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Survey of Teacher Attitude Regarding Inclusive Education Within Rural School Districts

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SURVEY OF TEACHER ATTITUDE REGARDING INCLUSIVE EDUCATION
WITHIN RURAL SCHOOL DISTRICTS

by

Laura Daniel

Dissertation

Submitted to the Faculty of

Harding University

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in Partial Fulfillment of the Requirements for

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3-14-17
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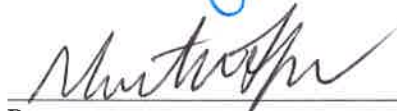
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DEDICATION

I would like to dedicate this dissertation to my grandparents and great nephew. My love for education began in Kindergarten. I was inspired by my teacher, which just happened to be my Grandma, Helen Shields. My grandpa, Jewel Shields, always said, “Sister, don’t stop! You keep going until you get your doctorate.”

My great-nephew, Joshua, was diagnosed at an early age as high-functioning autistic. He is such a joy and an inspiration. He is the reason I chose this topic for my dissertation.

ABSTRACT

by
Laura Daniel
Harding University
May 2017

Title: Survey of Teacher Attitude Regarding Inclusive Education Within Rural School Districts by Laura Daniel (Under the direction of Dr. Diana Julian)

The purpose of this dissertation was to determine if teacher attitudes towards inclusive education were influenced by the variables of gender, age, educational level, teaching level, and number of special education courses taken for regular general education teachers in rural school districts in South-Central Arkansas. Next, the purpose of the study was to determine the predictive effects of teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. Third, the purpose of the study was to describe what types of inclusive education training methods were perceived as being the most and least beneficial for regular general education teachers in rural school districts in South-Central Arkansas.

Teachers in three small, rural school districts located in Southcentral Arkansas were chosen as the accessible population for this study. These three schools share a special education supervisor. During the course of the data collection, 211 certified teachers were employed for the 2014-2015 school year. Of the 211 teachers, 78 teachers

completed and returned the survey. Of the 78, 72 survey results were usable for Part 1 of the analyses. Of the usable data, the majority of the returns were females.

To address the first main hypothesis with its five subsections, five one-way ANOVAs were conducted using the following teacher traits: gender, age, educational level, teaching level, and number of special education courses taken in undergraduate and/or graduate school as the five independent variables with the overall attitude toward inclusion serving as the dependent variable for each. The results of this study are in contrast to many that suggest teacher's gender, age, degree level, grade level teaching, and number of special education courses taken are significant influences on a positive teacher attitude.

To address the second hypothesis, a multiple regression was conducted to determine the predictive relationship between teaching years at their current level, total years teaching experience, and years of special needs teaching experience on the perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. In this study, no predictors significantly contributed to the model. However, results indicated that overall in this study, the general attitude of teachers was more positive toward inclusive education.

For the research question, the rankings were compiled from the survey regarding the most and the least beneficial in obtaining training about inclusion. Time for consultation with special education teachers was the most beneficial method. School building level ranked second, and district level in-service training method was third. College/University coursework was the least beneficial method but was only one point higher than being provided articles to read. All other methods were evenly distributed.

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CHAPTER I

INTRODUCTION

Prior to 1975, many children were not able to receive instruction in the general education classroom. However, after the Federal Legislature passed The Education of All Handicapped Children Act of 1975 (P.L. 94-142) and Individuals with Disabilities Education Act (IDEA, 2012), children with disabilities were able to receive an education in general education settings. This federal mandate was the first to allow children with disabilities to receive their education in the least restrictive environment (LRE). It allowed children with disabilities to be educated with children who did not have disabilities. This desegregation came to be known as inclusion. People often use the terms LRE, inclusion, and mainstreaming interchangeably, but they are not synonymous concepts (Yell, 1998). In 1992, McColl (as cited in Yell, 1998) stated that mainstreaming and inclusion are narrower terms compared to LRE. Under IDEA (2012), the LRE requires that students with disabilities be educated to the maximum extent appropriate with their nondisabled peers. Therefore, LRE is a method used by schools to determine if students with disabilities are being educated in the least restrictive setting in order to maintain integration of students without disabilities.

This requirement to educate students in a LRE has been difficult to implement for some teachers because of their lack of training or experience with children with disabilities. The *36th Annual Report to Congress on the Implementation of the*

Individuals with Disabilities Education Act, 2014 described that, from 2003 to 2012, the percentage of students with disabilities educated in the regular education classroom increased from 49.9% to 61.5% (U.S. Department of Education, 2014). These percentages denote an increase in the number of students with disabilities being educated in the general education classroom alongside their peers. However, many teachers have difficulty with the implementation of inclusion settings because of their lack of knowledge or experience.

Statement of the Problem

This study replicated parts of a study done by Kern (2006) and included three parts. First, the purpose of the study was to determine how teachers differed on how they perceived inclusion of special education students in the regular general education classroom in rural school districts in South-Central Arkansas. The teachers are identified by these five variables:

- a. How does teachers' gender (male and female) affect their perceptions concerning inclusion?
- b. How does teachers' age (35 and below, 36-45, and 46 and above) affect their perceptions concerning inclusion?
- c. How does teachers' education level (bachelor's, bachelor's plus 30, master's, and master's plus 30 degree) affect their perceptions concerning inclusion?
- d. How does teachers' teaching level (elementary, middle, and high school) affect their perceptions concerning inclusion?

- e. How does teachers' training (two or less and three or more special needs courses in college including undergraduate and graduate school) affect their perceptions concerning inclusion?

Second, the purpose of the study was to determine the predictive effects of teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. Third, the purpose of the study was to describe what types of inclusive education training methods were perceived as being the most and least beneficial for regular general education teachers in rural school districts in South-Central Arkansas.

Background

A Brief Legal History of Inclusion

Hatchell (2009) noted the earliest court case dealing with inclusion was in 1893 when the Supreme Court of Massachusetts upheld the expulsion of a child from public school that was said to be "weak in mind." Even though all of the states had compulsory attendance laws by the early 1900s, children with disabilities were widely excluded from this practice (Yell, 1998). Nevertheless, a Wisconsin lower court decision authorized a public school to exclude a child who drooled, had speech problems, and exhibited facial contortions even though he had the academic and physical ability to benefit from school (Hatchell, 2009). Consequently, in 1919, the Supreme Court of Wisconsin affirmed the lower courts' decision.

People living in the 1950s witnessed several events that began to change the course of special education. The case of *Brown v. the Board of Education* (1954) served

as a precedent for establishing the rights of students with disabilities. The basis of this case was to abandon the segregation of students in schools based solely on a person's race. However, according to Yell (1998), the Court reasoned that this also applied to those denied equal opportunity to an education due to a disability. The 1957 launching of the Soviet Union's satellite, Sputnik, was another turning point in education for America. Although many remember this event as a catalyst for reform efforts in education with a new focus on mathematics and science, Osgood (2005) pointed out that during this time public schools were also reorganizing and restructuring the teaching of content and subject matter in addition to reclassifying and re-categorizing students for special education. One year later in 1958, during President Dwight D. Eisenhower's tenure in office, Congress passed two laws that increased awareness of students with disabilities. The first legislation was P.L. 85-905, which provided loan services for captioned films for the deaf. The second piece of legislation was P.L. 85-926, which provided federal support for training teachers of children with mental retardation.

In the 1960s, events continued to advance special education beginning with John F. Kennedy taking office as President of the United States. Osgood (2005) reported that President Kennedy had a particular interest in special education because his sister, Rosemary, had been identified as mentally retarded. As a result, President Kennedy initiated two major pieces of legislation that promoted special education. Osgood noted that, first, the President appointed a Panel on Mental Retardation charged to examine ways to prevent and manage mental retardation on a national level. Next, the centerpiece of Kennedy's legislative initiatives was the passing of P.L. 88-156, which established a Division of Handicapped Children and Youth within the United States Office of

Education. This division authorized funding for continued and expanded training of special education personnel and provided support for more research, research facilities, demonstration projects, and dissemination activities in mental retardation and other areas of exceptionality.

Later, in 1966, President Johnson established a permanent committee on mental retardation (Osgood, 2005). Through Johnson's administration, the Elementary and Secondary Education Act was passed. Grants were made available to the states through this law to support the education of children with disabilities. Another law passed under Johnson's administration was P.L. 89-105. This law furthered support for research and demonstration projects in special education. According to Osgood (2005), the third and most significant law passed during this time was P.L. 89-750, which amended Title VI of the Elementary and Secondary Education Act, established the Bureau of Education of the Handicapped, and provided grants to states for special education at preschool, elementary, and secondary levels. Osgood reported that, by the late 1960s, there was a heightened awareness of children with disabilities and their education, care, and treatment. This attentiveness increased federal commitment and public support of initiatives to expand services for special education.

By the early 1970s, even with all the legislation to date, Douvanis and Hulsey (2002) noted, "there were eight million children with disabilities in the United States, and fully one-half were receiving no educational services" (p. 1). A lawsuit in 1971, *Pennsylvania Association of Retarded Citizens (PARC) v. Commonwealth of Pennsylvania*, resulted in a ruling that would change education through the present day. In this case, the court found that a state interrupts a student's right of access to an

appropriate public education when they found that education is a continuous process and that education goes beyond just an intellectual pursuit. This case created the right to an education for Pennsylvania children with disabilities and expressed a clear preference for mainstreaming, with homebound instruction or residential placements used in only the rarest circumstances. According to Peterson (2007), the affirmation of the *PARC v. Pennsylvania* (1972) case by the federal appeals court and the ruling in the *Mills v. D.C. Board of Education* (1954) federal district court case applied equal protection to all students regardless of their disabilities. The courts' position was that children with disabilities have an equal right to access education compared to their nondisabled peers. This decision resulted in some students attending school that were not previously attending.

Later in the 1970s, the concept of LRE resulted from an amendment to the Education of the Handicapped Act of 1974 that was introduced by Senator Robert Stafford of Vermont. The Education for All Handicapped Children Act of 1975 was enacted on November 29, by President Gerald Ford (Yell, 1998). The Education for All Handicapped Children Act of 1975 is more commonly known as P.L. 94-142. This law provided funding to states to assist them in educating students with disabilities. Furthermore, this law guaranteed that all students were to receive a free appropriate public education, which included students with disabilities. There were four purposes of P.L. 94-142:

- “to assure that all children with disabilities have available to them...a free appropriate education which emphasizes special education and related services designed to meet their unique needs.”

- “to assure that the rights of children with disabilities and their parents...are protected.”
- “to assist State and localities to provide for the education of all children with disabilities.”
- “to assess and assure the effectiveness of efforts to educate all children with disabilities.” (U.S. Office of Special Education Programs, 2015, p. 5)

The LRE amendment, introduced in 1974, was incorporated into P.L. 94-142 and mandated students with disabilities to be educated to the maximum extent appropriate alongside peers without disabilities.

The final federal regulations of P.L. 94-142 were released and enacted at the start of the 1977-1978 school year. These regulations provided a set of rules for school districts to follow when providing an education to students with disabilities. The regulations included the development of an Individualized Education Plan (IEP) for students with disabilities. An IEP is a written document that contains the student’s goals and objectives, specific education and related services, aids and supports, and modifications that must be provided to the student. P.L. 94-142 was amended in 1986 to articulate student and parent rights under P.L. 94-142 and section 504. It was again amended in 1990, and the name was changed to the IDEA. This amendment also called for many changes in the old law.

IDEA was reauthorized in 1997 adding that students with disabilities were to be included in state and district-wide assessments. In addition, regular education teachers were now required to be a member of the Individualized Education Plan (IEP) team. In 2004, IDEA was reauthorized again, which led to several changes. The biggest change

called for more accountability at the state and local levels with more data on outcomes being required. In addition, schools were now required to provide adequate instruction and intervention for students to help keep them out of special education (Peterson, 2007).

Defining LRE for Students with Special Needs

Even though P.L. 94-142 did not define inclusion or LRE, it was instrumental in bridging special education students with general education students. The LRE principle stipulates that students with special needs will be educated in “settings as close to the regular educational classroom as possible in which an appropriate program can be provided and the child can make satisfactory educational progress” (Hernandez, 2013, p. 480). Schools now had no choice but to place special education students alongside general education students in the regular classroom.

Determining LRE has not always been easy. One of the early LRE decisions was from *Roncker v. Walter* (1983). In the *Roncker* case, Neill Roncker was a nine-year-old student classified as having moderate mental retardation. The school wanted to place the child in a special school for students with disabilities, but his parents objected and challenged the placement. Yell (1998) stated, “the U.S. District Court for the Southern District of Ohio ruled in favor of the school district, and stated that the mainstreaming requirement allowed schools broad discretion in the placement of students with disabilities” (p. 251). This decision led to an appeal to the U.S. Court of Appeals for the Sixth District by Roncker’s parents, in which the lower court’s decision was reversed. “The act (PL 94-142) does not require mainstreaming in every case but its requirement that mainstreaming be provided to the maximum extent appropriate indicates a very strong congressional preference” (Yell, 1998, p. 251). One of the significant results of the

Roncker decision was the Roncker Portability Test, which asked the following question: Can the educational services that make a segregated placement superior be feasibly provided in a non-segregated setting? If no, the placement in the segregated setting is appropriate.

The *Daniel R.R. v. State Board of Education* (1989) court did not use the Roncker Portability Test only. In this case, an additional judicial standard of review was established. Daniel was a six-year-old student with Down Syndrome that was placed in a general education pre-kindergarten class for half a day and in an early childhood special education class for half a day. He was removed from the general education class and placed in the special education class for the full day after the pre-kindergarten teacher informed the placement committee that he did not participate and had failed to master any of the skills being taught. The court ruled that the school district had properly provided a continuum of educational services, had experimented with a variety of alternative placements, had properly provided supplementary aids and services in an attempt to maintain Daniel in a general education classroom, and had mainstreamed him to the maximum extent possible (Hatchell, 2009).

