/neutral, 4 = disagree, and 5 = strongly reject). However, 13 of the questions were reversed scored (2, 3, 7, 8, 9, 14, 15, 19, 22, 23, 25, 26, and 28); as a result, the 5-point scale needed to be reversed (1=strongly reject to 5=strongly accept). Upon completion, answers were averaged, and each participant was assigned an overall score rating his or her beliefs about inclusion.

The last section of the instrument was composed of 32 multiple-answer questions taken verbatim from the QIEM (Wolery et al., 2000). While the complete QIEM tool has interview, survey, and observation sections for both the administration and teachers, only the teacher survey was used in this study. As a result, the scores are proportional to the ratings identified by Wolery et al. (2000), the authors. Within the teacher survey, the program goals and purpose section consists of 7 questions, answers are assigned points ranging from 0 to 5, and scores can range from 3 to 35. In general, the higher the score, the greater the likelihood that the program's organization and commitment to inclusive services are high. Scores of 25 or higher probably indicates high quality in program organization and focus. Scores of 17 or less indicates the program is in significant need of improvement as it relates to the program's organization and focus. The staff support and perceptions answers in this section are assigned values between 0 and 5 and scores can range from 18 to 150; generally, the higher the score, the higher the quality of staff supports and their perceptions. Scores of 130 or greater represent a high degree of staff supports whereas scores of 60 or below represent a low degree of staff supports. Each completed survey was assigned sub-scores for questions 1-7 and 8-32 and an overall score for all 32 questions. No work has been done to establish the reliability or validity of these sections as work on the QIEM has not continued and is only available from the authors as an unpublished manuscript.

## CHAPTER 4

### RESULTS

In this chapter I will discuss the findings of the study. Overall teachers' beliefs about inclusion are positive however differences do exist on certain measures. Additionally there was a significant relationship between beliefs and quality of supports, beliefs and training, and beliefs and general supports.

#### Research Questions

1. Are there differences between Head Start and private preschool teachers' beliefs about educating children with special needs in early childhood education settings?
2. Is there an association between an early educator's beliefs about inclusion and the reported quality of inclusion by program type?
3. Is there an association between early educators' beliefs about inclusion and the training they received?
4. Is there an association between early educators' beliefs about inclusion and the general supports they received?

#### Comparison of Teachers' Beliefs about Inclusion

To answer the first question, measuring the teachers' beliefs about including children with special needs in classrooms with typically developing peers, the *My Thinking about Inclusion* (MTAI) scale (Stoiber et al., 1998) was completed by all respondents in both the Head Start and private preschool groups. The mean for the complete MTAI by population by groups can be found in Table 4.

Table 4

#### *Inclusion Beliefs Survey Mean*

---

Survey Question	Combined Mean	Head Start Mean	Private Mean
Total MTAI Ave	2.40	2.35	2.43

---

Using the average MTAI score and program type, a two-sample *t*-test with equal variance was conducted to determine if there was a relationship between the teachers' beliefs score by program. The mean MTAI average score for Head Start was 2.57, and the mean average score for private school teachers was 2.64. Results show that there was no significant difference on the MTAI between groups (See Table 5).

Table 5

*Average Score on the MTAI*

		Head Start (n = 103)	Private (n = 115)	<i>t</i>	df	p-value
MTAI Total	Mean	2.57	2.64	-1.20	216	0.23(ns)
	SD	0.41	0.39			

In an effort to determine if differences existed between groups in specific areas, analyses of sub-scales in the MTAI scale were conducted by program. As described earlier, Stoiber et al. (1998) constructed the MTAI to investigate three subscales: core perspectives, expected outcomes, and classroom practice.

The core perspective subscale consists of 12 questions that ask about the respondents' beliefs about educating children with disabilities in typically developing classrooms. Scores were averaged based on the 5-point Likert scale. Initially, the factorability of the 12 core perspective items was examined. Principal component analysis was used because the primary purpose was to identify and compute composite scores for the factors underlying the core perspectives section of the MTAI tool.

The eigenvalues showed that the first factor accounted for 34% of the variance, the second factor 11% of the variance, the third factor 9% of the variance, and the fourth factor 8% of the variance. The fifth and sixth factors accounted for 7% of the variance, the seventh factor explained 6% of the variance, and the eighth and ninth factors explained 5% of the variance. The tenth factor explained 4% of the variance, the eleventh factor explained 3% of the variance, and the twelfth factor explained 2% of the variance. The results indicated that the items in this subscale were intercorrelated (see Table 6).



Table 6

*Principal Components Correlation: Core Perspectives*

Principal components/correlation	Number of observations	=	218	
	Number of comparatives.	=	12	
Rotation: (unrotated = principal)	Rho	=	1.0000	
-----				
Component	Eigenvalue	Difference	Proportion	Cumulative
-----				
Comp1	4.35564	2.98365	0.3350	0.3350
Comp2	1.37199	.202331	0.1055	0.4406
Comp3	1.16966	.103878	0.0900	0.5306
Comp4	1.06578	.104903	0.0820	0.6125
Comp5	.960877	.0877299	0.0739	0.6865
Comp6	.873147	.0882603	0.0672	0.7536
Comp7	.784887	.124857	0.0604	0.8140
Comp8	.660029	.0592306	0.0508	0.8648
Comp9	.600799	.119425	0.0462	0.9110
Comp10	.481374	.129432	0.0370	0.9480
Comp11	.351942	.0280622	0.0271	0.9751
Comp12	.32388	.32388	0.0249	1.0000

Next, to determine if there was a difference between groups based on the average core perspective score, two-sided *t*-test with equal variances was conducted. The Head Start teachers had a mean of 2.57 and the private school teachers had a mean of 2.59. A complete list of means by survey question can be found in Table 7.

Table 7

*Inclusion Beliefs Survey Mean: Core Perspectives*

Survey Question	Combined		Head Start		Private		t
	Mean	SD	Mean	SD	Mean	SD	
<b>Core Perspectives</b>	<b>2.58</b>	<b>0.50</b>	<b>2.57</b>	<b>0.50</b>	<b>2.59</b>	<b>0.51</b>	<b>-0.38(ns)</b>
1) Students with special needs have the right to be educated in the same classroom as typically developing students.	1.83	0.80	1.71	0.72	1.95	0.86	-2.21*
2) Inclusion is a desirable practice for educating most typically developing students.	2.17	0.97	1.71	1.00	1.95	0.94	0.14(ns)
3) It is not difficult to maintain order in a classroom that contains a mix of children with exceptional education needs and children with average abilities.	3.00	1.15	3.00	1.15	3.01	1.14	-0.06(ns)
4) Children with exceptional education needs should be given every opportunity to function in an integrated classroom.	1.83	0.74	1.79	0.71	1.88	0.77	-0.91(ns)
5) Inclusion can be beneficial for parents of children with exceptional education needs.	1.89	0.78	1.80	0.80	1.97	0.75	-1.69*
6) Parents of children with exceptional needs prefer to have their child placed in an inclusive classroom setting.	2.48	0.91	2.54	0.93	2.42	0.89	1.03(ns)
7) Most special education teachers do not lack an appropriate knowledge base to educate typically developing students effectively.	2.61	0.98	2.53	1.06	2.67	0.91	-1.02(ns)
8) The individual needs of children with disabilities CAN be addressed adequately by a regular education teacher.	3.14	1.14	3.10	1.10	3.18	1.19	-0.55(ns)
9) We do not need to learn more about the effects of inclusive classrooms before inclusive classrooms take place on a large scale basis.	3.68	1.00	3.75	1.08	3.63	1.94	0.89(ns)
10) The best way to begin educating children in inclusive settings is just to do it.	2.99	1.05	3.06	0.99	2.93	1.11	0.90(ns)
11) Most children with exceptional needs are well behaved in integrated education classrooms.	3.14	0.80	3.12	0.87	3.17	0.75	-0.45(ns)
12) It is feasible to teach children with average abilities and exceptional needs in the same classroom.	2.21	0.89	2.25	0.90	2.17	0.87	0.65(ns)

†p< 0.10 \*p<0.05 \*\*p<0.01 \*\*\*p<0.00

While two of the questions indicated that the results were significant at  $p<0.05$ , overall there were no significant differences between groups on the average MTAI subscale (Table 8). Of the two questions where significance was determined, both indicated that the Head Start teachers reported more positive beliefs about the rights of children to be educated with their typically developing peers and the benefits for parents and children with special needs when those children are included.

Table 8

*Core Perspective Average Subscale*

		Head Start (n = 103)	Private (n = 115)	t	df	p-value
Core	Mean	2.57	2.59	-0.38	216	0.70(ns)
	SD	0.50	0.51			

The expected outcomes subscale consisted of 11 questions that explored teachers' beliefs about how they feel inclusion will affect children with disabilities educated in typically developing classrooms. A principal components analysis was used because the primary purpose was to identify and compute composite scores for the factors underlying the expected outcomes section of the MTAI instrument (see Table 9).

