

## ABSTRACT

### Elementary Principals' Attitudes Towards the Inclusion of Students with Disabilities in the General Education Setting

Roxanna C. Ramirez

Mentor: Weldon E. Beckner, Ed.D.

Since the beginning of special education, educators have explored the topic of how best to serve students with disabilities. Only recently have schools begun to integrate students with disabilities in mainstream classrooms. Principals are now faced with deciding which students with disabilities will benefit from inclusion and how the inclusion process should be implemented. Because of the role Principals play in implementing inclusion programs into their schools it is important to study how principals' perceptions of inclusion guide their decisions.

This question was the foundation for the purpose of this study, which was to determine the attitudes and perceptions of Texas elementary school principals relative to including students with disabilities in general education classrooms. This study investigated how demographic information and experience affected principals' attitudes about inclusion. In addition, it also examined the principals' perception regarding the appropriateness of the placement of students based on the type of disability.

The research was conducted using a Web-based survey that was developed by Praisner (2000), the Principals and Inclusion Survey (PIS). The PIS contains four

sections including demographics, training, experience, attitudes toward inclusion and most appropriate placement for students with disabilities. The principals were randomly selected from the Texas Education Agency (TEA) records. The sample survey included a total of 360 principals, of which 110 completed the survey. Once the information was collected, it was analyzed using univariate analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA).

The results of the study indicated that demographic factors, training, and experience did not have a statistically significant affect on principals' attitudes toward inclusion. The study did find that principals' special education teaching experience had a statistically significant affect on principals' attitudes toward inclusion.

The study also found that 108 of the principals that successfully responded to the section examining principals' overall attitudes toward inclusion showed a more favorable attitude toward the inclusion of students with disabilities in general education classrooms. The results from this study indicate the importance of developing educational administration programs that will prepare elementary school principals with stronger, more positive attitudes toward including students with disabilities in general education settings.

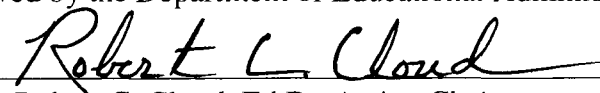
Elementary Principals' Attitudes Towards the Inclusion of Students with Disabilities  
in the General Education Setting

by

Roxanna C. Ramirez, B.S., M.A.


A Dissertation

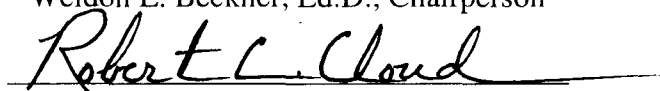
Approved by the Department of Educational Administration

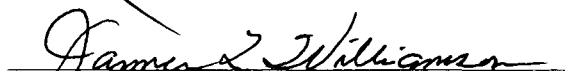
  
Robert C. Cloud, Ed.D., Acting Chairperson

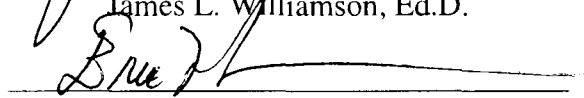
Submitted to the Graduate Faculty of  
Baylor University in Partial Fulfillment of the  
Requirements for the Degree  
of  
Doctor of Education


Approved by the Dissertation Committee

  
Weldon E. Beckner, Ed.D., Chairperson

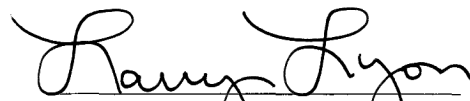
  
Robert C. Cloud, Ed.D.

  
James L. Williamson, Ed.D.

  
Eric L. Robinson, Ph.D.

  
Gayle R. Avant, Ph.D.

Accepted by the Graduate School  
August 2006

  
J. Larry Lyon, Ph.D., Dean

Copyright © 2006 by Roxanna C. Ramirez

All rights reserved

## TABLE OF CONTENTS

	Page
List of Tables .....	vi
Acknowledgments .....	vii
Chapter One .....	1
Introduction .....	1
The Principal’s Role in Inclusion .....	3
Statement of the Problem .....	5
Purpose of the Study .....	5
Objectives of the Study .....	6
Significance of the Study .....	7
Definition of Terms .....	8
Basic Methodology .....	10
Limitations of the Study .....	10
Basic Assumptions .....	11
Chapter Two .....	13
Literature Review .....	13
Philosophy of Inclusion .....	14
History of Inclusion and Inclusion Research .....	14
The Regular Education Initiative .....	16
Effects of Inclusion on Educators .....	17
Trends of Inclusion .....	20
Related Inclusion Research .....	21
Implications for Administrators and Leadership .....	24
Summary and Conclusions .....	30
Chapter Three .....	35
Methodology .....	35
Introduction .....	35
Research Questions .....	35
Participants .....	37
Sample Size .....	37
Description of the Instrument .....	37
Methodology .....	42
Data Analysis .....	43