Based on this ruling, the *Daniel R.R. v. State Board of Education* (1989) court developed a more appropriate two-part test for determining compliance with the LRE requirement. According to Yell (1998), the Daniel Two-Part Test included the following questions:

1. Can education in the general education classroom with supplementary aids and services be achieved satisfactorily?

2. If a student is placed in a more restrictive setting, is the student integrated to the maximum extent appropriate? (p. 253)

In reaction to cases like *Roncker v. Walter* and *Daniel R.R. v. State Board of Education*, The National Center on Educational Restructuring and Inclusion (1994) developed the following working definition of inclusive education.

Providing to all students, including those with significant disabilities, equitable opportunities to receive effective educational services, with the needed supplementary aids and support services, in age appropriate classrooms in their neighborhood schools, in order to prepare students for productive lives as full members of society. (p. 15)

This definition provided a better understanding of what inclusive education entailed.

Attitudes on Inclusion

Proper teacher attitude is crucial for inclusion classrooms to be successful.

According to Ridarick and Ringlaben (2013), teacher attitudes are one of the most significant influences in the successful implementation of inclusion. Furthermore, Stauble (2009) indicated that teachers with negative attitudes are possibly prejudiced regarding students' abilities to learn. There may be several factors that influence teachers' attitudes toward an inclusive classroom, and it is important to take those into consideration.

According to Subban and Sharma (2005), factors influencing teachers' attitudes toward inclusive education include training, gender, age, teaching experience, teacher qualifications, class size, level of confidence, previous experience teaching students with disabilities, severity of student's disability, and support from administrative staff.

Hypotheses and Research Question

This study was divided into three parts. The first two parts were guided by two main hypotheses, and the third part was guided by a research question. First, no significant difference will exist with each of the five groups on how they will perceive inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. This general hypothesis was subdivided by the five groups.

- 1a. No significant difference will exist between males versus females on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas.
- 1b. No significant difference will exist between teachers who are age 35 and below versus 36-45 versus 46-55 and 56 and above on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas.
- 1c. No significant difference will exist between teachers who hold a bachelor's degree versus a master's degree on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas.
- 1d. No significant difference will exist between teachers who teach at the elementary versus the middle versus the high school level on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas.
- 1e. No significant difference will exist between teachers who took two or less special needs courses versus three or more courses in college (including

undergraduate and graduate) on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas.

Secondly, no significant predictive relationship will exist between teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on perception of inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. Third, what types of inclusive education training methods are perceived as being the most and least beneficial for regular general education teachers in three rural school districts in South-Central Arkansas?

Description of Terms

Americans with Disabilities Act (ADA). Dixon, Lambert, Stairs, Tejeda, and Williams (2009) defined ADA as a federal law that gives civil rights protections to individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. ADA (2012) guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications.

Child with a disability. According to IDEA (2012), a child with a disability is defined as a child evaluated as having an intellectual disability, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance, an orthopedic impairment, autism, a traumatic brain injury, other health impairment, a specific learning disability, deaf-

blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.

Eligibility for special education services. The Arkansas Department of Education (2008) stated that eligibility for special education services means that a child is determined eligible on the basis of assessments and other evaluation measures administered by a group of qualified professionals and the parent of the child, the results of which state that a child has a disability in accordance with the IDEA and other regulations. In addition, the disability must result in an adverse effect on educational performance and the corresponding need for special education services.

Free Appropriate Education (FAPE). Berry et al. (1996) defined FAPE as an educational program that is individualized to a specific child and designed to meet that child's unique needs. FAPE also provides access to the general curriculum and meets the grade-level standards established by the state from which the child receives educational benefit.

General Education. Olson (2003) defined general education as a classroom environment where students without disabilities are generally taught. It is also referred to as regular education.

Inclusion. Yell (1998) defined inclusion as the placement of students with disabilities in the general education classroom with peers without disabilities.

Individuals with Disabilities Act (IDEA). Dixon et al. (2009) defined IDEA as the law that guarantees all children with disabilities access to FAPE.

Least Restrictive Environment (LRE). Yell (1998) defined LRE as the IDEA mandate that students with disabilities should be educated to the maximum extent appropriate with peers without disabilities.

Paraprofessional. The Arkansas Department of Education (2008) defined a paraprofessional, in connection with special education, as a staff member other than a teacher who works directly with students with disabilities under the direct supervision of a teacher or other licensed professional, who has received appropriate training pertaining to the tasks and activities he/she is asked to perform and who meets state-established qualification standards.

Special Education. The Arkansas Department of Education (2008) defined special education as specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability. Special Education includes instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings.

Significance

Research Gaps

Studies have been conducted on teacher attitude on inclusive education. However, these studies have used only a snapshot of teacher perceptions and not a study of student success over time. Even though studies consistently imply that teachers with a positive attitude toward inclusion have a greater influence on the success of the program, Ryan and Gottfried (2012) believed present day literature is inconsistent in reporting that general education teachers are skeptical on whether students with special needs should be included in the general education classroom. To get the best results for how inclusion

influences students, more studies should be conducted on student achievement in the inclusive classroom.

Possible Implications for Practice

In order for the inclusive classroom to be successful, researchers need to continue investigating the attitudes of general education and special education teachers (Ross-Hill, 2009). By researching teachers' attitudes toward inclusion, schools will be able to see the areas in which teachers need the greatest amount of support to help them implement inclusive education (as cited in Berry et al., 1996). Subban and Sharma (2005) felt it was important to study the attitudes of general education teachers towards inclusion since their insights influence their behavior towards students with special needs. Moreover, examining the attitude of teachers toward inclusion will shed light on the barriers that may exist. Results of this study could influence the education system for rural schools by indicating general education and special education teacher attitudes toward inclusion and determining the barriers that exist in promoting a positive attitude for the inclusive classroom. Furthermore, the results of this study could provide a means to the most and least beneficial education training methods for teachers of inclusive programs.

Process to Accomplish

Research Design

This study replicated parts of the study by Kern (2006) and used the *Survey of Teacher Attitude Regarding Inclusive Education Within an Urban School District*. For research design purposes, the study was divided into three parts. The first part consisted of a quantitative, causal-comparative (survey) strategy to investigate regular general education teachers' attitudes regarding inclusive education practices in the rural school

setting. Data from the participants were gathered in a post-survey only format. The data were then subdivided by the five independent variables in the study, which included the following teacher traits: gender, age, educational level, teaching level, and number of special education courses taken in undergraduate and/or graduate school. The dependent variable for all five independent variables was teacher attitudes measured by the *Teacher Attitudes Towards Inclusive Education* survey. For the purposes of the statistical computations, the Total Attitude score was used. The second part of the study consisted of a quantitative, regression strategy to investigate the predictive relationship between teaching years at their current level, total years teaching experience, and years of special needs teaching experience on the perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. Finally, the third part of the study consisted of a qualitative, descriptive strategy to investigate the types of inclusive education training methods that were perceived as being the most and least beneficial for regular general education teachers in rural school districts in South-Central Arkansas. Open-ended questions completed by teachers at the end of the survey instrument helped to identify the training methods that teachers rated as being the most beneficial and the least beneficial in obtaining training about inclusion.

Sample

Teachers in three small, rural school districts located in South-Central Arkansas were chosen as the accessible population for this study. These three schools share a special education supervisor. School A had 85 certified teachers for the 2014-2015 school year, and 50% of its teachers held a degree beyond a bachelor's. Of the 85 certified staff, 77 were regular education teachers and 8 were special education teachers. Student

enrollment as of October 1, 2014, was 969. The demographic make-up was 92.0% Caucasian, 4.6% Hispanic, 1.33% American Indian, 1.03% Asian, and 0.71% African-American. In addition, they were 52% male and 48% female. The free and reduced lunch rate for the district was 63%. The special education percentage for the district was 12.5%.

School B had 82 certified teachers for the 2014-2015 school year, and 71% of the teachers held a degree beyond a bachelor's. Of the 82 certified staff, 72 were regular education teachers and 10 were special education teachers. Student enrollment as of October 1, 2014, was 1,003. The demographic make-up was 96.0% Caucasian, 2.5% Hispanic, 0.4% American Indian, and 0.2% African-American. In addition, they were 52.5% male and 47.5% female. The free and reduced lunch rate for the district was 58%. The special education percentage for the district was 14%.

School C had 44 certified teachers for the 2014-2015 school year, and 70% of the teachers held a degree beyond a bachelor's. Of the 44 certified teachers, 40 were regular education teachers and 4 were special education teachers. Student enrollment as of October 1, 2014, was 582. The demographic make-up was 95.0% Caucasian, 0.02% Hispanic, 0.002% American Indian, 0.003% African-American, 0.003% Asian, and 0.003% Pacific Islander. In addition, they were 52% male and 48% female. The free and reduced lunch rate for the district was 62%. The special education percentage for the district was 13%.

Instrumentation

The survey, *Teachers Attitudes Towards Inclusive Education*, consisted of three parts. Part A of the survey gathered teacher demographic information: gender, age range, education level, current teaching level, number of years at current teaching level, number

of total years teaching, amount of training received in teaching children with special needs, and amount of experience teaching children with special needs in the classroom.

Part B of the survey consisted of 42 questions related to teacher attitudes regarding inclusive education. The questions were divided into the following five subdomains: student variables, peer support, administrative support, collaboration, and training. The teachers were instructed to answer the questions based on a 4-point Likert scale: Strongly Disagree (SD), Disagree (D), Agree (A), or Strongly Agree (SA).

Part C of the survey consisted of three open-ended qualitative research questions. The first question was: What type of delivery method do you believe would benefit you most in receiving training regarding including special education students in your classroom? Teachers were asked to indicate the perceived benefit of the following six choices by selecting a score 1 to 7 (ie. *most beneficial* to *least beneficial*, respectively): (a) district level in-service training, (b) out-of-district, (c) coursework at college/university, (d) school building level training, (e) article(s) provided to you, (f) time for consultation with school psychologists, and (g) time for consultation with special education teachers. The next two open-ended questions asked teachers to list other methods of training delivery they believed would be helpful in receiving information on inclusive education and to list any other topic(s) on which they would like training regarding inclusive education.

In order to establish face validity for the survey, 10 expert reviewers, consisting of certified school psychologists from Pennsylvania and New Jersey, reviewed the instrument. Suggestions were incorporated into a revision of the instrument. The survey

was administered to elementary, middle, and high school regular and special education teachers in the Chester Upland School District (Kern, 2006).

Data Analysis

To address the first main hypothesis with its five subsections, 5 one-way ANOVAs were conducted using the following teacher traits: gender, age, educational level, teaching level, and number of special education courses taken in undergraduate and/or graduate school as the five independent variables with the overall attitude toward inclusion serving as the dependent variable for each. To address the second hypothesis, a multiple regression was conducted to determine the predictive relationship between teaching years at their current level, total years teaching experience, and years of special needs teaching experience on the perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. To test the hypotheses, the researcher used a two-tailed test with a .05 level of significance. For the research question, the researcher compiled the rankings from the survey regarding the most beneficial and the least beneficial in obtaining training about inclusion. The researcher also summarized the open-ended statements concerning the other topic(s) that would be the most and least beneficial education training methods for teachers of inclusive programs.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

The purpose of this literature review was to investigate teacher attitudes on inclusive education. This study replicated parts of a study done by Kern (2006). Her study researched if teacher attitudes toward inclusive education were influenced by numerous variables such as teacher gender, teacher age, years of teaching experience, educational level of the teacher, school or grade level teaching, and the number of special education courses taken. Teachers may also be influenced by the support they received for inclusive education. Types of support included peer support, administrative support, training and collaboration (Kern, 2006).

The literature review in this chapter provides a research-based foundation for this study and its findings and is organized into six parts. First, a brief overview of attitudes was presented. Second, an examination of variables affecting teacher attitudes was discussed. Third, the researcher took an in-depth look at teacher support for inclusive education. Fourth, a discussion of the effects of inclusive education on nondisabled students was presented. Fifth, training for inclusive education teachers was reviewed. Sixth, components of inclusion classrooms were examined.

Attitudes

According to Aud et al. (2011), the National Center for Educational Statistics reported 95% of students with disabilities were served in regular schools during the fall

of 2011. Furthermore, 61.1% of students with disabilities spent 80% or more of their school day in the general classroom; 19.8% of students with disabilities spent 40-79% of their school day in the general classroom. Only 14% of students spent less than 40% of their day in the general classroom. Therefore, with the majority of students with disabilities spending greater than half of their school day in the general education classroom, teacher attitude toward inclusion could possibly have an effect on student success.

With the standards movement of No Child Left Behind and now the Every Student Succeeds Act, all students are expected to participate in state-required assessments. Teachers have a responsibility for educating all students in their classroom. Yet, inclusion teachers may not feel adequately trained to prepare all students in their classroom for these required assessments, adding more tasks and responsibilities for the teacher. Hull (2005) stated, “accountability in relation to student outcomes has become a notable focus of educational reform” (p. 17). This added accountability for student performance on mandated assessments can have a tremendous influence on teacher attitude. According to Showalter-Barnes (2008), teacher attitude can directly influence student performance. Therefore, it is important that inclusive education teachers maintain a positive attitude toward educating all students within their classroom.

Attitudes are formulated by cognitive, affective, and behavioral components. The cognitive component is based upon thoughts and beliefs, or knowledge. Emotions or feelings are the basis for the affective component. The behavioral component is influenced by actions or behaviors. It is important to understand the formation of attitudes as it relates to teachers’ thought processes and classroom conduct. According to Munck

(2007), attitudes are determined by a person's experiences and influence reactions in either a favorable or unfavorable manner. Therefore, teachers' attitudes form the basis of their actions.

Several studies have been conducted to determine teacher attitudes toward including students with disabilities in the general education classroom. General education teachers who do not have a positive attitude towards inclusion may not recognize the needs of the special education student or follow the IEP. Bergren (1997) revealed a strong positive teacher attitude toward the placement of special needs students in the general education classroom. According to Berry et al. (1996), "the majority of the teachers had positive attitudes toward inclusion" (p. 17). A quantitative research survey by Bruce (2010) determined there was not a difference in attitude between general education teachers and special education teachers on their perceptions of the benefits of inclusion. Bondurant (2004) noted that 76% of participants indicated that inclusion was beneficial to special education students. A meta-analysis study on American attitudes from 1958 through 1995 by Scruggs and Mastropieri (1996) revealed, "a majority of teachers agreed with the general concept of mainstreaming/inclusion, and a slight majority were willing to implement mainstreaming/inclusion practices in their classes" (p. 71). Teacher attitudes may be influenced by a number of factors.