Table 9

*Principal Components Correlation: Expected Outcomes*

Principal components/correlation	Number of observations = 218 Number of comp. = 11			
Rotation: (unrotated = principal)	Rho = 1.0000			
Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	4.07169	2.58425	0.3702	0.3702
Comp2	1.48744	.509378	0.1352	0.5054
Comp3	.97806	.190958	0.0889	0.5943
Comp4	.787102	.0511614	0.0716	0.6658
Comp5	.735941	.0944185	0.0669	0.7327
Comp6	.641522	.0489345	0.0583	0.7911
Comp7	.592588	.042603	0.0539	0.8449
Comp8	.549985	.11357	0.0500	0.8949
Comp9	.436415	.0447863	0.0397	0.9346
Comp10	.391628	.0639986	0.0356	0.9702
Comp11	.32763		0.0298	1.0000

The eigenvalues showed that the first three factors accounted for 37%, 13%, and 9% of the variance, respectively. The fourth and fifth factor accounted for 7% of the variance; the sixth factor accounted for 6% of the variance and the seventh and eighth accounted for 5% of the variance. The ninth and tenth factors accounted for 4% of the variance; the eleventh factor accounted for 3% of the variance (table 9).

These results indicated that 9 of the 11 items in this subscale were intercorrelated with one another with factor loaders below 0.35, while the two behavior items with factor loaders +0.50 behaved somewhat independently in component 2. As a result, I removed the two questions about behavior and totaled the remaining questions for an alternate subscale. A complete list of questions in the alternate subscale can be found in Table 10.

Table 10

*Inclusion Beliefs Survey Mean: Alternate Expected Outcomes*

Survey Question	Combined Mean SD	Head Start Mean SD	Private Mean SD	t
<b>Expected Outcomes (w/o behavior)</b>	<b>2.23 0.50</b>	<b>2.13 0.50</b>	<b>2.33 0.48</b>	<b>-3.05***</b>
13) Inclusion is socially advantageous for students with special needs.	1.89 0.74	1.77 0.74	1.99 0.73	-2.24*
14) Children with special needs will probably not develop academic skills more rapidly in a special, separate classroom than in an integrated classroom.	2.76 0.99	2.65 1.00	2.89 0.97	-1.76 †
15) Children with exceptional needs are not likely to be isolated by typically developing students in inclusive classrooms.	2.53 0.91	2.33 0.88	2.71 0.90	-3.18***
16) The presence of children with exceptional education needs promotes acceptance of individual difference on the part of typically developing students.	1.76 0.65	1.73 0.65	1.78 0.66	-0.62(ns)
17) Inclusion promotes social independence among children with special needs.	1.95 0.68	1.86 0.70	2.03 0.66	-1.85 †
18) Inclusion promotes self-esteem among children with special needs.	2.09 0.77	1.96 0.78	2.21 0.74	-2.40*
20) Children with special needs in inclusive classrooms develop a better self-concept than in a self-contained classroom.	2.39 0.78	2.30 0.83	2.47 0.73	-1.60(ns)
21) The challenge of a regular education classroom promotes academic growth among children with exceptional education needs.	2.43 0.77	2.20 0.77	2.63 0.72	-4.27***
22) Isolation in a special class does have a negative effect on the social and emotional development of students prior to middle school.	2.29 0.85	2.34 0.90	2.25 0.79	0.76(ns)

Notes: † $p < 0.10$  \* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.00$

To determine if there was a difference between groups based on the alternate expected outcome subscale, I ran a two-sided  $t$ -test with equal variances. Scores were averaged based on the 5-point Likert scale. The Head Start teachers reported a mean score of 2.13 compared to the private preschool teacher's mean score of 2.33. A complete list of means by question can be found in Table 11. The output indicated that there is a significant difference between the beliefs on this sub-scale and program type ( $p < .01$ ). Head Start teachers (mean = 2.13) reported higher expected outcomes for their students with special needs than the private school teachers (mean = 2.33) (Table 11).

Table 11

*Alternate Expected Outcomes Subscale*

		Head Start (n = 103)	Private (n = 115)	t	df	p-value
Alternate Expected Outcome	Mean	2.13	2.33	-3.05	216	0.00***
	SD	0.50	0.48			

Overall expected outcomes for children with special needs in inclusive environments was significant at  $p < 0.00$ . Head Start teachers agreed that students with special needs will benefit from challenges in regular education classrooms and that children with special needs will not be isolated in inclusive environments. They also conveyed, at a  $p < 0.05$  level of significance, that inclusion is socially advantageous and that it promotes self-esteem for children with special needs. Lastly, at a  $p < 0.01$  level of significance, Head Start teachers indicated more positive beliefs that children with special needs are not likely to be socially isolated in inclusive classrooms and that their presence there will promote social independence.

Next I ran a two-sided  $t$ -test with equal variances on the two behavior questions that were identified as in the principal components analysis. The scores for the question were added together and then averaged. The means for these two questions can be seen in Table 12. While the answers to these two questions were the only time the average score of private preschool teachers' average score was more favorable towards inclusion than the answers of the Head Start teachers, it was not significant.

Table 12

*Inclusion Beliefs Survey Mean: Expected Outcomes Behavior*

Survey Question	Combined		Head Start		Private		t
	Mean	SD	Mean	SD	Mean	SD	
<b>Expected Outcomes (w/o behavior)</b>	<b>2.61</b>	<b>0.83</b>	<b>2.63</b>	<b>0.94</b>	<b>2.60</b>	<b>0.73</b>	<b>0.19(ns)</b>
19) Children with exceptional needs are not likely to exhibit more challenging behaviors in an integrated classroom setting.	2.97	0.97	2.98	1.07	2.96	0.87	0.18(ns)
23) Typically developing students in inclusive classrooms are not more likely to exhibit challenging behaviors learned from children with special needs.	2.26	0.95	2.27	1.02	2.25	0.89	0.15(ns)

† $p < 0.10$  \* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.00$

To compare the outcomes of the alternate expected outcomes scores to the un-altered expected outcomes scores, I re-ran the  $t$ -test with equal variances for all 11 items in the expected outcomes subscale. The output indicated a significant difference between the beliefs on this subscale and program type ( $p < 0.01$ ). Head Start teachers (mean = 2.22) reported higher expected

outcomes for their students with special needs than the private school teachers (mean = 2.38) (Table 13). While the complete expected outcomes score was significant at  $p < 0.01$ , the output showed that by removing the two behavior questions, the alternate expected outcomes score was significant at  $p < 0.00$ .

Table 13

*Expected Outcomes Average Subscale*

		Head Start (n = 103)	Private (n = 115)	t	df	p-value
Expected	Mean	2.22	2.38	-2.45	216	0.01**
	SD	0.50	0.48			

In the last MTAI subscale, five questions make up the classroom practices section of the tool. The dimension of the classroom practices questions looked at how inclusion affects day-to-day decisions in inclusive classrooms. A principal components analysis was used because the primary purpose was to identify and compute composite scores for the factors underlying the expected outcome section of the MTAI tool (see Table 15).

The eigenvalues showed that the first factor explained 47% of the variance. The second and third factors explained 18% and 14% of the variance respectively, and the final two factors combined explained 19% of the variance. The results indicated that the items in this subscale were intercorrelated with one another (Table 14).

Table 14

*Principal Components Correlation: Classroom Practices*

<b>Practices</b>				
Principal components/correlation		Number of observations = 218		
Rotation: (unrotated = principal)		Number of comp. = 5		
		Rho = 1.0000		
Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	2.34952	1.43716	0.4699	0.4699
Comp2	.912365	.178181	0.1825	0.6524
Comp3	.734184	.150701	0.1468	0.7992
Comp4	.583483	.163037	0.1167	0.9159
Comp5	.420446	.	0.0841	1.0000

Next, to determine if there was a difference between groups based on average classroom practices score, I ran a two-sided *t*-test with equal variances. The Head Start group of teachers had mean scores of 3.35 and the private school teachers had a mean of 3.30. A complete list of

means by question can be found in Table 15. There was no significant difference on the classroom practices subscale between the two groups of teachers.

While the overall MTAI scores for both groups indicated that participants reported slightly favorable (below 3 on the Likert scale) beliefs towards inclusion, there was not a difference in beliefs between groups using the overall score. Only the expected outcomes subscale showed any significant difference between groups, with the Head Start teachers reporting lower scores on this measure. In Chapter 5, I discuss the implications for these results; however, my initial analysis provides some evidence that for the MTAI tool, Head Start teachers believe that students with special needs who are educated with their typically developing peers will have better outcomes as a result of their placement.