Chapter Four .....	45
Results .....	45
Purpose of Study .....	45
Method .....	45
Sample Size .....	46
Demographics .....	47
Attitudes of Elementary Principals in Texas Toward Inclusion .....	48
Demographic ANOVA .....	50
Training/Experience ANOVA .....	51
Knowledge ANOVA .....	55
Programs ANOVA .....	57
Handicapping Conditions ANOVA .....	59
MANOVA Results .....	61
Pairwise Comparisons .....	62
Pairwise Comparison 1: Special Education Teaching Experience .....	62
Special education teaching experience, independent variable and learning disability (LD), dependent variable .....	63
Special education teaching experience, independent variable and mental retardation (MR), dependent variable .....	64
Special education teaching experience, independent variable and visual impairment (VI), dependent variable .....	65
Special education teaching experience, independent variable and physical disability (PD), dependent variable .....	65
Special education teaching experience, independent variable and speech impairment (SI), dependent variable .....	65
Special education teaching experience, independent variable and multi-handicapped (Multi), dependent variable .....	66
Special education teaching experience, independent variable and autism, dependent variable .....	66
Pairwise Comparison 2: Elementary Principal Experience .....	66
Elementary principal experience, independent variable and emotional disturbance (ED), dependent variable .....	67
Elementary principal experience, independent variable and visual impairment (VI), dependent variable .....	67
Elementary principal experience, independent variable and hearing impaired (AI), dependent variable .....	67
Elementary principal experience, independent variable and speech impairment (SI), dependent variable .....	68
Pairwise Comparison 3: Inservice Hours in Inclusion Practices .....	68
Hours of inservice in inclusion practices, independent variable and mental retardation (MR), dependent variable .....	69
Pairwise Comparison 4: Time Period of Special Education Training .....	69
Time period of special education training, independent variable and learning disabled (LD), dependent variable .....	69

Time period of special education training, independent variable and mental retardation (MR), dependent variable.....	70
Time period of special education training, independent variable and emotionally disturbed (ED), dependent variable.....	70
Time period of special education training, independent variable and visual impairment (VI), dependent variable.....	71
Time period of special education training, independent variable and hearing impaired (AI), dependent variable.....	71
Time period of special education training, independent variable and speech impairment (SI), dependent variable.....	71
Time period of special education training, independent variable and multi handicapped (multi), dependent variable.....	71
Time period of special education training, independent variable and autism, dependent variable.....	72
Pairwise Comparison 5: Special Education Law Knowledge.....	72
Special education law knowledge, independent variable and mental retardation (MR), dependent variable.....	73
Special education law knowledge, independent variable and speech impairment (SI), dependent variable.....	73
Special education law knowledge, independent variable and multi-handicapped (multi), dependent variable.....	73
Additional Findings.....	73
Chapter Five.....	74
Discussion and Conclusions.....	74
Introduction of Study.....	74
Summary of Study.....	75
Attitudes of Texas Principals Toward Inclusion.....	80
Summary of Attitudes of Texas Principals Toward Inclusion.....	84
Most Appropriate Placement Perception of Elementary Principals.....	84
Summary of Most Appropriate Placement Perception of Elementary Principals.....	85
Limitations of Results.....	85
Implications for Research and Practice.....	87
Implications for Future Research.....	89
Conclusion.....	90
Appendix.....	91
Appendix A.....	92
Appendix B.....	96
Appendix C.....	97
References.....	98