Variables Affecting Teacher Attitudes

There have been several studies on the variables that influence teacher attitudes toward inclusion. Such variables include teacher gender, teacher age, years of teaching experience, educational level of the teacher, school level or grade level teaching, and

number of special education courses taken. These variables can influence attitudes and need to be considered prior to teaching in the inclusive classroom.

Gender

Researchers indicated that teacher gender did not affect attitudes toward inclusion. Kern (2006) surveyed teachers using the *Attitudes Regarding Inclusive Education Scale*. Through an ANOVA to identify differences between independent variables, she determined that no significant difference existed between male and female teachers in relation to their attitudes regarding inclusive education. Furthermore, Buford and Casey (2012) determined if differences existed between male and female teachers on their preparedness to teach in inclusive education. Although there was a greater response rate from females, the results indicated there was no significant difference between male and female teachers in relation to their preparedness to teach in an inclusive classroom. Logan and Wimer (2013) surveyed 203 teachers to determine teacher attitudes on inclusion and ascertained that there was no effect of gender on attitudes. Jobe, Rust, and Brissie (1996) reported no significant difference between males and females for the total score on the *Opinion Relative to the Inclusion of Students with Disabilities* questionnaire. However, they did find that male teachers were slightly more positive towards inclusion compared to female teachers and were significantly more confident than females in their ability to teach students with disabilities. Although teaching is primarily a dominant female field, no significant difference existed between the sexes regarding inclusive education.

Age

The age of the teacher can have an effect on teacher attitude. Buford and Casey (2012) found a difference in regard to teacher age and attitude regarding their preparedness to teach students with special needs in an inclusive setting. They concluded that teachers below the age of 36 held a significantly more positive attitude on preparedness for teaching in an inclusive classroom. Furthermore, Kern (2006) also identified a significant difference in attitude and teacher age. She reported that teachers below the age of 36 had a more positive attitude towards inclusive education than any other age bracket.

Years of Teaching Experience

Researchers have reported mixed reviews on the number of years of teaching experience and teacher attitudes for inclusion. According to several studies, teacher attitude on teaching students with disabilities in the general education classroom was not affected by the number of years of teaching experience and most reported positive attitudes. For example, Logan and Wimer (2013) did not find a significant effect on attitude by the years of teaching experience. The purpose of their study was to determine teacher attitudes on inclusion. They surveyed 203 teachers from schools in Georgia. The researchers were surprised that the level of experience was not a significant factor in attitude toward inclusion. Likewise, Bruce (2010) found no significant difference between the years of teaching experience on the overall attitude towards integration and inclusion. According to Buford and Casey (2012), the numbers of years teaching at their current teaching level did not influence teacher attitude, which remained positive regardless of the years of teaching. Furthermore, Jobe et al. (1996) found the attitudes of

teachers with less than 6 years of experience were not statistically different than those with more years of teaching experience. Kern (2006) claimed that teachers had a positive attitude towards inclusive education regardless of the number of years of teaching experience. She also reported that the number of years teaching at the current teaching level did not appear to influence teacher attitude. Walker (2012) concluded the weakest correlation identified in his study was between the number of years of teaching experience and teachers' attitudes toward including students with disabilities in their classrooms. A study conducted by Lawrence (2008) suggested that general education teachers with more years of teaching experience are more positive in teaching students with disabilities. Elementary and secondary teachers did not waiver in their attitude toward inclusion based on a study conducted by Ross-Hill (2009). Based on this review of the literature, the number of years teaching and the influence on teachers' attitudes toward inclusion varied across studies.

Education Level of the Teacher

Several studies have shown that teachers have not changed their attitude on inclusion based on earning a higher degree of education. Stoler (1992) found no significant difference among teachers with different educational levels regarding their perceptions on inclusion. Further, Kern (2006) detected no difference in attitude for teachers who held a Bachelor's degree, Bachelor's plus 30 hours, Master's degree, or Master's plus 30 hours. Bruce (2010) claimed no significant difference between the different levels of degrees earned (Bachelors, Masters, and Specialist) on the overall attitude towards integration and inclusion. Finally, Buford and Casey (2012) also found no difference in teachers who held a Bachelor's degree, Bachelor's degree plus 30,

Master's degree or Master's degree plus 30. The degree level of the teacher did not change their attitude toward inclusion.

School or Grade Level Teaching

Furthermore, another teacher-related variable that may have an influence on teachers' attitudes toward inclusion is the school or grade level in which the teacher is teaching. However, teachers' attitudes were not significantly different for teachers teaching at the elementary, middle, or secondary levels, according to Kern (2006). Likewise, Ross-Hill (2009) reported no significant difference when comparing elementary and secondary regular education teachers' attitudes towards the implementation of inclusion. Buford and Casey (2012) also reported no difference in attitude with teachers who taught at elementary, middle, or secondary levels. According to Buford and Casey, previous research suggested that a difference in attitude towards inclusive education existed among elementary, middle, and high school level teachers. This literature review did not find any significant influence on teacher attitude toward inclusion based on school or grade level teaching. However, Logan and Wimer (2013) asserted high school teachers felt more confident in their ability to implement inclusion in comparison to K-8 and middle school teachers. Further research could indicate that significant differences exist in teachers' attitudes toward inclusive education across various grade levels.

Number of Special Education Courses Taken

The number of special education courses taken may also influence teachers' attitudes toward inclusion. Stoler (1992) attempted to determine if attitudes and perceptions of regular education teachers toward inclusion of students with special needs

into their classrooms differed by educational level or previous training in special education. The study determined that there was a significant difference in the perceptions of inclusion based on special education coursework. The teachers who had more special education courses held a more positive attitude. Consequently, 141 out of 182 teachers reported they had never taken a class in special education. However, Kern (2006) reported no significant difference in attitude was detected between teachers who had taken two or fewer courses and teachers who had taken three or more courses in teaching special needs children. Likewise, Bruce (2010) reported no difference between the different number of courses taken on the overall attitude of teachers towards integration and inclusion. This literature review found mixed results on the influence of the number of special education courses taken and teacher attitude.

Support

Teachers in the inclusive classroom need to have a positive attitude in order to implement practices effectively in their classrooms. According to Showalter-Barnes (2008), “It is important to provide teachers with support during their participation in inclusion so that they may provide effective education to the included student which will positively impact teacher attitude” (p. 43). A leading cause influencing a teacher’s negative attitude stems from a lack of support. Administrator support and collegial support are important for inclusive education teachers.

Administrator

Often, this lack of support is from the administrator. Support from administrators is a must for inclusive teachers. Berg (2004) implied that teacher success in implementing inclusion is dependent upon the administrative support. Therefore, administrative support

is vital in an inclusive school (McLeskey & Waldron, 2002). In addition, they reported that school administrators should provide support for program development and opportunities for staff development, as well as promote the need for positive changes toward inclusion among staff. Walker (2012) reported a high correlation between principal support and the attitudes of inclusion teachers. Administrators set the tone in the building and are an essential element in how many teachers view teaching students with disabilities. Showalter-Barnes (2008) stated, “Modeling of accepting and positive attitudes is the responsibility of school administrators” (p. 41). Furthermore, the principals’ role is to support teachers and help them improve outcomes for all students (Waldron & Redd, 2011). According to Obiakor, Harris, Mutua, Rotatori, and Algozzine (2012), “It is imperative that school administrators encourage and implement progressive teacher practices that buttress inclusion in their schools” (p. 487). Consequently, Buford and Casey (2012) found that most teachers surveyed believed they could approach their administrator with concerns, but they did not receive adequate support when dealing with special needs students. They reported that teachers believed administrators did not provide support, materials, or time for additional training. Administrative support is crucial to inclusive teachers. In addition to administrative support, teachers also need support from their peers.

Collegial support is another tool that is helpful to the inclusive teacher. Buford and Casey (2012) found that teachers in the inclusive setting believed they had the support of their peers. Support from peers is crucial in formulating a positive attitude for teachers teaching in an inclusion classroom. Avramidis and Norwich (2002) concluded that the more resources and support an inclusive teacher received, the greater the

potential for formulating a positive attitude toward inclusion. According to Scruggs and Mastropieri (1996), the success of inclusion is contingent upon the amount of support offered. Likewise, Forlin (2001) concluded that inclusion teachers become more stressed when they have fewer supports assisting them. During the interview process of his study, Walker (2012) discovered teachers felt the lack of support was a challenge in the successful implementation of inclusion. Support for teachers may come in many forms, such as collaboration, cooperative teaching (co-teaching), and support personnel.

Collaboration

Support in the form of collaboration is key to promoting positive teacher attitudes toward inclusion. Kern (2006) stated, "Collaboration describes the relationship between two people as they work together for a common goal" (p. 54). She also identified a correlation between peer support and collaboration. This relationship is imperative for inclusive teachers. For example, Villa and Thousand (2003) recognized collaboration as being vital in the successful implementation of inclusion. Also, Olson (2003) determined the majority of participants in her study were in agreement that general education and special education teachers needed to collaborate for successful inclusion. Furthermore, Buford and Casey (2012) reported that positive outcomes result from collaboration between general education teachers and special education teachers. A partnership between general educators and special educators is an essential component to the success of inclusion. According to Orr (2009), collaboration emerged as the strongest theme in her study, *New Special Educators Reflect about Inclusion: Preparation and K-12 Current Practice*. Moreover, Hwang and Evans (2011) ascertained the degree of collaboration as an important factor of successful inclusion. According to Worrell (2008), "Effective and

meaningful collaboration is the glue that binds a successful inclusion program together" (p. 46). Bondurant (2004) asserted that 94% of the participants indicated that collaboration was an important factor for inclusion. Collaboration between general education teachers and special education teachers has been found to be integral in promoting successful inclusion, according to Costley (2013). Furthermore, Hatchell (2009) concluded that collaboration between all staff members was essential to the success of inclusion. The relationship among educators has been found to be a major contributor for positive attitudes of teachers in the inclusive classroom. This relationship can be formed through efforts of co-teaching.

Co-teaching

The partnership of jointly sharing instruction between the general education teacher and the special education teacher is co-teaching. Co-teaching is an instructional strategy that is often used in the inclusive classroom. It first appeared in the 1980s as a strategy for supporting the inclusive classroom (Pugach & Winn, 2011). According to Friend, Cook, Hurley-Chamberlain, and Shamberger (2010), "Co-teaching can be viewed as a reasonable response to the increasing difficulty of a single professional keeping up with all the knowledge and skills necessary to meet the instructional needs of the diverse student population" (p. 11). Students with special needs can benefit from strong strategies within the general education classroom in order to increase learning opportunities of the general education curricula. The partnership of the two teachers creates a greater delivery method for the inclusive classroom. It allows all students full access to the general education curricula. For example, Walsh and Jones (2004) discovered two particular benefits of co-teaching classrooms over self-contained classrooms. First, general

education curriculum instruction was more evident in co-taught classrooms than self-contained classrooms. Second, co-taught classrooms were more likely to utilize higher order thinking skills during instruction than self-contained classrooms. Successful co-teaching requires necessary skills, knowledge, and dispositions. For example, Brinkman and Twiford (2012) suggested, "Skills such as classroom management, collaborative lesson planning, communication, data collection, interpersonal skills, differentiation of instruction, and self-advocacy" (p. 7) were all essential in promoting effective co-teaching.

Despite the benefits of co-taught classrooms, Monahan, Marino, Miller, and Cronin (1997) reported that only a marginal number of teachers felt comfortable with co-teaching. Furthermore, Berry et al. (1996) indicated that teachers found co-teaching beneficial but did not implement it correctly. In addition, Kilanowski-Press, Foote, and Rinaldo (2010) found that co-teaching was the least used instructional approach for inclusive education. While co-teaching has been reported as being a positive instructional strategy to implement in the inclusive classroom, there are reasons why it is not being implemented fully by teachers. For example, Pugach and Winn (2011) identified a lack of common planning time and a lack of administrative support as barriers to successful implementation of co-teaching. Pugach and Winn also concluded that co-teaching has not yet exhibited the greatest collaborative efforts. Identifying the barriers of co-teaching is essential for successful implementation. It is also crucial for maintaining a positive attitude for teachers utilizing the strategy in the inclusive classroom setting.

Support Personnel

Another form of support to promote a positive attitude for teachers in inclusion classrooms is support personnel. Examples of support personnel include speech and language, occupational, physical, and behavioral therapists, along with other resources such as special educators. According to Leatherman and Niemeyer (2005), teachers who had access to support personnel verbalized a more positive attitude. Furthermore, Leatherman (2007) ascertained that not only are teachers welcome to therapists working with students, but they appreciate the therapists showing them certain skills they could utilize in the classroom to benefit the students. This type of support is beneficial to inclusive teachers, and it provides them with additional resources to promote success for students with special needs in the general education classroom.

Additional Support

One of the most crucial supports for inclusive teachers comes from the parents of students with special needs. The support of parents is necessary for an effective inclusion program. According to Cardona (2009), most parents want their special needs child to be in the general education classroom as much as possible with the students without disabilities. The parents prefer that the students be in the same environment for the greatest amount of time possible. Therefore, they are more supportive of the teacher. However, in some cases teachers feel threatened by parents of students with special needs. Glazzard (2011) indicated that some teachers have a negative attitude toward inclusion, and some parents even resist wanting their child in an inclusive classroom. These teachers and parents have the idea that students with special needs are not going to perform as well academically if they are in an inclusive classroom. Teachers with

negative attitudes toward inclusion tend not to have the support of the parents of students with special needs.