Table 15

*Inclusion Beliefs Survey Mean: Classroom Practices*

Survey Question	Combined Mean	SD	Head Start Mean	SD	Private Mean	SD	t
<b>Classroom Practices</b>	<b>3.32</b>	<b>0.49</b>	<b>3.35</b>	<b>0.53</b>	<b>3.30</b>	<b>0.45</b>	<b>0.79(ns)</b>
24) Children with exceptional needs monopolize teachers' time.	2.79	1.04	2.84	1.12	2.75	0.96	0.69(ns)
25) The behaviors of students with special needs do not require significantly more teacher-directed attention than those of typically developing children.	3.81	0.81	3.88	0.83	3.74	0.78	1.32(ns)
26) Parents of children with exceptional education needs require more supportive services from teachers than parents of typically developing children.	3.56	1.03	3.54	1.13	3.57	0.95	-0.15(ns)
27) Parents of children with exceptional needs present no greater challenge for a classroom teacher than do parents of a regular education student.	3.07	1.02	3.06	1.06	3.09	0.99	-0.21(ns)
28) A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the children with special needs.	3.37	1.05	3.41	1.09	3.34	1.03	0.48(ns)

†p < 0.10 \*p < 0.05 \*\*p < 0.01 \*\*\*p < 0.00

### Beliefs about and Reported Quality of Supports for Inclusion

The second research question sought to understand the association between teachers' beliefs about inclusion and the reported quality of inclusion in their setting. The QIEM (Wolery et al., 2000) was developed to assess the quality of support for inclusion through a process of interviews, observations, and a survey. For the purpose of this study, I chose to use a portion of the survey consisting of 37 questions that measure teacher training, general supports, and in-class help scores. The complete survey also included a five-question section on teaming with families; however, I decided to eliminate those questions because they were not relevant to this study. Possible scores ranged from 8 to 150 with higher scores indicating a greater perception of quality for inclusion. Scores over 108 represent a high degree of reported quality for inclusion whereas scores of 50 or below represent a low degree of reported quality of inclusion.

For this analysis, the total QIEM and MTAI scores were used to determine a relationship between teachers' beliefs about inclusion and the reported quality. A Pearson's product correlation was conducted, and the results showed a significant relationship between perceived quality of inclusion and teachers' beliefs about educating children with special needs in early education classrooms ( $p < 0.00$ ). Teachers in self-reported high-quality programs also had more favorable beliefs about including children with special needs in their classrooms.

To see if there was a difference by program type and the total QIEM score, a two-sample *t*-test with equal variance was conducted on a relationship between the teachers' beliefs score by program. The mean QIEM total score for Head Start was 85.39 and the mean average score for private school teachers was 75.42 (Table 16). Results show that there is a significant ( $p < 0.00$ ) difference on the QIEM between groups. The QIEM total score can be found in Table 16.

Table 16

#### *Quality of Inclusive Educational Measure t-Test*

		Head Start (n = 94)	Private (n = 93)	<i>t</i>	df	p-value
QIEM Total	Mean	85.39	75.42	3.22	185	0.00***
	SD	19.09	23.03			

Next, I ran a regression using MTAI as the outcome variable and both the QIEM and program type as the predictor variables. Results indicated an association between the teachers' beliefs about inclusion and the reported perception of quality ( $t = -4.90, p < 0.00***$ ). When adding program type, there were no significant ( $t = -.22, p = 0.83ns$ ) differences between groups. While there was no added effect of program type, and since perception did differ, this regression result suggests that there is a differing view of quality that accounts for between-program differences.

### Beliefs about Inclusion and Training

The third research question was designed to see if there was a relationship between a teacher's belief about inclusion and the amount of training he or she received for working with children with special needs. For this question, two different analyses were conducted using two different measures. While the results cannot be compared, the analysis helps understand how a



teacher's beliefs may or may not be tied to the number of college classes completed and additional professional development after college.

To see if there was a relationship between beliefs and the number of college classes completed (pre-service training), the teachers were asked to report the number of classes about educating children with special needs they had completed. Categories included <1-2, 3-5, 6-8 and >9 classes on special needs (see Table 17).

Table 17

*Teachers' Special Needs Training*

	<b>Head Start</b> (n = 103)	<b>Private</b> (n = 115)	<b>Total</b> (n = 218)
	Frequency %	Frequency %	Frequency %
<b>Special needs training (college level) number of courses</b>			
<1-2	64 (62%)	96 (83%)	160 (73%)
3-5	24 (23%)	11 (10%)	35 (16%)
6-8	5 (5%)	1 (1%)	6 (3%)
>9	10 (10%)	7 (6%)	17 (8%)

Overall, 73% of the sample reported two or fewer college-level special needs training classes. Head Start teachers, however, reported having completed twice as many special education classes (in the 3-5 range) compared to private school teachers. A chi square analysis found that the differences between programs were significant ( $p < .003^{**}$ ) (see Table 18).

Table 18

*Chi Square Special Needs Training*

Number of Special Needs Courses	Head Start	Private School	Total
Less than or equal to 2	64	96	160
3-5	24	11	35
6-8	5	1	6
9 or more	10	7	17
Total	103	115	218

Pearson chi2 (3) = 13.8059 Pr = 0.003

Next, I ran a regression to see if teachers' beliefs about inclusion were associated with the number of classes completed by program type (Head Start vs. private). Results indicated that there was not a significant relationship between the number of classes completed and teachers' beliefs ( $t=-0.86$ ,  $p=0.39ns$ ) about inclusion. While the two tests showed that Head Start teachers had more training, there was not a significant relationship between the number of classes and their scores on the MTAI ( $t=1.02$ ,  $p=0.31ns$ ). While training overall didn't make a difference in beliefs, certain elements of training did.

The second set of questions explored the teachers' reported training (in-service) and was extracted from the QIEM tool. However, to answer this research question, only questions 8-11 (training) on the QIEM were included. These training questions were:

- On which of the following topics have your classroom staff received training related to general topics of special education and disability?
- On which of the following does your staff need additional training?
- On which of the following topics have your classrooms staff received training for their child(ren) with disabilities?
- Which of the following best describes the amount of training/staff development your classroom staff have received for the child(ren) with disabilities in their class?

Participants were asked to mark all that applied, and questions were scored according to the responses. Scores could range between 1 and 20 on each question, and higher scores indicated more training. A Pearson's product correlation determined that there was a significant relationship ( $p=0.00$ ) between the scores on the MTAI and the scores on the QIEM questions 8-11 (training). Positive scores on the MTAI were associated with more training.

The last step in this analysis looked at the relationship between teachers' beliefs about inclusion, the amount of in-service training reported, and program type. A simple linear regression was run using the complete MTAI as the dependent variable and training questions from the QIEM and program type as the independent variables. The results (Table 19) indicated that there was a significant relationship ( $t=-5.35$ ,  $p<.000***$ ) between the types of training and beliefs about inclusion; however, when program type was added to the regression, the results were not significant ( $t=0.39$ ,  $p=0.69$ ).

Table 19

*MTAI QIEM Training Program Regression*

		<i>t</i>	p-value
MTAI Ave	Training	-5.35	0.000***
	Program	0.39	0.69

**Relationship between Supports for and Beliefs about Inclusion**

The final research question sought to understand if there is a relationship between teachers' beliefs about inclusion and the supports that they receive for inclusion. For this question, I used the complete MTAI score with questions 12-16 on the QIEM to see if there was an association between the beliefs score and general supports. "General supports" questions included how much support classroom staff receive, how much help classroom staff get if they have a problem with a child with disabilities in their class, and the amount of appropriate materials the classroom staff have for the child(ren) with disabilities in their classes. Responses

ranged from “not at all” to the “right amount of help,” and numerical scores were assigned based on the answer selected.

A Pearson’s product correlation indicated that there was a significant relationship ( $p=0.000^{***}$ ) between the MTAI scores and questions 12-16 on the QIEM. Teachers who reported more favorable beliefs about inclusion also reported significantly more supports for inclusion.

Next, I wanted to determine if there was a difference between groups. A simple linear regression was conducted using the MTAI average scores as the dependent variable and the QIEM questions 12-16 and program type as the independent variables. Significant results indicated that the teacher’s beliefs were tied to support ( $t = -5.32, p<0.000^{***}$ ). While the output suggested that program type was approaching significant levels ( $t = 1.89, p= 0.06$ ), it could not be determined that there was a difference between the Head Start and private preschool teachers’ beliefs about and support for inclusion.

Table 20

*MTAI QIEM Support Program Regression*

		<i>t</i>	p-value
MTAI Ave	Support	-5.32	0.000***
	Program	1.89	0.06 †

**Summary**

The intent of this study was to see if there were differences between those with positive beliefs about inclusion and the supports that they receive. Using the MTAI scale, the teachers surveyed for this study reported that children with special needs could be included in traditional classrooms. Between groups, only the expected outcomes for these students had a significant difference. Head Start teachers reported more favorable expected outcomes for included children.

Next I looked at the quality of supports for inclusion (via the QIEM), which included training and general support (i.e., people and materials). There was a significant relationship between beliefs and quality of supports, beliefs and training, and beliefs and general supports. While Head Start teachers reported having attended more special education classes, only the reported training they received yielded significantly different beliefs compared to the private school teachers with similar training.

## CHAPTER 5

### DISCUSSION

Outcomes for children with special needs included in traditional general education classrooms are influenced by both teachers' beliefs about inclusion (Bailey & Winton, 1987) and the supports teachers receive for that inclusion (Buell et al., 1999). In spite of these two well-researched areas of study, little work had previously been done to investigate links between preschool teachers' beliefs about and support for inclusion (Peck et al., 1993 Smith & Shepard, 1988).