## LIST OF TABLES

Table	Page
1. Survey Matrix.....	39
2. Demographic Information for Principal Sample.....	47
3. Attitude Toward Inclusion Scores.....	49
4. Demographic ANOVA Results – Dependent Variable: Attitude Toward Inclusion.....	51
5. Training and Experience.....	52
6. Training/Experience ANOVA Results – Dependent Variable: Attitude Toward Inclusion.....	54
7. Means for Special Education Teaching Experience.....	55
8. Special Education Law and Terminology Knowledge.....	56
9. Knowledge ANOVA Results – Dependent Variable: Attitude Toward Inclusion.....	56
10. Means for Special Education Law Knowledge.....	57
11. Programs ANOVA Results – Dependent Variable: Attitude Toward Inclusion.....	58
12. Means of CM and “Other Inclusion”.....	59
13. Handicapping Conditions ANOVA Results – Dependent Variable: Attitude Toward Inclusion.....	60
14. MANOVA Results.....	62
15. Between Subjects Test for Special Education Teaching Experience and Principals’ LRE Ratings among all Disability Groups.....	63
16. Between Subjects Test for Elementary Principal Experience and Principals’ LRE Ratings among all Disability Groups.....	66



## ACKNOWLEDGMENTS

There are so many important people to thank who have supported me through this journey. First of all, I would like to thank God for giving me the strength to do all things! Nothing is impossible through God!

I would like to thank my chairperson, Dr. Weldon Beckner, for his unconditional support and assistance. His knowledge and wisdom in the field of education were instrumental in the guidance and completion of this dissertation. Additionally, his willingness to work electronically and through the postal service was essential as we communicated long distance for most of this project. Thank you so much, Dr. Beckner!

I would like to thank all of my committee members, Dr. Avant, Dr. Robinson, Dr. Williamson, and Dr. Cloud. Thank you for their time and valuable suggestions concerning my research. I would like to thank Dr. Sandy Bennett for her help with the technology aspect of this research. A sincere thank you goes to Dr. Steven Coats for his guidance with the statistical portion of this study. Also, I would like to thank Kathy Wheeler for all that you have done. Thank you to the three of you for always being there to answer all my questions in your area of expertise.

I would like to thank my family for all the love and support you have shown me during this process! Thank you to my mom, Edmida, for being so wonderful, supportive, and for always believing in me! Thank you to my sisters, Letty, Selina, Elsa, and Rebecca for wanting me to hurry up and finish so we could spend more time together! I would also like to thank my Grandma Noyola, Tia Irene, and Tia Grace, thank you all for your kind words of encouragement and for being great role models! I love you all!

Thank you to Jennifer for always being there to listen and encourage me through it all! Rolando and Gary, thank you for being amazing friends! I could not have done it without you! Lastly, I would like to thank those who kept me in their prayers and believed in me. Thank you all.

## DEDICATION

To the loving memory of my father  
Fausto Ramirez

It was his wisdom and guidance that helped me  
to achieve more than I ever thought was possible

I love and miss you, daddy

## CHAPTER ONE

### Introduction

Since the beginning of special education, educators have explored the topic of how best to serve students with disabilities. It was not too long ago when very few classrooms included students with disabilities. Serving special education students sometimes meant placement in a special classroom or perhaps even a separate school (Sharpe, 2001).

Special education provides educational and related services to students with a wide range of abilities and disabilities (Praisner, 2000). In the past, these services were provided outside of the regular classroom in places such as self-contained or resource classrooms. The recent preference is to provide these services in the general education classroom with appropriate in-class support (Praisner, 2000). Here, special education students can learn side by side with their regular education peers, perhaps benefiting socially as well as academically in this environment. This system of educating students with disabilities in the regular classroom setting is called inclusion.

Special education as we know it was conceived in 1975 when Congress passed the Education for All Handicapped Children Act (Public Law 94-142). This act guaranteed for the first time that all students would receive a public education.

The law, whose name changed in subsequent reauthorizations in 1990, 1997, and 2004 to the Individuals with Disabilities Education Act (IDEA); Public Law 101-476; and Public Law 105-17, set the stage for inclusive schooling, ruling that every child is eligible to receive a free and appropriate public education (FAPE) and to learn in the least restrictive environment possible. (Kluth, Villa, & Thousand, 2003, p. 1)

Specifically, IDEA requires that each public agency shall ensure:

(1) That to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and

(2) That special classes, separate schooling or other removal of children with disabilities from the regular educational environment occur only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (20 U.S.C. 1412(5) (B))

The language in IDEA created the term inclusion and moved away from the use of the term mainstreaming. IDEA infers that all children should have educational services and support to assist with their disability. Therefore, school districts should presume that students with and without disabilities should be educated together to the greatest degree possible (Yell & Drasgow, 1999). In addition, all students have a right to learn, work, and grow educationally with peers their own age and in the same classroom (Wessels, 1991). This segment of the law is referred to as the Least Restrictive Environment (LRE) provision.