Effects on Nondisabled Students

Inclusion has an influence on all students in the classroom. Students without disabilities are also affected by inclusive practices. In fact, according to Eiken (2014), over half of the teachers surveyed indicated that nondisabled students learn better in the inclusion classroom. Furthermore, Scruggs and Mastropieri (1996) also reported 66.6% of special education teachers and 50.8% of general education teachers believed that all students could benefit from inclusion experiences. While some may feel that inclusion is harmful to students without disabilities, Staub and Peck (1994) indicated regularity among studies that inclusion does not harm students without disabilities. In fact, studies illustrate the benefits of nondisabled students being educated in the same classroom as their peers with disabilities. Such benefits may be academic or social.

For example, Salend and Duhaney (1999) stated, “the principal benefits include an increased acceptance, understanding, and tolerance of individual differences and the development of meaningful friendships with classmates with disabilities” (p. 123). Students without disabilities also progress academically (McLeskey & Waldron, 2002). In addition, Gandhi (2007) found that nondisabled students educated within an inclusive classroom performed as well as nondisabled students in a non-inclusive classroom. Likewise, Sharpe, York, and Knight (1994) indicated that there was not a decline in academic performance of students in an inclusive classroom.

Another advantage for students without disabilities being educated in an inclusive classroom alongside students with disabilities is increased friendships and social

acceptance. Austin (2001) found that the social development of students was facilitated for students with and without disabilities in the inclusive classroom. Additionally, Staub (2005) reviewed research on inclusion's effect on nondisabled students and reported benefits such as friendships, social skills, self-esteem, personal principles, patience, and comfort level with people who are different. Idol (2006) examined inclusion in four elementary and four secondary schools and concluded the majority of students without disabilities remained unaffected negatively by the presence of students with disabilities being in the classroom. Familia-Garcia (2001) indicated students without disabilities in the inclusive classroom had "increased positive attitudes and comfort levels in regards to students with disabilities, increased moral and ethical principles, and developed good and caring friendships" (p. 15). According to this research review, there were many benefits to students with and without disabilities in the inclusive classroom.

Consequently, not everyone believes inclusion is beneficial to students without disabilities. Berg (2004) claimed that the inclusive classroom had many distractions, and the students without disabilities resented the one-on-one attention and modified assignments that students with disabilities received. However, as already presented, other research indicates that students without disabilities are not negatively affected by being in the same classroom as students with disabilities.

Training

Quality professional development is vital for improving teacher excellence. According to Guskey (2002), professional development programs are most effective when they address teachers' needs that directly relate to their day-to-day classroom operation. Furthermore, Guskey noted that teachers are attracted to professional

development by their belief that they will grow professionally in knowledge and skills and increase effectiveness with students. Therefore, it is imperative for professional development to be structured to create opportunities to nurture teachers toward improving their teaching strategies for fostering student growth and achievement.

Professional development and training are fundamental in promoting positive attitudes in teachers toward inclusive education. Studies have shown the more training a teacher has, the more positive the attitude. For example, Stoler (1992) and Jobe et al. (1996), found that teachers with in-service training in special education indicated more positive attitudes toward inclusion than those without the training. Furthermore, Ross-Hill (2009) reported regular education teachers were more confident to teach students with special needs with adequate training. In addition, Bruce (2010) concluded teachers that received more hours of training were more favorable to the benefits of integration. Also, Walker (2012) revealed a strong correlation between teachers' attitudes toward inclusion and professional development. Wogamon (2013) conducted a correlational study in South Carolina on three variables: teacher attitude towards inclusion, hours of professional development in topics related to special education, and hours of support from special education personnel and administrators addressing the needs of students with disabilities. She found a statistically significant correlation between hours of professional development and teacher attitudes toward inclusion. Therefore, based upon the research review, it is essential for teachers to have adequate training to foster a positive attitude toward inclusion.

Many teachers feel they have not received enough training to work with special needs students. For many teachers, the shortage of or inadequate training has caused them

to lack confidence toward teaching in an inclusive classroom, not to mention prompting them to have a negative attitude. Studies by Leatherman (2007), and Glazzard (2011) reported teachers lacked adequate training to work with special needs students or to meet the demands of an inclusive classroom. Furthermore, Berry et al. (1996) concluded that teachers felt they had adequate training, but they would need proper in-service training in order to have a successful inclusive classroom. Not only do teachers need to be adequately trained prior to teaching in an inclusive classroom, but they also need on-going professional development. According to Hatchell (2009), most teachers are not receiving sufficient on-going training to comfortably teach special needs students in their general education classroom. In addition, for some teachers, the lack of training on specific needs of students fostered negative attitudes toward inclusion. For example, Costley (2013) suggested many teachers only received training in their undergraduate programs and lacked the opportunity to apply that training to real children. These teachers were not given adequate training on the specific needs of particular students. Therefore, they did not think they could properly provide for students in an inclusive classroom. In addition, Dickens-Smith (1995) stated, “The fear of inclusion is eliminated to a great extent and positive attitudes are developed with proper training on the part of both the special and regular education teacher” (p. 6). Safeguarding a positive attitude toward teaching in an inclusive classroom is fundamental for teachers to meet the specific needs of their students.

It is vital for teachers to receive training in order to be successful in an inclusive classroom. This training can be provided in a myriad of ways. For example, Biddle (2006) suggested opportunities such as attending workshops or observing model

classrooms. McLeskey and Waldron (2002) also found that teachers benefited from visiting successfully developed inclusive programs. Furthermore, Kern (2006) believed out-of-district training was the most beneficial. Training is crucial to positive teacher attitude and successful implementation of inclusion. Morgan and Demchak (1996) ascertained the importance of providing training on current effective practices and how to implement them. All teachers need to be trained appropriately for teaching students with special needs in the general education classroom. Dickens-Smith (1995) conducted a study in which teachers completed a survey prior to in-service training and again after the training. She found that regular education teachers showed a positive change in attitude in 11 out of 12 questions. Also, she stated, “three to one research studies on inclusion support the idea that staff development is the key component in promoting acceptance of children with disabilities within the regular setting” (p. 6). Therefore, it is even more important that training must be ongoing to maintain a positive attitude toward inclusion.

Inclusion Classrooms

According to federal law and this literature review, inclusion is here to stay, and it has been found to provide many benefits for students with and without disabilities. Successful inclusive classrooms exhibit certain characteristics. For example, Bucalos and Lingo (2005) recognized the following features of successful research-based strategies in inclusion classrooms:

- Commitment of teacher time in planning and execution of lesson(s).
- General and special education teachers available to students for a full class period.

- Clear understanding of both general and special education teachers of language and concepts central to content being covered.
- Successful collaboration between teacher and student, using instructional conversation and directive questioning.
- Use of conceptual anchors (video, story, problem-based scenario) to create a shared experience and framework for building on prior knowledge and engaging students in higher-order thinking skills.
- Use of flexible, creative differentiated instruction with student input; and use of cooperative learning with an emphasis on instructional conversation and responsibility for mutual learning. (p. 60)

Furthermore, Loreman (2007) reported seven contextual factors that are critical for effective inclusion classroom practice. Those supports included "developing positive attitudes, supportive policy and leadership, school and classroom processes grounded in research-based practice, flexible curriculum and pedagogy, community involvement, meaningful reflection, and necessary training and resources" (p. 22). Also, Leatherman and Niemeyer (2005) determined successful inclusive classrooms displayed positive teacher attitudes. These attitudes supported an environment where children with and without disabilities were involved in classroom activities. Teacher attitudes appeared to be influenced by the following: experiences in inclusive classrooms, teachers that addressed children's individual needs, teachers that facilitated family involvement, and resources and personnel that were available in the classroom. To promote successful inclusion, Costley (2013) had the following recommendations:

1. Read the educational literature about successful programs. Focus on the successful essentials for inclusion.
2. Initiate discussions with other teachers who have successfully worked as special educators implementing inclusion in regular classrooms.
3. Promote discussions with regular classroom teachers who have been successful collaborating with the special education teacher with inclusion students.
4. Seek out professional opportunities to learn about inclusion (i.e. training sessions/seminars). Teachers should encourage their instructional leader to provide professional development on this important subject. With knowledge, there is power and confidence!
5. Teachers need adequate and ample time to collaborate with each other about teaching methods, lesson plans, classroom behavior, and other areas of concern.
6. Regular classroom teachers need a special time to collaborate one on one with the special education teacher developing individualized inclusion strategies. (p. 7)

Research findings indicate the key to successful inclusive classrooms is positive teacher attitude, which is reflected in their behaviors in the classroom. Unfortunately, not all teachers promote a positive attitude toward inclusion, and inclusive classrooms are not always successful. Hatchell (2009) reported on factors behind positive and negative teacher attitudes. For a positive attitude, she stated that it is imperative for general education teachers and special education teachers to collaborate to foster a positive

attitude. Certain barriers were evident in several studies. For example, negative attitudes of general education teachers, lack of administrator support, lack of knowledge, lack of resources, class size, and a one-size-fits-all mentality of teachers were reported by Orr (2009), Bruce (2010) and Glazzard (2011). Furthermore, Hatchell (2009) reported 82.6% of participants disagreed that teachers were provided with ongoing training and in-service to prepare them for teaching students with disabilities. These barriers must be addressed before teachers can exhibit a positive attitude regarding inclusion and foster a successful classroom for all students. Teacher attitudes matter because teachers influence what takes place in the classroom.

CHAPTER III

METHODOLOGY

Inclusion mandates in the classroom cannot be implemented successfully without the teacher's proper attitude. According to Cochran (1998), a positive teacher attitude is key to successful inclusion. Also, a positive teacher attitude directly affects student success in the inclusive classroom and directly affects student achievement (Munck, 2007; Showalter-Barnes, 2008). Furthermore, Munck (2007) stated, "Teacher's actions are shaped by their attitudes" (p. 15). Hence the need to investigate teachers' attitude about the inclusion of children with special needs in the regular general education classroom.

This study was in three parts. First, the purpose of the study was to determine how teachers differed on how they perceived inclusion of special education students in the regular general education classroom in rural school districts in South-Central Arkansas. The teachers are identified by these five variables: gender, age, educational level, current teaching level, and number of special education courses taken. Second, the purpose of the study was to determine the predictive effects of teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. Third, the purpose of the study was to describe what types of inclusive education training methods were perceived as being the most and least

beneficial for regular general education teachers in rural school districts in South-Central Arkansas. This chapter is organized into six sections. These sections describe the research design, the sample, the instrumentation, the data collection procedures, the analytical methods, and the limitations.

Research Design

This study replicated parts of a study by Kern (2006) and used the *Survey of Teacher Attitude Regarding Inclusive Education Within an Urban School District*. For research design purposes, the study was divided into three parts. The first part consisted of a quantitative, causal-comparative (survey) strategy to investigate regular general education teachers' attitudes regarding inclusive education practices in the rural school setting. Data from the participants were gathered in a post-survey only format. The data were then subdivided by the five independent variables in the study, which included the following teacher traits: gender, age, educational level, teaching level, and number of special education courses taken in undergraduate and graduate school. The dependent variable for all five independent variables was teacher attitudes measured by the *Teacher Attitudes Towards Inclusive Education* survey. For the statistical computations, the Total Attitude score was used. The second part of the study consisted of a quantitative, regression strategy to investigate the predictive relationship between teaching years at their current level, total years teaching experience, and years of special needs teaching experience on the perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. Finally, the third part of the study consisted of a qualitative, descriptive strategy to investigate the types of inclusive education training methods that were perceived as being the most and least beneficial for regular general

education teachers in rural school districts in South-Central Arkansas. Open-ended questions completed by teachers at the end of the survey instrument helped to identify the training methods that teachers rated as being the most beneficial and the least beneficial in obtaining training about inclusion.

Sample

Teachers in three small, rural school districts located in South-Central Arkansas were chosen as the accessible population for this study. These three schools share a special education supervisor. School A had 85 certified teachers for the 2014-2015 school year, and 50% of their teachers held a degree beyond a bachelor's. Of the 85 certified staff, 77 were regular education teachers, and 8 were special education teachers. Student enrollment as of October 1, 2014, was 969. The demographic make-up was 92.0% Caucasian, 4.6% Hispanic, 1.33% American Indian, 1.03% Asian, and 0.71% African-American. Also, they were 52% male and 48% female. The free and reduced lunch rate for the district is 63%. The special education percentage for the district is 12.5%.

School B had 82 certified teachers for the 2014-2015 school year, and 71% of the teachers held a degree beyond a bachelor's. Of the 82 certified staff, 72 were regular education teachers, and 10 were special education teachers. Student enrollment as of October 1, 2014, was 1,003. The demographic make-up was 96.0% Caucasian, 2.5% Hispanic, 0.4% American Indian, and 0.2% African-American. Also, they were 52.5% male and 47.5% female. The free and reduced lunch rate for the district is 58%. The special education percentage for the district is 14%.

School C had 44 certified teachers for the 2014-2015 school year, and 70% of the teachers held a degree beyond a bachelor's. Of the 44 certified teachers, 40 were regular

education teachers, and 4 were special education teachers. Student enrollment as of October 1, 2014, was 582. The demographic make-up was 95.0% Caucasian, 0.02% Hispanic, 0.002% American Indian, 0.003% African-American, 0.003% Asian, and 0.003% Pacific Islander. In addition, they were 52% male and 48% female. The free and reduced lunch rate for the district is 62%. The special education percentage for the district is 13%.

Instrumentation

The survey, *Teachers Attitudes Towards Inclusive Education*, consisted of three parts. Part A of the survey gathered teacher demographic information: gender, age range, education level, current teaching level, the number of years at current teaching level, the number of total years teaching, amount of training received in teaching children with special needs, and amount of experience teaching children with special needs in the classroom.

Part B of the survey consisted of 42 questions related to teacher attitudes regarding inclusive education. The questions were divided into the following five subdomains: student variables, peer support, administrative support, collaboration, and training. The teachers were instructed to answer the questions based on a 4-point Likert scale: SD (Strongly Disagree), D (Disagree), A (Agree), or SA (Strongly Agree).