This study investigated a connection between early childhood education teachers' beliefs about including children with special needs in their classrooms and the training and supports that they received to help facilitate that inclusion. The goals of this study were to investigate differences between Head Start and private preschool teachers' beliefs about including children with special needs in general education classrooms, determine if there is an association between teachers' beliefs about inclusion and the reported quality of inclusive practices by program, identify any differences between teachers' beliefs about inclusion and the training that they received, and discover the possible association between educators' beliefs about inclusion and their general received supports.

Findings indicated no significant difference between Head Start and private preschool teachers' beliefs about including young children with special needs in their classrooms. While overall the beliefs indicated that both groups are favorable to inclusion, only the expected outcomes subscale identified differences between groups. The Head Start teachers reported that they expected students with special needs to have better outcomes than the private preschool teachers did. These Head Start teachers indicated that the presence of students with special needs would promote social independence in those students because they would not be socially isolated. Conversely, the private preschool teachers reported that students with special needs in inclusive classrooms were likely to exhibit more challenging behaviors and their peers were likely to learn challenging behaviors from them.

In regards to the second research question, the study found that teachers with self-reported high quality of inclusion in their settings also had more favorable beliefs about inclusion. Head Start teachers had a significantly higher score for perceived quality than the private preschool teachers. Since we know that Head Start teachers have structured support for including students with special needs in their classroom, it is not surprising that they would report higher quality inclusion.

For the third research question, I looked at training received using two different measures. First I wanted to see if there was an association between beliefs about inclusion and the number of college-level special education classes teachers in the study had completed. Overall 75% of the participants reported fewer than two classes; however, the Head Start teachers reported more classes than their private school colleagues at a significant level. Next I wanted to understand if a connection could be made between teachers' beliefs and the amount of in-service training they received and their beliefs about inclusion. Overall, teachers with positive beliefs towards inclusion were associated with in-service training. This was significant by program.

With respect to the fourth research question, I looked at the beliefs about inclusion and the supports that teachers receive for inclusion. Significant results indicated that there was a

relationship between beliefs and supports, and teachers who had more favorable beliefs about inclusion had more supports for inclusion. While the supports by program type approached significance, it could not be concluded that there were differences by program.

### **Beliefs about Inclusion**

Research question number one sought to understand teachers' beliefs about educating students with special needs in general education classrooms. Findings indicated that the total mean score for teacher's beliefs about inclusion for the entire sample were favorable towards inclusion. Participants agreed or strongly agreed that children with special needs should be included with their typically developing peers. This finding is similar to other studies that have also reported positive beliefs about inclusion. However, most other studies that have looked at teacher's beliefs found that the teachers were influenced by the nature of the disability (Eiserman et al., 1995; Siegel, 1992) and that teachers believed that inclusion is good for some children and not for others. My survey did not ask respondents to indicate their experience with or the severity of disability but rather asked them to report on their overall feelings about including children with special needs in typically developing classrooms.

With the most of the respondents reporting that they agreed that children with special needs should be included in general education classrooms, this result is optimistic for children with special needs and advocates for inclusive practices. Positive beliefs about inclusion may influence how teachers construct expectations for success, which leads to positive outcomes (Lieber et al., 1998; Powell & Beard, 1984; Schommer, 1994). Since Head Start teachers have access to the Head Start Center for Inclusion and private teachers are not necessarily required to attend ongoing seminars about inclusion, it was hypothesized that the Head Start teachers would have more positive beliefs about including children with special needs in their classrooms. While the overall results indicated no difference between groups, we may assume that these positive beliefs were constructed through a combination of experience, values, and ideologies (Stoiber et al., 1998).

Looking closely at the subscales, we also see that there was not a significant difference between groups for two of these scales: Should students with special needs be included in general education classrooms (core perspectives) and how children with special needs affect classroom management (classroom practices). A principal components analysis was conducted to see if components of the scale could explain the null hypothesis. Results, however, indicated that all of the questions in each subscale were tightly intercorrelated. While it is encouraging that the mean for all of the teachers was positive, I am intrigued by the fact that there was not a difference between groups. One could assume that the factors influencing the belief structure of these teachers comes from external sources; however, more information is needed to fully understand the outcomes. One possibility is that those teachers who think that inclusion is not good for children with special needs or are neutral to inclusion simply did not choose to fill out the survey. Another thought is that teachers who do not understand what inclusion means also did not choose to fill out the survey. The fourth option is that there might not be differences between groups. In addition to the work that advocates and researchers have done in the area of inclusion, some preschool teachers teach that everyone is special no matter how different they are. In addition to the moral component that inclusion brings, some children with special needs are not drastically different from their typically developing peers. Since I did not ask qualitative types of questions, it is difficult to know why there is not a difference between groups. Additional limitations to the sample are discussed below.

Significant differences between groups were evident in the responses to questions that addressed the expected outcomes for children with special needs educated in general education classrooms. Teachers from the Head Start programs reported significantly more favorable beliefs about outcomes for those students than did the teachers from the private programs. In an attempt to explain the difference between groups, it is important to reference literature about beliefs that indicate that teachers' beliefs are influenced by experience with children with special needs. Teachers who have had positive experiences with children with special needs often report more favorable views about inclusion (Buysse et al., 1996). Head Start teachers reported a significantly higher occurrence of children with special needs in their classroom, averaged over the last three years, than their private school colleagues.

A principal components analysis was conducted for this subscale and found that two questions about behavior were correlated, and the other nine questions in this section were intercorrelated. Questions about positive outcomes for children in included settings yielded significant differences between the groups in the areas of isolation, social and academic outcomes. The Head Start teachers reported significantly that students with special needs experience less isolation in inclusive classrooms and higher academic and social growth than the private school teachers. The only two questions where the private school teachers had slightly more favorable beliefs for inclusion were the two questions about behavior and these differences were not significant.

Head Start teachers historically have more experience working with students with special needs and this study corroborates that finding. Coupled with the literature that constructing beliefs about educating children are tied to the teachers' experiences, values, and ideologies (Stolber et al., 1998), it is not surprising that these teachers reported more positive outcomes for children with special needs in inclusion classrooms.

### **Beliefs about Inclusion and Quality of Inclusive Practices**

In research question number two, I attempted to determine an association between positive beliefs about inclusion and the quality of the inclusive program. The QIEM total score was composed of questions that addressed training, supports and collaboration with team members. As reported in the literature, quality programs are composed of these three components (Brekken & Corso, 2009). When paired with the MTAI, significant results indicated that teachers in self-reported high-quality inclusion programs also had more favorable beliefs about inclusion. Not surprisingly, Head Start teachers reported that the quality of their programs was significantly higher. The next two questions investigated these results to see how much training (both pre and in-service) and supports influenced the program quality.

### **Training and Beliefs about Inclusion**

Research question number three examined links between special education training and beliefs about inclusion. Head Start teachers reported attending more college-level special education classes than their private preschool colleagues. Despite this finding, there was not a significant relationship between the number of classes and scores on the MTAI. In the original study by Stoiber and colleagues (1998) using the MTAI scale, teachers with higher degrees and more classes on educating students with special needs reported more positive beliefs about inclusion. Additionally, the literature on pre-service training indicated that teachers need more classes to better prepare them for teaching students with special needs (Singh, 2006). Since this

study did not yield the same results, additional research is needed to determine the quality of the pre-service training and the number of classes needed to generate significant results.

The second part of this question looked at the training teachers received after they started teaching. While the research on training indicates that teachers learn more through informal observations than through formal trainings (Lieber et al., 2000), the results denoted that for this study, teachers with more in-service training had more positive beliefs about inclusion. While this finding was significant, there was no difference between the Head Start and the private preschool teacher samples. Whereas training was not significant, certain aspects of the training were and a follow-up qualitative study may be needed to determine the quality of training that affects more positive beliefs about inclusion.

### **Supports and Beliefs about Inclusion**

Prior to conducting this research, I hypothesized that there would be a correlation on the varying levels of support for early educators with their beliefs about including children with special needs in general education classrooms. Question number four addressed this hypothesis and determined that there is a significant relationship between beliefs about inclusion and the supports that teachers receive. Although the results approached significance, it could not conclusively be determined that there was a difference in the supports between the two sample groups. Qualitative research needs to be conducted to determine the most effective types of support for both Head Start and private preschool teachers.

Even though Head Start teachers reported significantly higher quality on the QIEM, neither the training nor supports scores indicated significant differences between the groups. The explanation for this anomaly is the one area that was not analyzed for this study. Quality programs are tied to teaming with specialists, colleagues, and parents (The National Professional Development Center on Inclusion, 2011). These questions were not factored into the supports score mainly because some respondents failed to answer the entire survey. When looking at the ability to collaborate with team members, however, Head Start teachers reported that they have more access to quality specialists than the private school teachers reported. This again is not a surprising finding because Head Start has a supportive infrastructure for collaboration and teaming (Brekken & Corso, 2009) compared to private schools that may be isolated and unable to collaborate with specialists at their facility. A follow-up study that looks specifically at access to quality supports and collaboration with teachers and their beliefs about inclusion is needed to draw conclusions from this finding.