What is an inclusive school? According to Stainback and Stainback (1990), “An inclusive school is a place where everyone belongs, is accepted, supports, and is supported by his or her peers and other members of the school community in the course of having his or her educational needs met” (p. 3). In inclusive schools, general education works cooperatively with special education to provide a quality learning environment for all students. It should be emphasized that the true spirit of inclusive

schooling is that all students should be included in the mainstream with appropriate programs and support to meet their individual needs. At the heart of these statements are the keywords “everyone” and “all”. Generally, in an inclusive setting, general education works cooperatively with special education to provide high quality programs for all students, regardless of their disability. As the instructional leaders of their school, principals have not only been key participants in the restructuring of regular education programs, but also in leading special education initiatives for inclusion (Livingston, Reed, & Good, 2001).

### *The Principal's Role in Inclusion*

School principals play an important role in creating an educational climate that provides opportunities for interactions between disabled and nondisabled students (Dyal & Flynt, 1996). This can generate a different set of challenges for the principal as well as the school staff. There is now more pressure on the building administrator to support and maintain the special programs in the school. According to Patterson, Marshall, and Bowling (2000), school administrators continue to encounter challenges in the area of special education that include the following:

- The new accountability in the 1997/2004 reauthorization, requiring special education students to participate in state testing and accountability programs.
- Ambiguous and varying definitions of least restrictive environment (LRE) and inclusion.
- Conflicts from outside groups such as advocacy groups about the value of inclusive practices.

- The need for collaboration between regular and special education teachers and specialists to modify their curriculum and pedagogy.
- Balancing the special education challenges with other administrative challenges including funding for education, buildings and facilities, and fear of lawsuits.

Historically, district level administrators have managed special education programming, staffing, training, and facilities. However, the burden of managing special education policies and practices has increasingly been made the responsibility of the principal (Patterson & Bowling, 2000). The success or failure of these inclusive policies is greatly dependant on the principal of the school (Dyal & Flynt, 1996).

As the popularity of inclusion programs continues to rise, so do the challenges for principals. Morgan and Demchak (1996) believe that administrator involvement becomes crucial because the attitudes of the school personnel and students often mirror that of the administrator.

As the instructional leaders of the school, administrators must have a working understanding of both special education law and educational programming (Praisner, 2000). The principal, as the instructional leader and agent of change within inclusive schools, must possess many competencies. These include the knowledge and skills in effective instruction, assessment, and discipline to provide support and feedback to teachers as they develop environments for teaching heterogeneous groups of students. Principals must possess skills to establish and support instructional teams, provide time to meet with these teams, and offer support for their work. There must also be the willingness to support collaborative interactions and to operate comfortably and effectively in collaborative groups. Lastly, principals in inclusive schools must establish

a clear vision that results in a commitment from the school and community (Barnett, 1998). All of the above require principals who support and develop among all school personnel a firm belief in educating all students in the least restrictive environment.

### *Statement of the Problem*

The Individuals with Disabilities Act (IDEA) from 1975, to the current reauthorization of IDEA in 2004, requires that schools provide services to students with special needs in the least restrictive environment (LRE) possible with potential placements ranging from placement in alternative school/classroom to full participation in instructional activities with non-disabled peers (Patterson, Marshall, & Bowling, 2000). School principals find themselves having to become familiar with special education law and policies in order to avoid possible losses in funding and lawsuits. Principals' attitudes can either promote or discourage the inclusion process in their school. Principals are making daily decisions related to special education and are taking on leadership roles in the special education service delivery in public elementary schools (Armstrong, n.d.). Therefore, the intention of this research is to strengthen the body of knowledge related to the role of the school principal in creating and maintaining successful inclusion programs for students with disabilities in public elementary schools in Texas.

### *Purpose of the Study*

The purpose of this study was to examine present attitudes and perceptions of elementary principals in the state of Texas relative to the inclusion of special education students in the general school setting. Additionally, this study attempted to determine



various characteristics of school principals related to their attitudes and perceptions about inclusion.

### *Objectives of the Study*

The following objectives guided this research.