Part C of the survey consisted of three open-ended qualitative research questions. The first question is: What type of delivery method do you believe would benefit you most in receiving training regarding including special education students in your classroom? Teachers were asked to rank the following six choices from most beneficial (1) to least beneficial (7): district level in-service training, out-of-district training,

coursework at college/university, school building level training, article(s) provided to you, time for consultation with school psychologists, and time for consultation with special education teachers. The next two open-ended questions asked teachers to list other methods of training delivery they believed would be helpful in receiving information on inclusive education and list any other topic(s) on which they would like training regarding inclusive education.

To establish face validity for the survey, the instrument was reviewed by 10 expert reviewers, consisting of certified school psychologists from Pennsylvania and New Jersey. Suggestions were incorporated into a revision of the instrument. The survey was administered to elementary, middle, and high school regular and special education teachers in the Chester Upland School District (Kern, 2006).

Data Collection Procedures

After approval from the Institutional Review Board for the research proposal, the following procedures were used to conduct the research. A letter was submitted to the superintendent of each school to conduct the research. With approval, a cover letter and the *Teacher Attitudes Towards Inclusive Education* were provided to teachers in Grades K-12. The letter clearly stated that informed consent is provided through the teacher completing and returning the survey. The letter also indicated that teacher participation is voluntary, that respondent anonymity would be maintained at all times, that all information would be kept confidential, and that the participant could view the results of the study.

Analytical Methods

To address the first main hypothesis with its five subsections, 5 one-way ANOVAs were conducted using the following teacher traits: gender, age, educational level, teaching level, and number of special education courses taken in undergraduate and/or graduate school as the five independent variables with the overall attitude toward inclusion serving as the dependent variable for each. To address the second hypothesis, a multiple regression was conducted to determine the predictive relationship between teaching years at their current level, total years teaching experience, and years of special needs teaching experience on the perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. To test the hypotheses, the researcher used a two-tailed test with a .05 level of significance. For the research question, the researcher compiled the rankings from the survey regarding the most beneficial and the least beneficial in obtaining training about inclusion. The researcher also summarized the open-ended statements concerning the other topic(s) that would be most and least beneficial education training methods for teachers of inclusive programs.

Limitations

A significant limitation of this study is the relatively small sample size. The survey was provided to only 244 teachers. The return rate of the survey was influenced by the support of the study by the district administrators and their willingness to encourage teacher participation and completion of survey promptly.

Another limitation is the survey was administered the last week of school. Typically, during this time of the school year teachers are stressed trying to complete responsibilities of ending the school year. These demands associated with the end of the

school year may have added additional pressure on teachers resulting in a negative response on the survey.

Additionally, since the study was conducted over three different rural school districts in South-Central Arkansas, the variation of inclusive methods may vary from district to district. Also, the school-wide culture varies within districts, as well as from district to district and may influence teacher response to the survey.

Lastly, the survey required teachers to self-report information. The use of self-reporting is dependent upon the honesty of the respondent.

CHAPTER IV

RESULTS

The researcher divided the present study into three parts. First, the purpose of the study was to determine how teachers differed on how they perceived inclusion of special education students in the regular general education classroom in rural school districts in South-Central Arkansas. This purpose was subdivided by the five independent variables: gender, age, educational level, current teaching level, and number of special needs courses taken in college. Second, the purpose of the study was to determine the predictive effects of teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience, on perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. Third, the purpose of the study was to describe what types of inclusive education training methods were perceived as being the most and least beneficial for regular general education teachers in rural school districts in South-Central Arkansas. This chapter presents the results of the data collected, including data entry; a description of demographics; and a statistical analysis of the results. An alpha level of .05 is commonly used for all statistical tests. Pallant (2007) indicated that an alternative to account for a Type 1 error is to apply a Bonferroni adjustment to the alpha level by dividing the alpha level of .05 by the number of comparisons. Because the sample numbers in the two levels of the independent variable, gender, were imbalanced, no statistical analysis was conducted.

Therefore, a Bonferroni correction was used because multiple comparisons were being employed ($.05/4 = .0125$).

Data Entry, Scoring, and Screening

The data collected included responses from teachers who completed the *Teacher attitudes towards inclusive education* survey. The data were placed into Microsoft Excel by variable to set up the database. This Excel file was then transferred and converted into the Statistical Program for Social Sciences (SPSS), Version 22 software for analysis. The *Teacher attitudes towards inclusive education* survey, comprised of 42 questions, served as the primary instrument in the study. Higher scores on each item suggested positive attitudes regarding inclusive education. To address the research questions, the Total Attitude score was used for the analyses.

The data were entered in three parts. Part A included all the demographic information provided by the subjects. Part B consisted of the appropriate Likert scale response (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, and 4 = *Strongly Agree*) based on individual responses from the participants. Finally, Part C involved qualitative responses from those participants who provided additional data. Descriptive statistical analyses were calculated to determine frequencies and percentages of survey responses.

The data were then screened for assumptions regarding the ANOVA analysis. To accomplish this, the data were screened for the dependent variable, total attitude score, and the independent variables (gender, age, educational level, current level teaching, and the number of special education courses taken). Next, the distributions of the variables were checked for the assumption of normality observing significance of Kolmogorov-Smirnov including scatter plots, histograms, skewness, and kurtosis. Levene's statistic

was applied to test for homogeneity of variance. Observation of these assumption tests showed the data adequately met the assumptions and the statistical tests could be employed.

Demographics

Teachers in three small, rural school districts located in South-Central Arkansas were chosen as the accessible population for this study. These three schools share a special education supervisor. During the course of the data collection, 211 certified teachers were employed for the 2014-2015 school year. Of the 211 teachers, 78 teachers completed and returned the survey. Of the 78, 72 survey results were usable for Part 1 of the analyses. Of the usable data, the majority of the returns were females. Age 46 and above comprised 45% of the sample, and the majority of participants (56%) achieved a master's level or above in education. The level of teaching was well distributed among the three teaching levels. The majority of the participants had taken two or fewer special education courses, categorized by the respondents who had received two or fewer courses and those who had taken three or more courses. Several participants reported having no special education courses in their bachelor's or master's university work (21%). Years teaching at their current level, total years teaching, and years teaching students with special needs were similar, though a wide range of experience was shown within each area.

Hypothesis 1a

Hypothesis 1a stated that no significant difference will exist between males versus females on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. Of the usable data, the large

majority of the returns were females. Because only 12 males responded to the survey compared to 60 females, a statistical result from any analysis would have produced unreliable results concerning the effects of gender on perceptions concerning inclusion. Regardless, the mean of the male group ($M = 112.00$, $SD = 10.07$, $n = 12$) was statistically different from the mean of the female group ($M = 111.02$, $SD = 9.64$, $n = 60$).

Hypothesis 1b

Hypothesis 1b stated that no significant difference will exist between teachers who are age 35 and below versus 36-45 versus 46-55 and 56 and above on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. The population from which this sample was drawn was normally distributed, and kurtosis fell between 1.2 and -1.5. To test the assumption of normality, histograms as well as Kolmogorov-Smirnov (KS) statistics were examined for each group across four age categories. Results for the KS tests revealed no significant deviation from a normal distribution for age below 35, $D(13) = .128$, $p = .200$; ages 36-45, $D(27) = .148$, $p = .133$; ages 46-55, $D(21) = .144$, $p = .200$; and ages 56 and above, $D(11) = .117$, $p = .200$. Data for sample groups were normally distributed. Levene's test of equality of variances was conducted within ANOVA and indicated that the assumption of variances had not been violated. Levene's test was not significant, $F(3, 68) = 0.69$, $p = .561$. There were no outliers. To test this hypothesis, a one-way ANOVA was conducted to compare the means of the four different age groups on perceptions concerning inclusion (see Table 1).

Table 1

One-Way ANOVA Results from Age on Perceptions Concerning Inclusion

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>ES</i>
Between Groups	649.38	3	216.46	2.47	.069	0.098
Within Groups	5957.27	68	87.61			
Total	6606.65	71				

The independent variable, age, was not significant and had a small effect size, $F(3, 68) = 2.47, p = .069, ES = 0.098$. Figure 1 shows the mean perceptions concerning inclusion for age of participants.

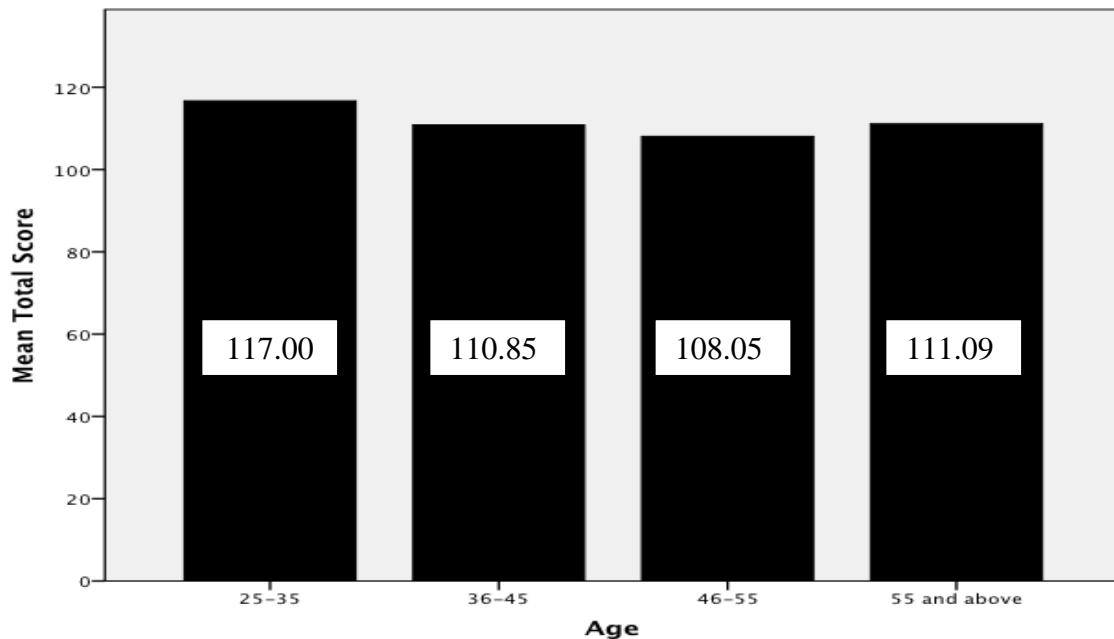


Figure 1. Mean perceptions concerning inclusion for age of participants.

The four different age groups did not score significantly different from each other. The means of the four groups were as follows: the age 35 and below group ($M = 117.00, SD =$

9.49, $n = 13$), the 36-45 group ($M = 110.85$, $SD = 8.94$, $n = 27$), the 46-55 group ($M = 108.05$, $SD = 10.62$, $n = 21$), and the 56 and above group ($M = 111.09$, $SD = 7.37$, $n = 11$).

Hypothesis 1c

Hypothesis 1c stated that no significant difference will exist between teachers who hold a bachelor's degree versus a master's degree on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. The population from which this sample was drawn was normally distributed, and kurtosis fell between 1.1 and -1.1. The KS statistics were examined for the educational level. Results for the KS revealed no significant deviation from a normal distribution for bachelor's degree, $D(24) = .130$, $p = .200$ and master's degree, $D(15) = .135$, $p = .200$. No participant contributed scores to more than one group. Data for sample groups were normally distributed. Levene's test of equality of variances was conducted within ANOVA and indicated that the assumption of variances had not been violated. Levene's test was not significant, $F(1, 70) = 2.22$, $p = .141$. There were no outliers. To test this hypothesis, a one-way ANOVA was conducted to compare the means of the two different educational level groups on perceptions concerning inclusion (see Table 2).

Table 2

One-Way ANOVA Results from the Educational Level of Participants on Perceptions Concerning Inclusion

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>ES</i>
Between Groups	8.28	1	8.28	0.09	.768	0.001
Within Groups	6588.16	70	94.12			
Total	6596.44	71				

The independent variable, educational level, was not significant and had a small effect size, $F(1, 70) = 0.09, p = .768, ES = 0.001$. Figure 2 shows the mean perceptions concerning inclusion for educational level of participants.

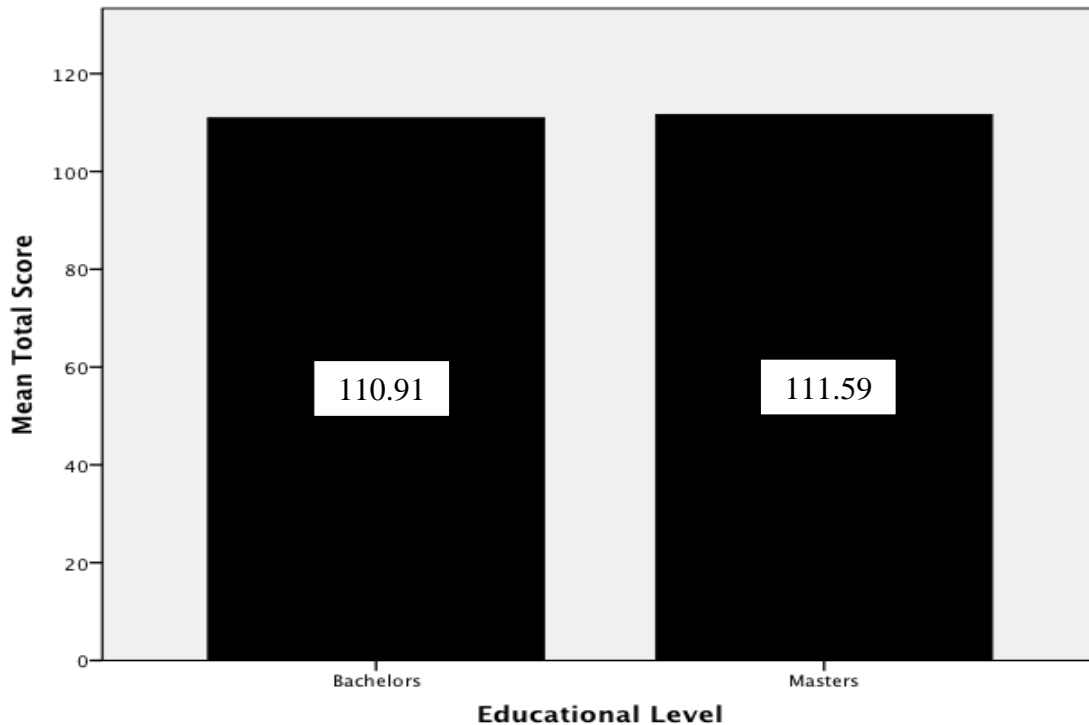


Figure 2. Mean perceptions concerning inclusion for educational level of participants.