### **Limitations**

My research had several limitations. The following discussion examines the limitations of the current study pertaining to the sample, including composition and size and the measures.

#### **Sample**

This study had several limitations in regards to sample size and composition. First, there was a moderate response rate with 37% (17 out of 45) of the Head Start programs in the geographic area agreeing to participate in the study. Only some of the counties gave me the email addresses of their teachers. As a result 30% of the Head Start teachers were contacted anonymously and the other 70% were forwarded a link from their administrators. Other counties posted flyers for teachers who were interested in participating. Consequently, the response rate

was difficult to calculate because I was uncertain of the number of teachers who were contacted for participation.

The sample is also not representative of the San Francisco Bay area. Because of the timing of data collection, teachers of migrant students were not sampled because these schools only operate during the harvest. In addition one county has an overrepresentation (20 teachers) of Head Start respondents. The administrator informed me that her teachers would not fill out electronic surveys so paper versions were dropped off at the county office. Since this was the largest Head Start program in the region, I only dropped off enough surveys for half of the teachers. Over 50% of the surveys were returned representing one quarter of the teachers in this area. While this is not the highest return rate for counties (one county returned 100% with 6 teachers), this region had the most respondents. Although this county is varied by demographics, it is not representative of the entire region. To yield a higher response rate in the future, teachers should be given a choice to fill out the survey either electronically or in paper form.

In an attempt to pair private school teachers in the same region as the Head Start teachers, I only contacted private school teachers in the areas where I received approval from the local Head Start programming. To recruit private schools, I then sent the invitation to the general email that was listed on the California Childcare Resource and Referral Network. Invitations were sent to 447 private preschool programs, but in many cases I do not know if the teachers received the invitation to participate. Of the surveys that were sent out, 25% were returned. This return rate was much lower than anticipated and because submissions were anonymous, there is no way to know if my sample is evenly matched. Future studies may consider a match sample of respondents.

## Measures

For this study I used the *My Thinking about Inclusion* scale (Stoiber et al., 1998) and the *Quality of Inclusive Educational Measures* (Wolery et al., 2000). While the MTAI tool reliability has been tested in multiple studies, the QIEM does not have the same level of reliability. Because the authors never published the tool and it was only used in three other studies, more research is needed to determine the effectiveness of the measure.

Another limitation is that I did not use the entire QIEM survey with questions about parental support. In the original Stoiber et al. study (1998), the researchers surveyed teachers as well as parents to understand to what extent the groups believed young children with special needs should be included in general education settings. To address the second part of the study, I used sections of the QIEM to calculate a perceived quality of inclusion score. For my purposes, I was only concerned with the teachers' beliefs and how that related to their perceived supports for inclusion. In retrospect, I think that having the parent section included in the QIEM (questions were removed in this study) would have added an additional level of support that teachers in the field rely on. The literature on supports for inclusion specifically acknowledges the importance of collaboration between teachers, specialists, and parents to provide quality inclusive services (Brekken and Corso, 2009).

Another limitation was that the survey was only distributed in English. For many teachers in both the Head Start sample and private preschool sample, English is not their first language. Had the survey been distributed in Spanish, Vietnamese, and Mandarin Chinese, I feel that the response rate would have been higher and more representative of the region.



Additionally the use of both the questions from the MTAI and QIEM created a very long survey. The time it took participants to complete the entire measure, ranged from 20-60 minutes. Teachers are busy and may have found the time involved daunting.

The final limitation to this study is that the observational component of the QIEM was eliminated. This qualitative component was removed in order to maintain the anonymity of the sample. Future studies should include this section in order to establish the actual quality of a program and not the perceived quality as reported. Although findings from this study cannot be widely generalized, it is my hope that the results will influence the need for additional research.

### **Implications**

In order for young children both with and without special needs to succeed in inclusive classrooms, the teachers need to believe that inclusion is a good thing. Teachers must feel prepared to educate special learners and have supports in place to facilitate quality inclusion. Based on the findings from this study, the supports that a teacher receives are tied to his or her beliefs about inclusion.

Preschool administrators must consider supporting teachers and providing quality supports for inclusion to foster better outcomes for students in inclusive environments. In addition pre- and in-service training must be combined with access to specialists for collaboration.

### **Future Research**

Future research should be focused on the need for both quantitative and qualitative studies. Prospective studies should include the entire QIEM to better understand the types and quality of supports that are linked to positive beliefs about inclusion. In order to yield generalizable results, a quantitative study should be conducted with nationally representative samples. In addition, we must engage in qualitative research (e.g., open-ended interviews, or observations, assessment) in at least three areas to better understand the factors that influence this study. First, it is important to understand if the reported quality of programs matches actual quality. This may be accomplished by using the entire QIEM as designed to get a more representative sample of the overall quality of a program. In addition, a mixed methods study that looks at the scores for the MTAI and observes the teacher implementing inclusion could yield interesting results. Last, it would be interesting to identify the types and quality of pre-service training that lead to higher scores on the MTAI.

### **Summary**

This study contributes to the literature in that beliefs about preschool inclusion are tied to the supports that teachers receive for inclusive practices. Although additional studies are needed to confirm the findings, the results of this study will help to expand the literature on the needs of the profession.

## REFERENCES

- Alvermann, D. E., & Commeryas, M. (1994). Gender, text, and discussion: Expanding the possibilities. In R. Garner & P. A. Alexander (Eds.), *Beliefs about text and instruction with text* (pp. 183-199). Hillsdale, NJ: Erlbaum.
- Americans with Disabilities Act, (1990).
- Annie E. Casey Foundation. (2012). *2012 KIDS COUNT data book: State trends in child well-being*. Retrieved from <http://www.aecf.org/~media/Pubs/Initiatives/KIDS%20COUNT/123/2012KIDSCOUNTDataBook/KIDSCOUNT2012DataBookFullReport.pdf>
- Ames, C., & Ames, R. (1989). *Research on motivation in education: The classroom milieu* (Vol. 3). San Diego, CA: Academic.
- Anders, P. L., & Evans, K. S. (1994). Relationship between teachers' beliefs and their instructional practice in reading. In R. Garner & P. A. Alexander (Eds.), *Beliefs about text and instruction with text* (pp. 137-153). Hillsdale, NJ: Erlbaum.
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman.
- Bailey, D., & Winton, P. (1987). Stability and change in parents' expectations about mainstreaming. *Topics in Early Childhood Education, 7*, 73-88.
- Banjeri, M., & Dailey, R. A. (1995). A study of the effects of an inclusion for students with learning disabilities: Themes and implications for the five cases. *Journal of Learning Disabilities 28*, 511-522.
- Beckman, P., Barnwell, D., Horn, E., Hanson, M. J., Guterrez, S., & Lieber, J. (1998). Communities, families, and inclusion. *Early Childhood Research Quarterly, 13*, 125-150.
- Bernstein, S., (1993). The case for integrating children with special needs into regular preschool programs from the National Network for Child Care. In C. M. Todd, (Ed.), *Day Care Center Connections, 2*(4), 6-7. Urbana-Champaign, IL: University of Illinois Cooperative Extension Service.
- Brekken, L., & Corso, R. (2009). Head Start's commitment to serving children with disabilities and their families. *National Head Start Association Dialog, 12*(2), 2-6.
- Brinker, D. (1995). The challenge of inclusion. *Journal of Early Intervention, 19*(3), 179-194.
- Buell, M. J., Hallam, R., Gamel-McCormick, M., & Scheer, S. (1999). A survey of

- general and special education teachers' perceptions and in-service needs concerning inclusion. *International Journal of Disability, Development and Education*, 46(2), 143-156.
- Buysse, V., Wesley, P., & Keyes, L. (1998). Implementing early childhood inclusion: Barrier and support factors. *Early Childhood Research Quarterly*, 13(1), 169-184.
- Buysse, V., Wesley, P., Keyes, L., & Bailey, D. B. (1996). Assessing the comfort zone of child care teachers in serving young children with disabilities. *Journal of Early Intervention*, 20(3), 189-203.
- California Department of Education. (2010). California preschool curriculum framework (Vol. 1). Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/psframeworkkvoll1.pdf>
- Clark, C. M., & Peterson, P. L. (1986). Teacher's thought process. In M. C. Wittrock (Ed.), *Handbook of research and teaching* (3<sup>rd</sup> ed., pp. 255-296). New York: Macmillan.
- DEC/NAEYC. (2009). *Early childhood inclusion: A joint position statement of the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC)*. Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute.
- Diamond, K. E., & Hestenes, L. (1994). Preschool children's understanding of disability: Experiences leading to the elaboration of the concept of hearing loss. *Early Education and Development*, 5, 301-309.
- Diamond, K. E., & Innes, F. K. (2000). The origins of young children's attitudes toward peers with disabilities. In M. Guralnick (Ed.), *Early childhood inclusion: Focus on change* (pp. 159-177). Baltimore, MD: Brookes.
- DiBella-McCarthy, H., McDaniel, E., & Miller, R. (1995). How efficacious are you? *Teaching Exceptional Children*, 27, 68-72.
- Education for All Handicapped Children Act of 1975, 20 USC 1401 (1975).
- Education of the Handicapped Act Amendments of 1986, 100 STAT 1145 (1986)
- Education portal*. (n.d.) Retrieved from <http://educationportal.com>
- Eiserman, W. D., Shisler, L., & Healey, S. (1995). A community assessment of preschool Providers' attitudes toward inclusion. *Journal of Early Intervention*, 19(2), 149-167.
- Fukkink, R. G., & Lont, A. (2007). Does training matter? A meta-analysis and review of caregiver training studies. *Early Childhood Research Quarterly*, 22

(3): 294-311.