1. To assess attitudes and perceptions of Texas elementary school principals relative to inclusion programs.
2. To determine if there is a relationship between types and amounts of principals' experience and their attitudes towards inclusion, including the following:
  - a. Years of experience in regular education classroom.
  - b. Years of experience in special education classroom.
  - c. Number of years as a principal.
3. To determine if there is a relationship between principals' gender and their attitudes towards inclusion.
4. To determine if there is a relationship between principals' age and their attitudes towards inclusion.
5. To determine if there is a relationship between the number of special education college credits earned by principals and their attitudes towards inclusion.
6. To determine if there is a relationship between the number of inservice training hours obtained by principals and their attitudes towards inclusion.
7. To determine if there is a relationship between the recency of training obtained by principals in the area of special education and their attitudes toward inclusion.

8. To determine if there a relationship between school size and principals attitudes towards inclusion.
9. To determine if there is a relationship between percentage of special education students in a principal's school and their attitudes towards inclusion.
10. To determine if there is a relationship between the principal's knowledge of special education law and their attitudes toward inclusion.
11. To determine if there is a relationship between the principal's knowledge of special education terminology, such as least restrictive environment, learning disabled and emotionally disturbed, and their attitudes toward inclusion.
12. To determine if there is a relationship between principals' knowledge of special education programs such as, resource room, life skills class, and content mastery, and their attitudes toward inclusion.
13. To determine principals' perceptions toward appropriate placement of students with various disabilities.
14. To determine if there is a relationship between the types of handicapping conditions on principals' schools and their attitudes towards inclusion.

### *Significance of the Study*

In the promotion of inclusion, are principals alleviating or generating barriers? Furthermore, do the attitudes and characteristics of the principals inhibit or inspire the school staff to accept the inclusion of students with disabilities? It is crucial that principals' attitudes towards inclusion reflect the laws of special education to prevent the loss of funding and lawsuits. An additional area of need is to determine if principals are appropriately trained about special education laws and the implementation of these laws.

This study was intended to further the understanding of attitudes and characteristics that could be useful to principals as they implement an inclusion program on their campus. It may give more insight into what knowledge is essential in implementing inclusion programs effectively and efficiently in their school. Furthermore, this study may assist educational administration programs in developing curricula that would be most beneficial to future school leaders as they face the challenges of implementing state and federal programs.

### *Definition of Terms*

For the purpose of this study the following definitions are provided to promote uniformity of understanding.

1. *Inclusion* – A clear definition appears to be a problem when attempting to define inclusion since no where in federal legislation is it defined (Woodrum & Lombardi, 2000). This study defines inclusion as a service delivery model in which there is a commitment to meet the educational needs of special education students within the regular classroom to the maximum extent appropriate. Inclusion allows for the full access of the social and educational opportunities offered to their non-disabled peers (Praisner, 2000).

2. *Mainstreaming* – Mainstreaming has been used to refer to the selective placement of special education students in one or more regular education classes. Proponents of mainstreaming generally assume that a student must “earn” his or her opportunity to be placed in regular classes by demonstrating an ability to “keep up” with the work assigned by the regular classroom teacher (Stout, 2001).

3. *Students with disabilities* – The definition from IDEA states that students with a disability are those having “mental retardation, hearing impairments including deafness, speech or language impairments, visual impairments including blindness, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, specific learning disabilities, deaf-blindness, or multiple disabilities, and who because of those impairments need special education and related services” (20 U.S.C. 1401(a)(1)).

4. *Regular or General Education* – “A set of educational experiences which a child would receive in a school or school district were that child to enter school at the kindergarten or first grade level, and proceed through school without being labeled ‘handicapped’ or in need of special services” (Lilly, 1988).

5. *Least Restrictive Environment* – Least restrictive environment (LRE) is defined by IDEA as that to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and that special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplemental aids and services cannot be achieved satisfactorily (20 U.S.C. 1412 (5) (B)).

6. *Special Education* – IDEA defines special education as specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability (20 U.S.C. 1401(a) (16)).

### *Basic Methodology*

This study surveyed elementary principals who are randomly selected from a participant pool, generated from the Texas Education Agency (TEA), for the 2005-2006 school year. TEA reports that there are 4,123 public elementary schools in Texas. This includes public schools that enroll elementary level students generally from grades kindergarten to sixth grade.

### *Limitations of the Study*

The possible limitations of this study could include the definitions used for inclusion and other key terms to be discussed within the study. Each state may define inclusion differently, therefore making it difficult to generalize across larger areas. In addition, since this study will be conducted in Texas, the sample may not represent the true characteristics of the population. The sample is only from one state and limited to elementary principals.