The two different educational level groups did not score significantly different from each other. The means of the two groups were as follows: the bachelor's level group ($M = 110.91$, $SD = 8.06$, $n = 33$) and the master's level group ($M = 111.59$, $SD = 10.90$, $n = 39$).

Hypothesis 1d

Hypothesis 1d stated that no significant difference will exist between teachers who teach at the elementary versus the middle versus the high school level on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. The population from which this sample was drawn was normally distributed, and kurtosis fell between 1.1 and -1.2. A KS test was used to test for normality with $p > .05$ for each group, indicating that the data were normally distributed across the groups. No participant contributed scores to more than one group. Data for sample groups were normally distributed. Levene's test of equality of variances was conducted within ANOVA and indicated that the assumption of variances had not been violated. Levene's test was not significant, $F(3, 68) = 0.33$, $p = .807$. There were no outliers. To test this hypothesis, a one-way ANOVA was conducted to compare the means of the four current levels of teaching on perceptions concerning inclusion (see Table 3).

Table 3

One-Way ANOVA Results from the Current Level of Teaching of Participants on Perceptions Concerning Inclusion

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>ES</i>
Between Groups	403.05	3	134.35	1.47	.230	0.061
Within Groups	6203.60	68	91.23			
Total	6606.65	71				

The independent variable, teaching level, was not significant and had a small effect size, $F(3, 68) = 1.47, p = .230, ES = 0.061$. Figure 3 shows the mean perceptions concerning inclusion for current level of teaching of participants.

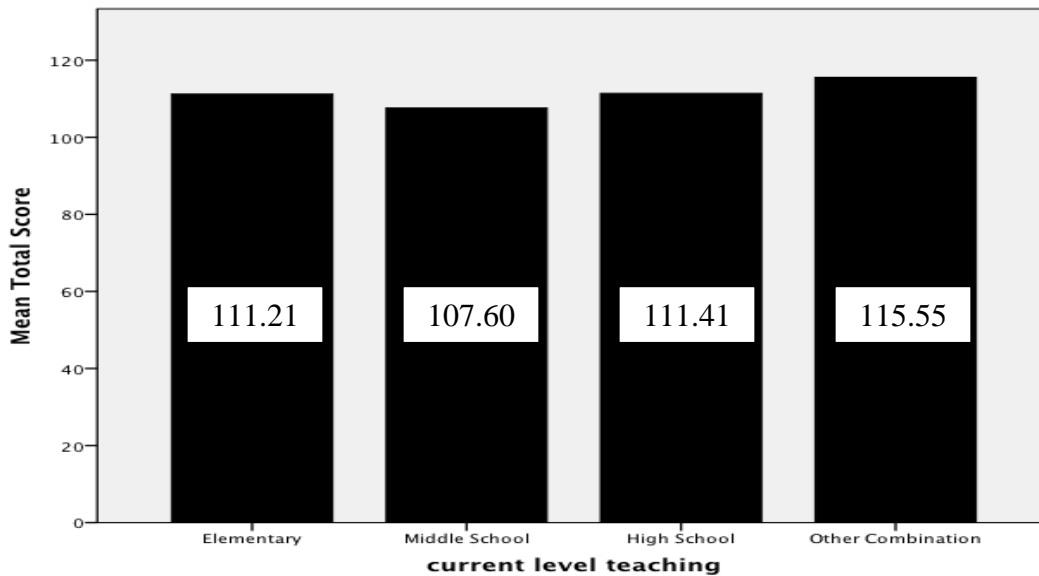


Figure 3. Mean perceptions concerning inclusion for current level of teaching of participants.

The four different teaching level groups did not score significantly different from each other. The means of the four groups were as follows: the elementary school group ($M = 111.21$, $SD = 8.71$, $n = 24$), the middle school group ($M = 107.60$, $SD = 10.47$, $n = 15$), the high school group ($M = 111.41$, $SD = 10.07$, $n = 22$), and the other combination group ($M = 115.55$, $SD = 8.90$, $n = 11$).

Hypothesis 1e

Hypothesis 1e stated that no significant difference will exist between teachers who took two or less special needs courses versus three or more courses in college (including undergraduate and graduate) on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. The population from which this sample was drawn was normally distributed, and kurtosis fell between 1.1 and -1.0. A KS test was used to test for normality with $p > .05$ for each group, indicating that the data were normally distributed across the groups. No participant contributed scores to more than one group. Data for sample groups were normally distributed. Levene's test of equality of variances was conducted within ANOVA and indicated that the assumption of variances had not been violated. Levene's test was not significant, $F(1, 68) = 0.04$, $p = .845$. There were no outliers. To test this hypothesis, a one-way ANOVA was conducted to compare the means regarding the number of special education courses taken on perceptions concerning inclusion (see Table 4).

Table 4

One-Way ANOVA Results from the Number of Special Education Courses Taken on Perceptions Concerning Inclusion

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>ES</i>
Between Groups	106.21	1	106.21	1.12	.293	0.016
Within Groups	6425.63	68	94.50			
Total	6531.84	69				

The independent variable, number of special education courses taken, was not significant and had a small effect size, $F(1, 68) = 1.12, p = .293, ES = 0.016$. Figure 4 shows the mean perceptions concerning inclusion for number of special education courses taken by participants.

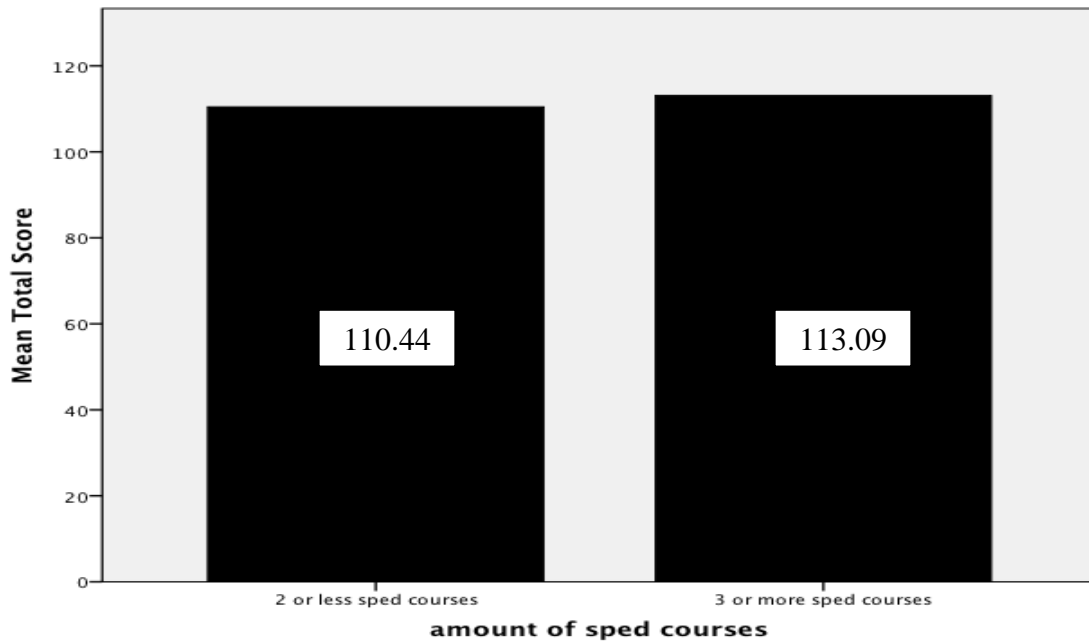


Figure 4. Mean perceptions concerning inclusion for number of special education courses taken by participants.

The two different groups of number of special education courses taken (two or less special needs courses versus three or more courses) did not score significantly different from each other. The means of the two groups were as follows: the two or less special needs courses group ($M = 110.44$, $SD = 9.71$, $n = 48$) and the three or more courses group ($M = 113.09$, $SD = 9.74$, $n = 22$).

The first part of this study consisted of five hypotheses, each using a one-way ANOVA analysis. The five independent variables for the five hypotheses were gender, age, educational level, current teaching level, and number of special education courses taken, respectively. None of the five independent variables had a statistically significant effect on the perceptions concerning inclusion measured by the *Teachers attitudes towards inclusive education* survey.

Hypothesis 2

Hypothesis 2 stated that no significant predictive relationship will exist between teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on perception of inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. Before conducting the analysis, the researcher examined data to determine if assumptions for multiple regression were met. A scatter plot was generated, which determined that all variables had a linear relationship. Initial screening was also conducted for normality. The analyzed data indicated most of the predictor variables fell within an acceptable range. An examination of the correlation table indicated there was not a strong correlation between the predictors. Multicollinearity was not a problem because all the Tolerance

values were less than .57 ($1 - R^2$) (Leech, Barrett, & Morgan, 2015). The Pearson correlation results for Hypothesis 2 are found in Table 5.

Table 5

Pearson Correlation Results for Hypothesis 2 on Attitude Toward Inclusive Education, n = 61

Variable	<u>Attitude</u>		<u>Yrs@CL</u>		TotalYrsT		SN Exp		<i>M</i>	<i>SD</i>
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>		
Attitude	1.00	.---	-.091	.243	-.215	.048	-.092	.241	110.95	10.33
Yrs@CL	-.091	.243	1.000	.---	.903	.000	.730	.000	14.85	10.17
TotalYrsT	-.215	.048	.903	.000	1.00	.---	.717	.000	16.89	10.06
SNExp	-.092	.241	.730	.000	.717	.000	1.00	.---	13.07	9.52

Note: Yrs@CL = Years at Current Level
 TotalYrsT = Total Years Teaching
 SNExp = Special Needs Experience

First, the model was examined to determine if all the variables as a whole predicted attitude toward inclusive education. A standard multiple linear regression was used to determine the accuracy of the predictor variables of years of teaching at the current level, total years of teaching experience, and years of special needs teaching experience on the attitudes toward inclusion for regular, general education teachers in rural school districts in South-Central Arkansas. The results are displayed in Table 6.

Table 6

ANOVA Results for the Regression Model Predicting Attitudes Toward Inclusion

Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	665.81	3	221.94	2.20	.097
Residual	5739.04	57	100.69		
Total	6404.85	60			

Regression results indicated that the overall model did not significantly predict perceptions on inclusion $F(3, 57) = 2.20, p = .097$. The model accounted for only 10.4% of variance in perceptions on inclusion ($R^2 = .104, R^2_{adj} = .057$). A summary of the regression coefficients is presented in Table 7.

Table 7

Coefficients for the Predictors of Inclusion

	<i>B</i>	<i>B</i>	<i>t</i>	<i>p</i>	Collinearity Statistics	
					Tolerance	VIF
Constant	114.91		44.92	.000		
Current Tch Level	0.549	0.540	1.78	.080	.171	5.84
Yrs Total Teaching	-0.747	-0.728	-2.45	.017	.178	5.61
Sped Experience	0.039	0.036	0.192	.848	.450	2.26

The coefficients for the predictors of attitudes toward inclusion indicate that no predictors significantly contributed to the model. However, the total years teaching experience was

closer to being a significant predictor than the other two predictors, years at current level and years of special needs teaching experience.

Research Question

The third part of the study addressed the research question: what types of inclusive education training methods are perceived as being the most and least beneficial for regular general education teachers in three rural school districts in South-Central Arkansas? Participants were asked about their beliefs reporting different training methods on inclusive education. They were asked to rank according to a 7-point scale from 1 (most beneficial) to 7 (least beneficial). Responses of 1, 2, and 3 were labeled as “Most beneficial,” responses 5, 6, and 7 were labeled “Least beneficial,” and a response of 4 was labeled “Neutral.” Of the participants, 53 respondents ranked the training methods in this section of the survey. Table 8 shows the rankings of the delivery methods.

Table 8

Ranking of Preferred Delivery Methods for Receiving Training about Inclusion (n = 53)

Delivery Method	Least Beneficial	Neutral	Most Beneficial
Consultation with special education teacher	22%	13%	65%
School building level training	17%	19%	63%
District level in-service	17%	22%	60%
Out of district training	40%	14%	46%
Consultation with school psychologist	62%	5%	33%
Articles provided	70%	13%	17%
Coursework at college/university	71%	11%	17%

Note: Percentages may not add to 100 due to rounding.

Time for consultation with special education teachers was the most beneficial method. School building level ranked second, and district level in-service training method was third. College/University coursework was the least beneficial method but was only one point higher than being provided articles to read. All other methods were evenly distributed.

CHAPTER V

DISCUSSION

The Education of All Handicapped Children Act of 1975 and Individuals with Disabilities Act were the two federal mandates that began the process of allowing children with disabilities the opportunity to receive education with children that did not have disabilities. This inclusion of all students in the same classroom required teachers to teach students with and without disabilities regardless of the teacher's knowledge or experience. Many teachers have difficulty with the implementation of inclusion, and therefore may develop a negative attitude. Ridarick and Ringlaben (2013) noted that teacher attitudes are one of the most significant influences in the successful implementation of inclusion. According to Subban and Sharma (2005), studying the attitudes of teachers toward inclusion is important because teacher insights influence their behavior towards students with special needs. In their view, successful inclusion classrooms are dependent on positive teacher attitudes.

The purpose of this study was to determine if teacher attitudes towards inclusive education were influenced by the variables of gender, age, educational level, teaching level, and number of special education courses taken for regular general education teachers in rural school districts in South-Central Arkansas. Next, the purpose of the study was to determine the predictive effects of teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on

perception of inclusion for regular general education teachers in rural school districts in South-Central Arkansas. Third, the purpose of the study was to describe what types of inclusive education training methods were perceived as being the most and least beneficial for regular general education teachers in rural school districts in South-Central Arkansas.