- Garner, R., & Alexander, P. A. (1994). *Beliefs about text and instruction with text*. Hillsdale, NJ: Erlbaum.
- Guralnick, M. J. (2001a). Social competence and early intervention. *Journal of Early Intervention, 14*, 3-14.
- Guralnick, M. J. (Ed.). (2001b). *Early childhood inclusion: Focus on change*. Baltimore, MD: Brookes.
- Guralnick, M. J., Connor, R. T., Hammond, M. A., Gottman, J. M., & Kinnish, K. (1996). Immediate effects of mainstreamed settings on the social interactions and social integration of preschool children. *American Journal of Mental Retardation, 100*, 359-377.
- Hallahan, D. P., & Kauffman, J. M. (2003). *Exceptional children: Introduction to special education* (9<sup>th</sup> ed.). Boston, MA: Allyn and Bacon.
- Head Start Act. (2007). United States Department of Health and Human Services, Early Childhood Learning and Knowledge Center. Retrieved from <http://eclkc.ohs.acf.hhs.gov/hslc>
- Head Start Center for Inclusion. (n.d.) Retrieved from <http://depts.washington.edu/hscenter/>
- Hundert, J., Mahoney, B., Mundy, F., & Vernon, M. L., (1998). A descriptive analysis of developmental and social gains of children with severe disabilities in segregated and inclusive preschools in southern Ontario. *Early Childhood Research Quarterly, 13*, 49-65.
- Hyson, M., Tomlinson, H. B., & Morris, C. A. S. (2008). Does quality of early childhood teacher preparation moderate the relationship between teacher education and children's outcomes? Paper read at the Annual Meeting of the American Education Research Association, New York City.
- Individuals with Disabilities Education Improvement Act of 2004 Title 20, § 1400 (2004).
- Individuals with Disabilities Education Act Amendments of 1991, 105 STAT 587 (1991).
- Individuals with Disabilities Education Act Amendments of 1997, 11 STAT 37 (1997).
- Kunc, N. (1992). The need to belong: Rediscovering Maslow's hierarchy of needs. *Restructuring for caring and effective education: An administrative guide to creating heterogeneous schools*. 25-40.
- Lamorey, S., & Bricker, D. D., (1993). *Integrated programs: Effects on young children*

- and their parents. In C. Peck, S. Odom, & D. Bricker, (Eds.), *Integrating young children with disabilities into community-based programs: From research to implementation* (pp. 249-269). Baltimore, MD: Brookes.
- Lieber, J., Capell, K., Sandall, S. R., Wolfberg, P., Horn, E., & Beckman, P. (1998). Inclusive preschool programs: Teacher's beliefs and practices. *Early Childhood Research Quarterly, 13*(1), 87-105.
- Lieber, J., Hanson, M. J., Beckman, P. J., Odom, S. L., Sandall, S. R., Schwartz, I. S., Wolery, R. (2000). Key influences on the initiation and implementation of inclusive preschool programs. *The Council for Exceptional Children, 67*(1), 83-98. *Journal of Early Childhood Teacher Education, 18*, 55-68.
- National Professional Development Center on Inclusion. (2007). *Research synthesis points on practices that support inclusion*. Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute, and Author. Available at <http://community.fpg.unc.edu/resources/resources/articles/NDPCI-ResearchSynthesis-9-2007.pdf>
- National Professional Development Center on Inclusion. (2011). *Research synthesis points on practices that support inclusion*. Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute, and Author. Available at [http://npdci.fpg.unc.edu/sites/npdci.fpg.unc.edu/files/resources/NPDCI-ResearchSynthesisPointsInclusivePractices-2011\\_0.pdf](http://npdci.fpg.unc.edu/sites/npdci.fpg.unc.edu/files/resources/NPDCI-ResearchSynthesisPointsInclusivePractices-2011_0.pdf)
- Odom, S. L. (2000). Preschool inclusion: What we know and where we go from here. *Topics in Early Childhood Special Education, 20*, 20-27.
- Odom, S. L. (Ed.). (2002). *Widening the circle: Including children with disabilities in preschool programs*. New York: Teachers College Press.
- Odom, S. L., & Diamond, K. A., (1998). Inclusion of young children with special needs in early childhood education: The research base. *Early Childhood Research Quarterly, 13*, 3-25.
- Odom, S. L., Horn, E. M., Marquart, J. M., Hanson, M. J., Wolfberg, P., Beckman, P... Sandall, S. (1999). On the forms of inclusion. *Journal of Early Intervention, 22*(3), 185-199.
- Odom, S. L., & McEvoy, M. A. (1990). Mainstreaming at the preschool level: Potential barriers and tasks for the field. *Topics in Early Childhood Special Education, 10*(2), 48-61.
- Odom, S. L., & Speltz, M. L. (1983). Program variations in preschools for handicapped and non-handicapped children: Mainstreamed vs. integrated special education. *Analysis and Intervention in Developmental Disabilities, 3*, 89-104.

- Okagaki, L., Diamond, K. E., Kontos, S. J., & Hestenes, L. L. (1998). Correlates of young children's interactions with classmates with disabilities. *Early Childhood Research Quarterly, 13*, 67-86.
- Olson, D. R., & Bruner, J. S. (1996). Folk psychology and folk pedagogy. In D. R. Olson & N. Torrance (Eds.), *Handbook of human development in education: New models of learning, teaching and schooling* (pp. 9-27). Oxford, UK: Blackwell.
- Peck, C. A., Carlson, P., & Helmstetter, E. (1992). Parent and teacher perceptions of outcomes for typically developing children enrolled in integrated early childhood programs: A statewide survey. *Journal of Early Intervention, 16*, 53-63.
- Peck, C. A., Furman, G. C., & Helmstetter, E. (1993). Integrated early childhood programs: Research on the implementation of change in organizational contexts. In C. Peck, S. Odom, & D. Bricker (Eds.), *Integrating young children with disabilities into community programs* (pp. 687-205). Baltimore, MD: Brookes.
- Powell, M., & Beard, J. W. (1984). *Teacher effectiveness: An annotated bibliography and guide to research*. Garland.
- Powell, M., & Beard, J. W. (1986). *Teacher attitudes*. Garland.
- Sadler, J. (2002). Knowledge, attitudes and beliefs of the mainstream teachers of children with a preschool diagnosis of speech/language impairment. *Child Language Teaching and Therapy, 21*, 147-205.
- Salend, S. (2001). *Creating inclusive classrooms: Effective and reflective practices*. Upper Saddle River, NJ: Prentice-Hall.
- Sandall, S. R., Schwartz, I. S., Joseph, G. E., Horn, E. M., Chou, H.-Y., Lieber, J.... Woley, R. (2003). *Building blocks for teaching preschoolers with special needs* (2<sup>nd</sup> ed.). Baltimore, MD: Paul Brookes.
- Schommer, M. (1994). An emerging conceptualization of epistemological beliefs and their role in learning. In R. Garner & P. A. Alexander (Eds.), *Beliefs about text and instruction with text* (pp. 25-55). Hillsdale, NJ: Erlbaum.
- Sherridan, S. M., Welch, M., & Orme, S.F. (2010). Is consultation effective? A review of outcome research. *Remedial and Special Education, 17*(6), 341-354.
- Siegel, J. (1992). *Regular education teacher's attitudes toward their mainstreamed students*. Paper presented at the Annual Convention of the Council for Exceptional Children, Baltimore, MD.
- Singh, D. K. (2006). Preparing general education teachers for inclusion. Paper presented at the Council for Exceptional Children and the second annual Technology and

- Media Division joint conference. San Diego, CA.
- Smith, M. L., & Shepard, L. A. (1998). Kindergarten readiness: A qualitative study of Teachers' beliefs and practices. *American Educational Research Journal*, 25, 307-333.
- Stoiber, K. C., Gettinger, M., & Goetz, D. (1998). Exploring factors influencing Parents' and early childhood practitioners' beliefs about inclusion. *Early Childhood Research Quarterly*, 13(1), 107-124.
- U.S. Department of Education. (2008). Thirtieth annual report to Congress on the implementation of the Individuals with Disabilities Education Act. Washington, DC: Author.
- United States Department of Labor and Statistics. (n.d.). Retrieved <http://www.bls.gov>
- University of North Carolina Frank Porter Graham Child Development Institute. (2007). Retrieved from <http://www.fpg.unc.edu>
- Wolery, M., Pauca, T., Brashers, M. S., & Grant, S. (2000). Quality of Inclusive Experiences Measure (QIEM). Unpublished manuscript.
- Werts, M. G., Wolery, M., Snyder, E. D., & Caldwell, N. K. (1996). Teachers' perception of the supports critical to the success of inclusion programs. *The Association for Persons with Severe Handicaps*, 21(1), 9-21.
- Wright, P., & Wright, P. (2009, January 2). Least restrictive environment (LRE) & FAPE. Retrieved from <http://www.wrightslaw.com>
- Zaslow, M., Tout, K., Halle, T., Whittaker, J. E., & Lavelle, B. (2010). *Toward the identification of features of effective professional development for early childhood educators: Literature review*. Washington, DC: US Department of Education.