Another potential limitation may be the survey instrument and the possibility for different interpretations. The principals may read the questions and, depending on their day, may answer differently than perceived. Participants may give the answers that they believe the researcher may want to hear and not what they may truly believe.

Associated with this possible limitation is the issue of the sample size and the difficulty in recruiting volunteers to participate in the study. The fact that participation is voluntary can effect the randomization of the sample and also can have an effect on the total number of respondents.

Another possible limitation of the survey is the fact that it is Web-based. Internet is increasing in popularity and consumer use, however, not everyone uses the internet.

This can affect the researcher's ability to assemble a representative sample of a particular population (Dominelli, 2003). Granello and Wheaton (2004) reported that internet use in the United States is growing at a tremendous rate of 2 million new users per month. Dominelli (2003) also reports that participants change their e-mail address more often than their mailing address, which as a result can affect participation rates due to non-delivery of the Web-survey. This describes another potential limitation associated with Web-based surveys which is lower response rate. Granello and Wheaton (2004) and Umbach (2004) suggest that multiple e-mail reminders be sent out when conducting on-line surveys. Research shows that sending out reminders may improve the response rate dramatically.

Another possible limitation experienced with the Web-based survey is technical difficulties that may occur. Granello and Wheaton (2004) also support this limitation by stating how technical problems can hinder response rate.

Though there are many potential limitations, this study may produce significant findings that can contribute to the research knowledge base in the area of principals and their attitudes toward the inclusion of students with disabilities.

### *Basic Assumptions*

This study assumes that school principals' attitudes towards inclusion will dictate how they choose to allocate services for children with special needs within their school. It assumes that these attitudes will also determine the success or failure of the inclusion program. It also assumes that the subjects will respond honestly to the instrument that will be used to measure attitudes towards the inclusion of special education students in the regular education setting. There is an assumption that the sample will represent the

total national population. Therefore, it could also be assumed that non-participants would have responded similarly to the participants. Both the originator and the researcher accept the assumption that the survey instrument is valid based on submission to a panel of experts. The researcher also assumes that the revisions made to the original questionnaire were not extensive enough to affect validation.

## CHAPTER TWO

### Literature Review

The focus of this literature review is on the attitudes, expectations, and perceptions of principals at the elementary level on special education students being integrated into the regular classroom environment. For the purpose of this review the following definitions will be used.

Mainstreaming has been used to refer to the selective placement of special education students in one or more regular education classrooms. Mainstreaming generally assumes that a student has earned the right to be placed in regular education classes by having demonstrated that he/she can keep up with the work assigned by the regular education teacher. This is linked with the traditional forms of special education service delivery.

Inclusion is a term that expresses commitment to educate each special education child to the maximum extent appropriate in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child, rather than moving the child to the services, and requires only that the child will benefit from being in the class rather than having to keep up with the other students. Inclusion generally favors newer forms of education service delivery.

Full Inclusion means that all students, regardless of handicapping condition or severity, will be in a regular classroom or program full time. All services must be taken to the child in that setting.



### *Philosophy of Inclusion*

Providing equal educational opportunities for children with special needs has been highly encouraged in recent years, gradually leading to accommodations in mainstream classrooms for children with a range of disabilities. The levels of disabilities include mild/moderate, the largest group of students with disabilities, and severe disabilities. The category of mild/moderate is of prime importance when it comes to inclusion, because these disabilities often include learning disabilities, cognitive impairment, and emotional disturbance. The goals of this placement include focus on reading, writing, math, and critical thinking. These goals are similar to the goals of their non-disabled peers in the general education setting and therefore promote the inclusion of special education students (Stump, 2000). This philosophy of inclusion contrasts with traditional practices, in which students with disabilities were segregated into special education classrooms. In 50 studies comparing the academic performance of mainstreamed and segregated students with mild handicapping conditions, the mean academic performance of the integrated group was in the 80<sup>th</sup> percentile, while the segregated students scored in the 50<sup>th</sup> percentile (Weiner, 1985). This evidence would indicate that segregated programs would be detrimental to students and would not meet the original goals of special education. Two studies indicate that there is a small to moderate beneficial effect of inclusion education on the academic performances of special needs students (Baker, Wang, & Walberg, 1994-1995; Carlberg & Kavale, 1980).