In this chapter, the researcher drew conclusions on the results from the data collected and the analysis performed. Implications were then made in examining the results of this study to the larger context of the literature. Next, recommendations were made for school leaders based on the results of the analysis concerning teacher perceptions on inclusion. Finally, the researcher discussed the significance of this study and the possible recommendations for future research.

Conclusions

To address the first main hypothesis with its five subsections, five one-way ANOVAs were conducted using the following teacher traits: gender, age, educational level, teaching level, and number of special education courses taken in undergraduate and/or graduate school as the five independent variables with the overall attitude toward inclusion serving as the dependent variable for each. To address the second hypothesis, a multiple regression was conducted to determine the predictive relationship between teaching years at their current level, total years teaching experience, and years of special needs teaching experience on the perception of inclusion for regular general education teachers. For the research question, the researcher compiled the rankings from the survey regarding the most beneficial and the least beneficial in obtaining training about inclusion.

Hypothesis 1a

The first hypothesis stated that no significant difference will exist between males versus females on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. Because the sample size was very small for male teachers, there was not enough balance between the male and female participants in the study to produce a valid statistical difference on perceptions concerning inclusion based on gender.

Hypothesis 1b

The second hypothesis stated that no significant difference will exist between teachers who are age 35 and below versus 36-45 versus 46 and above on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. ANOVA results indicated that age did not have a significant influence on teacher attitude regarding inclusive education. On average, scores for the participants in the four groups did not score significantly different from each other. The mean for the age 35 and below group was the highest, and the mean for the 46-55 group was the lowest. However, the means were so different as to reach significance. Therefore, the researcher failed to reject the null hypothesis.

Hypothesis 1c

The third hypothesis stated that no significant difference will exist between teachers who hold a bachelor's degree versus a master's degree on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. ANOVA results indicated that degree level of teacher did not have a significant influence on teacher attitude regarding inclusive education. On

average, the means of the two different educational level groups were not significantly different from each other. Even though the mean of the master's group was slightly higher compared to the bachelor's level group, evidence did not exist to reject the null hypothesis.

Hypothesis 1d

The fourth hypothesis stated that no significant difference will exist between teachers who teach at the elementary versus the middle versus the high school level on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. ANOVA results indicated that teaching level was not a significant influence on teacher attitude regarding inclusive education. On average, the means of the four different teaching level groups did not score significantly different from each other. Even though the mean for the other combination group was highest and the mean for the middle school group was the lowest, evidence did not exist to reject the null hypothesis.

Hypothesis 1e

The fifth hypothesis stated that no significant difference will exist between teachers who took two or less special needs courses versus three or more courses in college (including undergraduate and graduate) on their perceptions concerning inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. ANOVA results indicated that the number of special education courses taken was not a significant influence on teacher attitude regarding inclusive education. On average, the two different number of special education courses taken groups did not score significantly different from each other. Even though the mean of the three or more

courses groups was slightly higher compared to the two or less special needs courses group, evidence did not exist to reject the null hypothesis. Therefore, the researcher failed to reject the null hypothesis.

Hypothesis 2

The second hypothesis stated that no significant predictive relationship will exist between teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on perception of inclusion for regular general education teachers in three rural school districts in South-Central Arkansas. Regression results indicated that the overall model did not significantly predict perceptions on inclusion. The overall model accounted for only a small amount of variance in perceptions on inclusion. The coefficients for the predictors of attitudes toward inclusion indicated that no predictors significantly contributed to the model. However, the total years teaching experience was closer to being a significant predictor compared to the other two predictors, years at current level and years of special needs teaching experience. Therefore, not enough evidence existed to reject the null hypothesis.

The results of this study suggest that gender, age, degree level, grade level teaching, and number of special education courses taken did not appear to influence teacher attitude toward inclusive education. Results indicated that overall in this study, the general attitude of teachers was more positive toward inclusive education.

Research Question

The research question asked the following. What types of inclusive education training methods are perceived as being the most and least beneficial for regular education teachers in three rural school districts in South-Central Arkansas? School

district administrators use continuous professional development and training to enhance teacher's knowledge and skills in promoting student growth and achievement in their classrooms.

There are many ways to obtain on-going teacher training in order to foster a positive attitude toward inclusion. The results of this study indicated that allowing time for general education teachers to consult with special education teachers was the most beneficial method of training. School building level ranked second, and district level in-service training method was third among participants. The least beneficial trainings indicated in this study were college/university coursework and being provided articles. It is likely that teachers are more receptive to training when it is delivered in a method they perceive as beneficial.

Implications

According to Showalter-Barnes (2008), teacher attitude can directly affect student performance. To understand the present study, the results must be interpreted in the larger context of the literature. In regard to gender in Hypothesis 1a, the samples were unbalanced in this study and did not produce valid results for drawing a conclusion. Similarly, previous studies reported no effect of gender on teacher attitudes toward inclusion (Buford & Casey, 2012; Jobe et al., 1996; Kern, 2006). Each study had a greater response rate from females than from males. Buford and Casey (2012) surveyed teachers in a small, rural school district and suggested that no significant difference existed between male and female teachers. Kern (2006) also found in her study that no significant difference existed between male and female teachers, but rather both generally held a neutral attitude regarding inclusion. Jobe et al. (1996) had the largest number of

participants in their study (162 participants from 44 states), and found that no significant differences existed between gender for the Total attitude score. However, the differences that did exist suggested that male teachers were slightly more positive toward inclusion than female teachers.

This study next focused on teacher age as an independent variable. The results indicated that the three levels of teacher age (age 35 and below versus 36-45 versus 46 and above) did not significantly affect their perceptions concerning inclusion. This result stood in contrast to some of the previous research. Two studies indicated that teachers below the age of 36 held a slightly more positive attitude (Buford & Casey, 2012; Kern, 2006). Both of these studies suggested the difference in teachers below the age of 36 having a slightly more positive attitude may be attributed to having more exposure to teaching exceptional learners than their older counterparts. A result with no statistical significance may mean that teachers of all ages tend to have a positive attitude toward inclusive education.

In this study, the variable degree level of teacher for Hypothesis 1c was not a significant factor on teachers' perception of inclusion. The statistical results of this study coincide with the review of literature. Studies conducted by Bruce (2010), Buford and Casey (2012), and Kern (2006) all found no significant difference between the different degree levels of teachers. A result with no statistical significance may mean that degree level of teacher does not influence teachers' perception of inclusion. However, Stoler (1992) found that teachers with different educational levels have different perceptions of inclusion. Further investigation in his study discovered teachers with higher levels of

education had less positive attitudes toward inclusion than those who had achieved Master's degree status.

The variable of teaching level in Hypothesis 1d was not a significant factor on teachers' perception of inclusion. The statistical results of this study correspond with the review of literature. While studies conducted by Buford and Casey (2012), Kern (2006), and Ross-Hill (2009) did not find a statistical significant difference between teachers teaching at different grade levels, Kern (2006) had found a previous study that concluded the majority of high school teachers are prepared as content specialists and may not be willing to make adaptations for individuals. Kern's reasons for a discrepancy in how elementary and high school teachers view inclusion include smaller class size and less rigorous curriculum for elementary teachers. A result with no statistical significance may mean that teaching level does not influence teachers' perception of inclusion.

The variable number of special education courses taken was not a significant factor on teachers' perception of inclusion in Hypothesis 1e. The statistical results of this study were in agreement with the review of literature. Bruce (2010) and Kern (2006) did not find that the number of special education courses taken influenced teacher perception of inclusion. However, one study in the review of literature found a significant difference in perceptions of inclusion based on coursework. Stoler (1992) found that teachers with more coursework held a more positive attitude toward inclusion. He suggested this was in part because regular education teachers do not take special education methodology courses due to time constraints in completing the degree requirements in their regular education program area.

In Hypothesis 2, the predictive relationship of teaching years at the teachers' current level, total years teaching experience, and years of special needs teaching experience on perception of inclusion was investigated. In this study, no predictors significantly contributed to the model. However, the total years teaching experience was closer to being a significant predictor compared to the other two predictors, years at current level and years of special needs teaching experience. Buford and Casey (2012) reported that teacher attitude remained generally positive no matter how long the teachers had been working at their current teaching level, and neither the total number of years teaching nor the number of years of teaching students with special needs influenced teachers' attitude toward inclusion. Likewise, these same predictor variables were not an influence on teachers' perception of inclusion in Kern's (2006) study.

Finally, this study asked what types of inclusive education training methods are perceived as being the most and least beneficial for regular general education teachers? The results of this study showed time for consultation with the special education teacher as the most beneficial method of training. College/University coursework was the least beneficial method of training. The literature suggests that there is no doubt that training is essential in promoting inclusion and supporting teachers' perception toward inclusive education. Guskey (2002) reported the more training teachers received, the more positive the attitude. In addition, Ross-Hill (2009) found that regular education teachers were more confident to teach students with special needs when they received adequate training. Likewise, Jobe et al. (1996), Stoler (1992), and Wogamon (2013) found in their studies that teachers with in-service training in special education held more positive

attitudes toward inclusion than teachers without training. Proper training for general education teachers is key to a positive attitude toward inclusion.

Research exists that indicates the key to a successful inclusive classroom is a positive teacher attitude. According to Showalter-Barnes (2008), a positive teacher attitude is beneficial for the majority of students with disabilities that spend more than half of their educational day in the general education classroom. The results of this study are in contrast to many that suggest teacher's gender, age, degree level, grade level teaching, and number of special education courses taken are significant influences on a positive teacher attitude. In the sample surveyed for this study, statistical results indicated that all teachers, overall, possessed positive attitudes toward inclusion, which may have contributed to the non-statistically significant results.

Recommendations

Potential for Practice/Policy

This study examined how teachers perceived inclusion of special education students in the regular general education classroom. The study was conducted with a sample from three rural school districts in South-Central Arkansas. The findings of this study could provide implications for other rural school districts that have similar teacher demographics.

First, when IDEA was reauthorized in 2004, higher accountability for students with special needs on high-stakes testing required schools to ensure students were being provided adequate instruction and interventions. Under federal law, inclusion is here to stay. The probability of a general education teacher having a student with special needs educated alongside students without disabilities is highly likely. According to the

literature review, the key to a successful inclusive classroom is a positive teacher attitude. In this era of accountability for all students, it is important for inclusive education teachers to uphold a positive attitude. Teachers with more training tend to have a more positive attitude. Therefore, it is recommended for school districts to provide professional development on inclusive practices to general education teachers. This training needs to be on-going to better prepare teachers for the challenges of the inclusive classroom.

Second, it is important for inclusive classroom teachers to have the necessary support system. According to Showalter-Barnes (2008), it is imperative to provide inclusion teachers with support to promote a positive attitude. It is important for school leaders to understand how critical it is for them to provide support to teachers of inclusive classrooms. This support can come in a variety of ways. Administrators need to recognize all of the ways they can provide support to inclusion teachers. There are many ways in which an administrator can provide support. First, administrators can provide time for general education teachers to collaborate with the special education teacher. Second, they can provide opportunities for training for all teachers of students with special needs. Third, it is important for administrators to provide a listening ear for teachers that need to express their frustrations from time-to-time, without fear of repercussions. Fourth, administrators need to ensure teachers are using current, effective teaching practices. Fifth, they must provide teachers with necessary materials and resources.

The third recommendation was that research indicated that training is important for positive teacher attitude. Many teachers feel they have not received satisfactory training in order to teach students with disabilities in the general education classroom. Knowing this, it would be beneficial for state policy makers to require training with

specific disabilities for all teachers and not just teachers of special education. The training needs to address the various types of disabilities so general education teachers have a better understanding of all the different special needs. For example, special education teachers are required to receive training on Autism, but general education teachers are not. It would be beneficial for all teachers to receive this training. Also, teachers should be provided with professional development activities that directly deal with inclusion such as differentiated instruction, accommodations and modifications, and specific instructional strategies for students with various disabilities. It would also be valuable for teacher education programs to provide pre-service teachers with exposure to children with a wide range of abilities and special education instructional strategies, as well as to require all field experiences to include time in an inclusive and/or special education classroom.

Future Research Considerations

To evaluate the influence of teachers' perception of inclusion, the following studies are recommended for consideration:

1. The findings from this study support the need for additional longitudinal studies with a larger sample size. A larger sample size would improve the power of the study.
2. Future studies could include other advanced degrees to determine if those teachers have a more positive attitude for inclusive education.
3. Limited research has been done to include National Board Certified teachers; therefore, this variable could be included in teacher demographics.

4. The effect of the type of coursework should be included in future studies to further understand its influence on teachers' perception of inclusion.
5. The effect of gender should be addressed in further studies.
6. Obtaining administrator attitudes toward inclusion would be helpful since administrators help shape teacher attitudes.
7. Include larger schools or suburban schools where teachers have a larger population of special needs students to determine if teachers maintain a positive attitude.
8. Investigate if the severity of the disability has an influence on teachers' perception of inclusion.
9. Investigate the barriers to successful inclusion.

Inclusion is part of the educational landscape, and teachers will likely see an increase of students with disabilities being educated in the general education classroom. The attitude of the teacher is important because the teacher influences instruction and student achievement in the inclusion classroom. To further influence system-wide educational practices, research investigating the influences on teacher attitude is essential to understanding how to improve the attitude of teachers in the general education classroom that are teaching students with disabilities.