## APPENDIX A – Study Introduction Letter

### Introduction and Purpose

My name is Lisa Wadors Verne. I am currently a graduate student in the Joint Doctoral Program in Special Education between the University of California Berkeley and San Francisco State University. My faculty advisors are Dr. Bruce Fuller in the Graduate School of Education (UC Berkeley) and Dr. Marci Hanson in the Graduate College of Education (SFSU).

### Procedures

As part of my dissertation and doctoral studies, I would like to invite your preschool teachers to participate in a survey. If you agree to have them participate in my research, I will send a link to an online survey for the participating teachers. The survey should take no more than 20 minutes for them to complete. All responses will be anonymous and the information will be used only for my study. Results will not reveal any identifying information on the respondent's identity or location.

This survey will involve questions about the teachers' core perspectives and beliefs about including children with special needs in preschool classrooms. Since the information will be submitted anonymously, I will not need to follow up with the teachers for further clarification.

### Benefits/Compensation

All teachers who complete the survey will be sent a \$10 gift card from Amazon to thank them for their time. After all survey questions have been answered, they will be forwarded an email address to claim their gift.

### Risks/Discomforts

Due to the nature of the survey, there are no known risks for participating in my study.

### Confidentiality

Data collected in this study will be stored on a secure computer. Neither survey responses nor the gift card redemption process can be linked back to individual teachers.

### Rights

*Participation in research is completely voluntary.* Teachers are free to decline to take part in the study at any time.

### Questions

If you have any questions, please contact me at 415.310.4082 or [lwadors@berkeley.edu](mailto:lwadors@berkeley.edu). If you agree to have your teachers participate in this survey, please send them the following link <http://kwiksurveys.com?u=ECETeacherStudy> or you can forward their email addresses to [BerkeleySurvey2011@gmail.com](mailto:BerkeleySurvey2011@gmail.com) and they will be contacted with the online link to the survey.

Thank you for your time and consideration,

Lisa Wadors Verne, MA  
University of California Berkeley and San Francisco State University  
Joint Doctoral Program in Special Education







APENDIX B – Study Flyer

## Head Start Lead Teachers

Hello! I am a graduate student at the University of California, Berkeley working on my dissertation, and am inviting you to participate in my study “Early Childhood Educators Beliefs about Educating Young Children.

**Eligible participants:** Head Start teachers working with children aged 3-5 who are responsible for the day-to-day activities and decision-making in the classroom.

**Commitment:** Those who decide to participate will be asked to take a 20-minute on-line survey. To access the survey you will need to log on to:

<http://kwiksurveys.com?u=ECETeacherStudy>

You will be asked to answer questions about your beliefs and supports you receive to carry out your job. All answers are anonymous and you can decide to decline at any time.

**Compensation:** Those who complete the survey will be given instructions on how to redeem their \$10 gift card as a thank you for your participation.

I thank you in advance for your consideration in participating in this study. If you have any questions please feel free to contact me at [BerkeleySurvey2011@gmail.com](mailto:BerkeleySurvey2011@gmail.com).

Lisa

**APPENDIX C – Survey Tool**

**Early Childhood Educator’s Beliefs about Inclusion and Perceived Supports Survey  
Demographics**

1. Highest education level completed:	High school	High school and some college	Bachelors	Post Bachelors			
2. Years of early childhood experience:	<1-2y	3-5y	5-8	9+			
3. Special Needs Training (college level) number of courses (select one)	<1-2	3-5	6-8	9+			
4. Age (select one)	<20-29y	30-39y	40-49y	50-59y	60+y		
5. Gender (select one)	Male	Female					
6. Percentage of Students with Special needs in classroom (Average per year in the last three years)	<10%	10-20%	21-30%	31-40%	40-50%	>51%	
7. Ethnicity (check all that apply)	White	Black	Hispanic/Latino(any race)	Asian(any race)	American Indian	Other	Decline to answer.
8. Type of school	Head Start		Private Program				

**My Thinking About Inclusion (MTAI) Scale**

This scale was developed to measure beliefs of parents and practitioners about inclusion of exceptional children in the regular education setting. It includes a demographic survey for both parents and practitioners as well as a inclusion beliefs survey. The belief survey is made up

of 28 items. However, 12 of these items can be used for a brief scale (items 1, 2, 3, 4, 5, 6, 13, 14, 15, 16, 24, and 25).

The questions on the demographic survey are answered by circling the correct answer for each item. The questions on the inclusion beliefs survey are answered on a 5 point scale (strongly accept, agree, undecided/neutral, disagree, and strongly reject) by putting a mark in the box that correctly identifies the belief for each question.

To score the inclusion beliefs survey, it is rated on a 5-point scale where 1=strongly accept and 5=strongly reject. However, several of the questions are reversed scoring (2, 3, 7, 8, 9, 14, 15, 19, 22, 23, 25, 26, and 28). Therefore, the 5-point scale needs to be reversed (1=strongly reject to 5=strongly accept).

### My Thinking About Inclusion (MTAI) Scale

#### Inclusion Beliefs Survey

Core Perspectives	Strongly Accept	Agree	Undecided/ Neutral	Disagree	Strongly Reject
9. Students with special needs have the right to be educated in the same classroom as typically developing students					
10. Inclusion is NOT a desirable practice for educating most typically developing students.					
11. It is difficult to maintain order in a classroom that contains a mix of children with exceptional education needs and children with average abilities.					
12. Children with exceptional education needs should be given every opportunity to function in an integrated classroom.					
13. Inclusion can be beneficial for parents of children with exceptional education needs.					
14. Parents of children with exceptional needs prefer to have their child placed in an inclusive classroom setting.					
15. Most special education teachers lack an appropriate knowledge base to educate typically developing students effectively.					
16. The individual needs of children with disabilities CANNOT be addressed adequately by a regular education teacher.					
17. We must learn more about the effects of inclusive classrooms before inclusive classrooms take place on a large scale basis.					
18. The best way to begin educating children in inclusive settings is just to do it.					
19. Most children with exceptional needs are well					

behaved in integrated education classrooms.					
20. It is feasible to teach children with average abilities and exceptional needs in the same classroom.					
21. Inclusion is socially advantageous for children with special needs.					
22. Children with special needs will probably develop academic skills more rapidly in a special, separate classroom than in an integrated classroom.					
23. Children with exceptional needs are likely to be isolated by typically developing students in inclusive classrooms.					
24. The presence of children with exceptional education needs promotes acceptance of individual difference on the part of typically developing students.					

25. Inclusion promotes social independence among children with special needs.					
26. Inclusion promotes self-esteem among children with special needs.					
27. Children with exceptional needs are likely to exhibit more challenging behaviors in an integrated classroom setting.					
28. Children with special needs in inclusive classrooms develop a better self-concept than in a self-contained classroom.					
29. The challenge of a regular education classroom promotes academic growth among children with exceptional education needs.					
30. Isolation in a special class does NOT have a negative effect on the social and emotional development of students prior to middle school.					
31. Typically developing students in inclusive classrooms are more likely to exhibit challenging behaviors learned from children with special needs.					
32. Children with exceptional needs monopolize teachers' time.					
33. The behaviors of students with special needs require significantly more teacher-directed attention than those of typically developing children.					

34. Parents of children with exceptional education needs require more supportive services from teachers than parents of typically developing children.					
35. Parents of children with exceptional needs present no greater challenge for a classroom teacher than do parents of a regular education student.					
36. A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the children with special needs.					