### *History of Inclusion and Inclusion Research*

Inclusion has become a complex issue in education. The provision of educational opportunity and physical admittance can be legislated, but acceptance cannot. How

principals view the inclusion of students with severe disabilities in their neighborhood schools and in regular education classrooms is important to understand. Prior to 1958, there was little or no research that focused on the principal's view of students with disabilities. Parents of children with disabilities began organizing in the 1950s and 1960s to campaign for changes in the educational services being provided for their children. The passing of P.L. 94-142 in 1975 was one result. It mandates that all children, regardless of disability, have the right to free, appropriate education in the least restrictive environment (LRE), with age-appropriate peers, to the maximum extent appropriate. Then in 1990, P.L. 94-142 became known as the Individuals with Disabilities Education Act (IDEA). It expounds on the requirement that students with disabilities be provided a "free and appropriate education" (20 U.S.C. 1401), in the "least restrictive environment" possible for every student. This part of the law became known as the Least Restrictive Environment (LRE) provision. This provision was later strengthened and reemphasized in 1997 and more recently in 2004 by highlighting the importance of "involvement and progress in the general curriculum" (Council for Exceptional Children, 1997, p. 1). This was adopted to stress the importance of making sure that students have the support they need to be successful in appropriate educational settings.

Educating students in the least restrictive environment continues to invoke the challenge of the appropriateness of placing these students in the mainstream and whether their individual needs are being met while in the mainstream. This process will continue to cause controversy and draw criticism. Additionally, the number of students with disabilities who were served in Part B of IDEA has increased dramatically over the past several years. Part B of IDEA serves students with specified physical, mental, emotional

or sensory impairments who need special education or related services, (U. S. Department of Education Office of Special Education and Rehabilitation Services (OSERS), 1994). Since IDEA originally took effect in 1976-1977 enrollment had risen 23% by 1989-1990 (Fuchs & Fuchs, 1994). This has stirred up much discussion on the true spirit of educating all children in the most appropriate educational setting and at what cost.

Legislation is not the only component that has driven inclusive education; litigation has played a key role in the movement (Boyd, 2001; Daane, Beirne-Smith, & Latham, 2000; Geter, 1998; Levy, 1999). Several Court cases were instrumental in the inclusion movement including Pennsylvania Association of Retarded Citizens (PARC) vs. Commonwealth of Pennsylvania (1971), Mills vs. District of Columbia (1972), and Oberti vs. Clementon (1993). One of the most landmark cases was Brown vs. Board of Education (1954), when the Supreme Court ruled against the segregation of school, allowing for the right to a free and equal education for all. This set the stage for the developing concerns of segregated models for student with disabilities (Geter, 1998). In addition to legislation and litigation, a powerful movement known as the Regular Education Initiative (REI) that started in the 1980s by the federal government, was also supportive of the inclusion movement (Boyd, 2001).

### *The Regular Education Initiative*

In 1986, a monumental article was written titled “Educating Children with Learning Problems: A Shared Responsibility”. The author, Madeleine Will, created a stir in the field of education by suggesting a move towards integration. This movement was called the Regular Education Initiative (REI). The concept is based on the

movement evolving around the notion of special services programs being provided for students traditionally labeled mildly handicapped (Lilly, 1988). Lilly states that these special services range from the special classes of the 1940s through early 1960s, the “pull-out” services known as resource rooms in the late 1960s, migrating to the indirect, consultation of teachers within the classroom in the 1970s and 1980s. The trend led to the current concepts of “prevention of referral and placement of students in special education using teacher assistance teams, collaborative problem solving, cooperative learning, and other general-education-based interventions with children who are having trouble learning and/or behaving appropriately in the classroom” (p. 253).

Fundamentally, REI called for more disabled students being appropriately educated in the general classroom setting, a restructuring of special education as we know it. The movement lost momentum as advocates for students with all levels of disabilities were at odds over the potential changes through REI.

#### *Effects of Inclusion on Educators*

Inclusion is having a significant impact on our schools as more and more students with disabilities are placed in regular education classrooms (McLeskey, Henry, & Hodges, 1998). The current research is quite varied and often confusing when it comes to full inclusion. Daane, Beirne-Smith, and Latham (2000) discuss how inclusion requires the collaboration between general and special education and that researchers must analyze the trend of classroom teachers’ and building administrators’ perceptions about the inclusion of students with disabilities in the general education setting. The authors continue by stating how it is of importance to look at both teachers’ and school administrators’ perceptions as they may have a vast impact on inclusion in their school.