REFERENCES

- Americans with Disabilities Act of 1990, 42 U.S.C. § 12101-12213 (2012).
- Arkansas Department of Education. (2008). *Special education and related services 2.00 definitions*. Little Rock, AR: Author.
- Aud, S., Hussar, W., Kena, G., Bianco, K., Frohlich, L., Kemp, J., & Tahan, K. (2011). *The condition of education 2011* (NCES 2011-033). U.S. Department of Education, National Center for Education Statistics. Retrieved from <https://nces.ed.gov/pubs2011/2011033.pdf>
- Austin, V. L. (2001). Teachers' beliefs about co-teaching. *Remedial and Special Education, 22*, 245-55. doi:10.1177/074193250102200408
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education, 17*(2), 129-147. doi:10.1080/08856250210129056
- Berg, S. L. (2004). *The advantages and disadvantages of the inclusion of students with disabilities into regular education classrooms* (Master thesis, University of Wisconsin-Stout). Retrieved from <http://www2.uwstout.edu/content/lib/thesis/2005/2005berg.pdf>
- Bergren, B. A. (1997). *Teacher attitudes toward included special education students and co-teaching* (Report No. ED 408 754). Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED305625)

- Berry, G., Berst, T., Jund, A.S., Overton, M., Rondina, A., & Tate, M. (1996). *What are teachers' attitudes towards inclusion in the general education classroom?*
- Retrieved from
<http://emurillo.org/Classes/Class2/documents/AttitudesInclusion.doc>
- Biddle, S. (2006). Attitudes in education. *The Science Teacher*, 73, 52-56. Retrieved from
<http://www.nsta.org/publications/news/story.aspx?id=51705>
- Bondurant, B. J. (2004). *Teachers' attitudes towards inclusion* (Master thesis, California State University). Available from ProQuest Information and Learning Company. (UMI No. 1419630)
- Brinkmann, J., & Twiford, T., (2012). *Voices from the field: Skill sets needed for effective collaboration and co-teaching*. Washington, DC: Department of Peer Learning.
- Retrieved from <http://files.eric.ed.gov/fulltext/EJ997467.pdf>
- Brown v. Board of Education, 347 U.S. 483 (1954).
- Bruce, J. R. (2010). *Teachers' perceptions of the inclusion of students with disabilities in the general education classroom* (Doctoral dissertation, Tennessee State University). Retrieved from
<http://digitalscholarship.tnstate.edu/dissertations/AA13433389>
- Buford, S., & Casey, L. B. (2012). Attitudes of teachers regarding their preparedness to teach students with special needs. *Delta Journal of Education*, 2, 16-30. Retrieved from <http://www.deltastate.edu>
- Bucalos, A. B. & Lingo, A. S. (2005). Filling the potholes in the road to inclusion: Successful research-based strategies for intermediate and middle school students

- with mild disabilities. *Teaching Exceptional Children Plus, 1*, 1-14. Retrieved from <http://files.eric.ed.gov/fulltext/EJ966515.pdf>
- Cardona, C. M. (2009). Teacher education students' beliefs of inclusion and perceived competence to teach students with disabilities in Spain. *Journal of the International Association of Special Education, 10*, 33-41. Retrieved from <http://www.iase.coe.nau.edu/index3.html>
- Cochran, H. K. (1998). *Differences in teachers' attitudes toward inclusive education as measured by the scale of teachers' attitudes toward inclusive classrooms (static)*. Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED426548)
- Costley, K. C. (2013). *Ongoing professional development: The prerequisite for and continuation of successful inclusion meeting the academic needs of special students in public schools*. Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED541075)
- Daniel R. R. v. State Board of Education, 874 F.2d 1036 (1989).
- Dickens-Smith, M. (1995). *The effect of inclusion training on teacher attitude towards inclusion* (Report No. SP 035 734). Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED381486)
- Dixon, E., Lambert, F., Stairs, C., Tejada, K., & Williams, S. (2009). *Teacher perception of the inclusion of special education students in the general education classrooms*. Retrieved from <http://emurillo.org/clsses/class2/documents/teacherperceptionsSpecEd.doc>

- Douvanis, G., & Hulsey, D. (2002). *The least restrictive environment mandate: How has it been defined by the courts?* Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED469442)
- Eiken, R. (2014). *Teacher attitudes toward the inclusion of students with disabilities in the general education classroom* (Master's thesis, Northwest Missouri State University). Retrieved from <http://www.nwmissouri.edu/library/researchpapers/2015/eiken>
- Familia-Garcia, M. (2001). *Special and regular education teachers' attitudes towards inclusive programs in an urban community school* (Report SP 040520). Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED461657)
- Forlin, C. (2001). Inclusion: Identifying potential stressors for regular class teachers. *Educational Research, 43*, 235-245. doi:10.1080/00131880110081017
- Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-Teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation, 20*, 9-27. doi:10.1080/10474410903535380
- Gandhi, A. G. (2007). Context matters: Exploring relations between inclusion and reading achievement of students without disabilities. *International Journal of Disability, Development and Education, 54*, 91-112. doi:10.1080/10349120601149797

- Glazzard, J. (2011). Perceptions of the barriers to effective inclusion in one primary school: Voices of teachers and teaching assistants. *Support for Learning, 26*, 56-63. doi:10.1111/j.1467-9604.2011.01478.x
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching, 8*(3), 381-391. doi:10.1080/135406002100000512
- Hatchell, E. (2009). *Regular education and special education teacher attitudes toward inclusion* (Master's thesis, University of Wisconsin-Stout). Available from <http://www2.uwstout.edu/content/lib/thesis/2009/2009hatchelle.pdf>
- Hernandez, S. J. (2013). *Collaboration in special education: Its history, evolution, and critical factors necessary for successful implementation*. Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED544122)
- Hull, J. R. (2005). *General classroom and special education teachers' attitudes toward and perceptions of inclusion in relation to student outcomes* (Doctoral dissertation, The University of West Florida). Retrieved from http://etd.fcla.edu/wf/wfe/0000046/hull_jennifer_ruhl_200506_EdD.pdf
- Hwang, Y. S., & Evans, D. (2011). *Attitudes towards inclusion: Gaps between belief and practice*. Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (EJ921198)
- Idol, L. (2006). Toward inclusion of special education students in general education, a program evaluation of eight schools. *Remedial and Special Education, 27*, 77-94. doi:10.1177/07419325060270020601
- Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2012).

- Jobe, D., Rust, J. O., & Brissie, J. (1996). Teacher attitudes toward inclusion of students with disabilities into regular classrooms. *Education, 117*, 148-153. Retrieved from <http://www.questia.com>
- Kern, E. (2006). *Survey of teacher attitude regarding inclusive education within an urban school district* (Doctoral dissertation, Philadelphia College of Osteopathic Medicine). Retrieved from http://digitalcommons.pcom.edu/psychology_dissertations
- Kilanowski-Press, L., Foote, C. J., & Rinaldo, V. J. (2010). *Inclusion classrooms and teachers: A survey of current practices*. Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (EJ909035)
- Lawrence, R. R. (2008). *A look inside the classroom: Teacher satisfaction with inclusion at the secondary level* (Doctoral dissertation, Indiana State University). Available from ProQuest Dissertations and Theses database. (UMI No. 3345305)
- Leatherman, J. M. (2007). "I just see all children as children": Teachers' perceptions about inclusion. *The Qualitative Report, 12*, 594-611. Retrieved from <http://www.nova.edu/ssss/QR/QR12-4/leatherman.pdf>
- Leatherman, J. M., & Niemeyer, J. A. (2005). Teachers' attitudes toward inclusion: Factors influencing classroom practice. *Journal of Early Childhood Teacher Education, 26*, 23-36. doi:10.1080/10901020590918979
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2015). *IBM SPSS for intermediate statistics* (5th ed.). New York, NY: Routledge.

- Logan, B. E., & Wimer, G. (2013). Tracing inclusion: Determining teacher attitudes. *Research in Higher Education Journal*, 20, 1-10. Retrieved from ERIC database. (EJ1064663)
- Loreman, T. (2007). Seven pillars of support for inclusive education. *International Journal of Whole Schooling*, 3, 22-38. Retrieved from ERIC database. (EJ847475)
- McLeskey, J., & Waldron, N. L. (2002). School change and inclusive schools: Lessons learned from practice. *Phi Delta Kappan*, 84, 65-72. Retrieved from ERIC database. (EJ653571)
- Mills v. DC Board of Education, 347 U.S. 483 (1954).
- Monahan, R. G., Marino, S. B., Miller, R., & Cronic, D. T. (1997). *Rural teachers', administrators', and counselors', attitudes about inclusion* (Report No. 021 000). Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED406099)
- Morgan C. R., & Demchak, M. (1996). *Addressing administrative needs for successful inclusion of students with disabilities* (Report No. RC 020 566). Washington, DC: Department of Peer Learning. Retrieved from ERIC database. (ED394767)
- Munck, M. (2007). Science pedagogy, teacher attitudes, and student success. *Journal of Elementary Science Education*, 19, 13-24. doi:10.1007/BF03173660
- National Center on Educational Restructuring and Inclusion. (1994). *The graduate school and university center*. New York, NY. Retrieved from ERIC database. (ED375606)

- Obiakor, H., Harris, M., Mutua, K., Rotatori, A., & Algozzine, B. (2012). Making inclusion work in general education classrooms. *Education and Treatment of Children, 35*, 477-490. doi:10.1353/etc.2012.0020
- Olson, J. M. (2003). *Special education and general education teacher attitudes toward inclusion*. (Master's thesis, University of Wisconsin-Stout). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.390.6881&rep=rep1&type=pdf>
- Orr, A. C. (2009). New special educators reflect about inclusion: preparation and k-12 current practice. *Journal of Ethnographic & Qualitative Research, 3*, 228-239. Retrieved from ERIC database. (EJ906600)
- Osgood, R. L. (2005). *1960-1968: Challenging traditions in special education. The history of inclusion in the United States*. Retrieved from <http://www.muse.jhu.edu/book/13164>
- Pallant, J. (2007). *SPSS survivor manual* (3rd ed.). New York, NY: Open University Press
- Pennsylvania Association of Retarded Citizens v. Commonwealth of Pennsylvania, 343 F. Supp. 279 U.S. Dist. Lexis 13874 (1972).
- Peterson, J. (2007). *A timeline of special education history*. Retrieved from <http://www.admin.foreschools.org>
- Pugach, M. C., & Winn, J. A. (2011). Research on co-teaching and teaming. *Journal of Special Education Leadership, 24*, 36-46. Retrieved from ERIC database. (EJ926850)

- Ridarick, T., & Ringlaben, R. (2013). *Elementary special education teachers' attitudes regarding inclusion*. Retrieved from <http://www.lynchburg.edu>
- Roncker v. Walter, 700 F.2d 1058 (1983).
- Ross-Hill, R. (2009). Teacher attitude towards inclusion practices and special needs students. *Journal of Research in Special Education Needs*, 9, 188-198.
doi:10.1111/j.1471-3802.2009.01135.x
- Ryan, T. G., & Gottfried, J. (2012). Elementary supervision and the supervisor: Teacher attitudes and inclusive education. *International Electronic Journal of Elementary Education*, 4, 563-571. Retrieved from
<http://files.eric.ed.gov/fulltext/EJ1068600.pdf>
- Salend, S. J., & Duhaney, L. G. (1999). The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education*, 20, 114-126. doi:10.1177/0741932599020000209
- Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1996: A research synthesis. *Exceptional Children*, 63, 59-74.
doi:10.1177/001440299606300106
- Sharpe, M. N., York, J. L., & Knight, J. (1994). Effects of inclusion on the academic performance of classmates without disabilities. *Remedial and Special Education*, 15, 281-287. doi:10.1177/074193259401500503
- Showalter-Barnes, K. (2008). *The attitudes of regular education teachers regarding inclusion for students with autism* (Doctoral dissertation, Walden University). Retrieved from <http://scholarworks.waldenu.edu/dilley>

Staub, D. (2005). *Inclusion and the other kids: Here's what research shows so far about inclusion's effect on nondisabled students*. Retrieved from <http://staff.pausd.org>

Staub, D., & Peck, C. A. (1994). What are the outcomes for nondisabled students? *Educational Leadership*, 52, 36-40.

Stauble, K. R. (2009). *Teacher attitudes toward inclusion and the impact of teacher and school variables* (Doctoral dissertation, University of Louisville). Retrieved from <http://ir.library.louisville.edu/etd>. doi:10.18297/etd/1375

Stoler, R. D. (1992). Perceptions of regular education teachers toward inclusion of all handicapped students in their classrooms. *The Clearing House: A Journal of Education Strategies, Issues and Ideas*, 66, 60-62.
doi:10.1080/00098655.1992.9955931

Subban, P., & Sharma, U. (2005). Understanding educator attitudes toward the implementation of inclusive education. *Disabilities Studies Quarterly*, 25.
doi:10.18061/dsq.v25i2.545

U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs. (2014). *36th annual report to congress on the implementation of the individuals with disabilities education act, 2014*. Washington, D.C. Author. Retrieved from <http://www.ed.gov/about/reports/annual/osp>

U.S. Office of Special Education Programs. (2015). *History, twenty-five years of progress in educating children with disabilities through IDEA*. Retrieved from <http://www2.ed.gov/policy/speced/leg/idea/history.pdf>

- Villa, R. A., & Thousand, J. S. (2003). Making inclusive education work. *Educational Leadership, 61*, 19-23.
- Waldron, N. L., & Redd, L. (2011). Case in point: Providing a full circle of support to teachers in an inclusive elementary school. *Journal of Special Education Leadership, 24*, 59-61.
- Walker, T. J. (2012). *Attitudes and inclusion: An examination of teachers' attitudes toward including students with disabilities* (Doctoral dissertation, Loyola University Chicago). Retrieved from http://ecommons.luc.edu/luc_diss/401
- Walsh, J. M., & Jones, B. (2004). New models of cooperative teaching. *Teaching Exceptional Children, 36*, 14-20. doi:10.1177/004005990403600502
- Wogamon, L. S. (2013). *Examining the relationships between secondary general education teachers' attitudes toward inclusion, professional development, and support from special education personnel* (Doctoral dissertation, Liberty University). Retrieved from <http://www.digitalcommons.liberty.edu/doctoral/773/>
- Worrell, J. L. (2008). How secondary schools can avoid the seven deadly school "sins" of inclusion. *American Secondary Education, 36*, 43-56. Retrieved from <http://www.jstor.org/stable/41406108>
- Yell, M. L. (1998). *The law and special education*. Upper Saddle River, NJ: Prentice-Hall.