**(QIEM) Classroom Staff Questionnaire**

**Program Goals and Purposes**

37. Which of the following best describes whether and who participated in developing and reviewing the program philosophy statement (statement of mission, purposes, or goals)?
- a. I do not know
  - b. We do not have a written philosophy statement
  - c. We have a written philosophy statement, but it was developed more than 3 years ago and has not been reviewed
  - d. We have a written philosophy statement, it was developed or reviewed in the last 3 years, but classroom staff and parents were not involved in the development or review
  - e. We have a written philosophy statement, it was developed or reviewed in the last 3 years, classroom staff were involved, but parents were not involved in development or review
  - a. We have a written philosophy statement, it was developed or reviewed in the last 3 years, and classroom staff and parents were involved in the development or review
38. Rate the extent to which the program’s philosophy (mission, purposes, goals) guides every-day work in the program. (**Note:** This question does not focus specifically on inclusion).
- a. I do not know
  - b. Program does not have a philosophy
  - c. Program has a philosophy but, it does not guide every-day work
  - d. Program has a philosophy, and it occasionally guides every-day work
  - e. Program has a philosophy, and it often guides every-day work
  - f. Program has a philosophy, and it almost always guides every-day work
39. Rate the extent to which the program’s philosophy (mission, purposes, goals) guides every-day work related to inclusive services.
- a. I do not know
  - b. Program does not have a stated philosophy
  - c. Program has a philosophy but it does not guide every-day work related to inclusion
  - d. Program has a philosophy and it occasionally guides every-day work related to inclusion
  - e. Program has a philosophy and it often guides every-day work related to inclusion

f. Program has a philosophy and it almost always guides every-day work for inclusion

40. Rate how important inclusive services are to the program.
- Inclusive services are not important to the program
  - Inclusive services are not very important
  - Inclusive services are somewhat important
  - Inclusive services are very important
  - Inclusive services are extremely important
41. Rate how well known the program is in the community for its inclusive services. (*Community* means other child care programs, providers of infant-toddlers services for children with disabilities, school systems, other agencies related to children, and the general public).
- I do not know
  - Program is not at all known
  - Program is not very well known
  - Program is well known
  - Program is very well known
  - Program is extremely well known
42. Rate how committed you are to having inclusive services in the program.
- Not at all committed
  - Not very committed
  - Somewhat committed
  - Very committed
  - Extremely committed
43. Rate how committed the administration is to having inclusive services.
- Not at all committed
  - Not very committed
  - Somewhat committed
  - Very committed
  - Extremely committed
44. On which of the following topics have you received training related to general topics of special education and disability? (**select all that apply**)
- Description of different types of disabilities
  - Attitudes toward children with disabilities
  - Provisions of the law (IDEA) related to children with disabilities
  - General information on IFSPs and IEPs
  - Effects of children's disabilities on families
  - Communicating and working with families of children with disabilities
  - General issues related to inclusion
  - General information about behavioral support and problem behaviors
  - General information about transition planning for children with disabilities
  - Information on teaming and working with professionals from other disciplines
  - None of the above

45. On which of the following topics have you **received** training for your child(ren) with disabilities (those in your class)? (**select all that apply**)
- Health, safety, and emergency issues related to my child(ren) with disabilities
  - Information about the disabilities of the child(ren) in my class
  - Issues relate to the therapies received by my child(ren) with disabilities
  - Practices for supporting the therapies received by my child(ren) with disabilities
  - Practices for organizing the classroom areas for my child(ren) with disabilities
  - Procedures for organizing the classroom schedule for my child(ren) with disabilities
  - Procedures for addressing the problem behaviors of my child(ren) with disabilities
  - Procedures for teaching my child(ren) with disabilities
  - Procedures for embedding teaching strategies into class activities and routines
  - Procedures for monitoring progress related the goals of my child(ren) with disabilities
  - None of the above
46. On which of the following topics do you **need additional training** (training you have not already had, or which you feel was insufficient)? (**select all that apply**)
- Health, safety, and emergency issues related to my child(ren) with disabilities
  - Information about the disabilities of the child(ren) in my class
  - Issues relate to the therapies received by my child(ren) with disabilities
  - Practices for supporting the therapies received by my child(ren) with disabilities
  - Practices for organizing the classroom areas for my child(ren) with disabilities
  - Procedures for organizing the classroom schedule for my child(ren) with disabilities
  - Procedures for addressing the problem behaviors of my child(ren) with disabilities
  - Procedures for teaching my child(ren) with disabilities
  - Procedures for embedding teaching strategies into class activities and routines
  - Procedures for monitoring progress related the goals of my child(ren) with disabilities
  - None of the above

For the following questions, **select the best response**.

47. Which of the following best describes the amount of training/staff development you have received for your child(ren) with disabilities in your class?
- I have received no training/staff development
  - I received much less than I need
  - I received less than I need
  - I received about the right amount of training/staff development
48. Rate how much support you get from the administration. (Support includes coverage for meetings, adequate planning time, adequate materials, and other assistance).
- I get no support from the administration
  - I get much less support than I need
  - I get less support than I need
  - I get slightly less support than I need
  - I get about the right amount of support



49. Rate how much help you get from the administration if you have a problem related your child(ren) with disabilities in your class.
- I get no help
  - I get much less than I need
  - I get less than I need
  - I get slightly less than I need
  - I get about the right amount of help
50. Rate how much planning time you have. (**Note:** This item refers to planning time for your class not just for children with disabilities).
- I get no planning time
  - I get much less than I need
  - I get less than I need
  - I get slightly less than I need
  - I get about the right amount of planning time
51. Rate how adequate your classroom space is for the children in your class.
- My classroom space is not at all adequate
  - My classroom space is less than adequate
  - My classroom space is adequate
  - My classroom space is very adequate
52. Rate the amount of appropriate materials you have for your child(ren) with disabilities.
- I have no appropriate materials
  - I have much less than I need
  - I have less than I need
  - I have slightly less than I need
  - I have about the right amount of appropriate materials
53. Rate the extent to which you are a part of the team for your child(ren) with disabilities.
- I am not a part of the team
  - I am somewhat included as part of the team
  - I am a full member of the team

For Items 54-63, answer for each specialist with whom you have regular contact (once per month); add the discipline for those with whom you have regular contact but are not listed.

54. Rate how much time you have to meet with specialists (special educators and therapists) related to your child(ren) with disabilities.
- I have no time to meet with them
  - I have much less than I need
  - I have less than I need
  - I have slightly less than I need
  - I have about the right amount of time to meet

55. Rate the extent to which specialists ask you for information and give you information about your child(ren) with disabilities.
- They never ask and give me information
  - They seldom ask and give me information
  - They sometimes ask and give me information
  - They frequently ask and give me information
56. Rate how often specialists follow through on their commitments to you.
- They never follow through
  - They seldom follow through
  - They are inconsistent in following through
  - They usually follow through
  - They almost always follow through
57. Rate how helpful specialists are in identifying goals for your child(ren) with disabilities.
- They give me no help in identifying goals
  - They give me little help
  - They give me about the right amount of help
  - They identify the goals and tell me what the goals are
  - They identify goals and do not tell me what the goals are
58. Rate how helpful specialists' suggestions and recommendations are about interventions related to your child(ren) with disabilities.
- They give me no suggestions or recommendations about interventions
  - They are rarely helpful
  - They are occasionally helpful
  - They are frequently helpful
  - They are almost always helpful
59. Rate how helpful specialists are in monitoring the progress of your child(ren) with disabilities.
- They give me no help in monitoring progress
  - They are rarely helpful
  - They are occasionally helpful
  - They are frequently helpful
  - They are almost always helpful
60. Rate how helpful specialists are in solving problems related to your child(ren) with disabilities.
- They give me no help in solving problem
  - They are rarely helpful
  - They are occasionally helpful
  - They are frequently helpful
  - They are almost always helpful

61. Rate how helpful specialists are in your interactions with the families of your child(ren) with disabilities
- They give me no help with families
  - They are rarely helpful
  - They are occasionally helpful
  - They are frequently helpful
  - They are almost always helpful
62. Which of the following best describes specialists' role in your class?
- Specialists work mostly with the child(ren) and do not consult with me
  - Specialists work mostly with the child(ren) and consult some with me
  - Specialists divide their work about equally between the children and consulting with me
  - Specialists do not work with child(ren) but consult with me
  - Specialists work some with the child(ren) but mostly consult with me
63. Which of the following best describes how specialists provide therapy or services to your child(ren) with disabilities?
- Specialists provide therapy outside of the classroom
  - Specialists provide therapy in the classroom but work only with child who has disabilities
  - Specialists provide therapy in the classroom and work with the child with disabilities in small groups
  - Specialists integrate their therapy into classroom activities and routines
- I provide social support or connect them with other social supports
  - I have about the right amount of communication

Special Educator

Speech Therapist/Pathologist

Occupational Therapist

Physical Therapist

Other (specify)

64. Rate how much in-class help you have from other adults (assistants, volunteers, etc.)
- I have no in-class help from other adults
  - I have much less than I need
  - I have less than I need
  - I have more than I need
  - I have about the right amount of in-class help

65. Rate how well prepared you are to lead/supervise other adults (assistants, volunteers, etc.) in classroom work.

- a. I have no in-class help from other adults
- b. I am not at all prepared to lead/supervise other adults
- c. I am not very prepared
- d. I am somewhat prepared
- e. I am very prepared

66. Rate how well defined adult roles (your own, assistants', volunteers', etc.) are in your class.

- a. I am the only adult in my class
- b. Adult roles are not at all defined
- c. Adult roles are not very defined
- d. Adult roles are somewhat defined
- e. Adult roles are very defined

67. Rate how helpful the other adults in your class (assistants, volunteers, etc.) are in working with the child with disabilities.

- a. I am the only adult in my class
- b. They are not at all helpful
- c. They are not very helpful
- d. They are somewhat helpful
- e. They are very helpful

68 . Rate the amount of tension and negative interactions/feelings between the adults in your class.

- a. I am the only adult in my class
- b. There is a lot of tension and negative interactions/feelings
- c. There is some
- d. There is very little
- e. There is almost none

**Thank you for completing this questionnaire.**