Therefore it is relevant to examine the research dealing with teachers and the impact they have on the attitudes towards and success of inclusion.

Little research has been done selective to instructional contexts of students with severe disabilities in the regular classroom (Kennedy, Shikla, & Fryxell, 1997). Home's (1985) comprehensive review of teachers' attitudes toward inclusion found the attitudes of teachers before P.L. 94-142 did not change significantly after the law's passage. Her findings indicated that placement of students with disabilities in regular classrooms was not sufficient in itself to alter the perceptions of teachers. This supports the need for understanding teachers' perceptions so as to develop methods that will foster positive attitudes about inclusion.

Scruggs and Mastropieri (1996) compiled a research synthesis of teacher perceptions on inclusion from 1958 to 1995. They identified 28 reports in which teachers were surveyed about their perceptions of inclusion. Overall, special educators were found to be more supportive of inclusion than regular education teachers. Regular education teachers' perceptions appear to alter with the severity of the disability and the amount of extra responsibility required. Only 28% of the teachers reported having enough time for inclusion. In the Diebold and VonEschenbach (1991) study, 23 of the 25 teachers surveyed expressed a willingness to teach students with various disabilities, except for those with severe disabilities or mental retardation.

Most studies have been done with elementary school teachers, who appear to exhibit more positive attitudes toward inclusion than secondary teachers. Teachers in general seem more willing to include students with mild disabilities than those with severe disabilities in a regular classroom. Altogether, teachers feel they need a great deal

of support for any integration to be successful (Scruggs & Mastropieri, 1996). The severity of the disability affects the regular education teacher's opinion on inclusion. They do not feel qualified to teach students with severe disabilities in the regular classrooms. Most are not even convinced that being served in their neighborhood school is beneficial to the student with a severe disability, much less in the regular classroom. Results suggest that understanding and acceptance of differences is the most positive aspect that could be attained among the regular education students within full inclusion classrooms.

Inclusion research typically focuses on a variety of interrelated elements, including the type of disability, age of the children, classroom size, the impact it has on students without disabilities, and academic and social outcomes. Research shows that there is a large impact of teacher attitudes on inclusion and demonstrates that teachers with more special education training feel more confident about accommodating youth with disabilities and more positive about inclusion (Data Trends #32, 2001).

The preconceived notions of regular classroom teachers must be noted when examining their perceptions, attitudes, and expectations regarding special students being integrated into their classroom. Teachers are influenced by comments that may have been overheard while walking down the hallway, or in the teachers' lounge, as well as the written documents that follow special education students wherever they go in the school setting. Once a student is labeled as Emotionally Disturbed (ED), Learning Disabled (LD), or Other Health Impaired (OHI), they will have a hard time losing the label regardless of their growth or potential. Many students enter classrooms bearing the labels listed above, and are often treated differently by both teachers and students. Some

teachers find that the labels create a negative predisposition towards a special student, and thus affect the way they treat the student. Information, which can be found in student records and shared conversations amongst teachers, contributes to a teacher's preconceived feelings toward a student. From this standpoint, teachers should acknowledge the ramifications of the written notes they put in each special student's record throughout the year. A study by Safran, Safran, and Orlansky (1982) found that written information and labels have significant effects on the teacher's perceptions of the behavior of the student. Furthermore, the study indicated that not only the information discovered, but also the manner in which the information was presented, effected the perceptions (pp.384-394). For example, when the ED label was used, the teacher in the study noted more disruptive behaviors from the ED student than from his/her peers. The effects vary among exceptionalities. Another example, utilizing an OHI student who has cerebral palsy, or is orthopedically handicapped, notes that a teacher will not look at or make eye contact with these students as often as he/she makes eye contact with the other students.

### *Trends of Inclusion*

The current trend in education is for schools to find "new and innovative ways to create learning environments that are responsive to the needs of the students with mild/moderate disabilities" (Stump. 2000, p. 1). Stump continues by listing suggestions to enhance the outcomes of students integrated in the general education classrooms including the following:

- 1) Setting the tone - This can be achieved by working with staff to articulate a vision, setting goals, and developing a plan of action for the inclusion program. By

including staff in the planning stages of an inclusion program, teachers can create a sense of ownership in the effort and work together to determine the desired outcomes of the program. Stump (2000) goes on to say that it is hard work to develop and sustain a collaborative inclusion program and that it requires the staff's full cooperation and commitment to the program.

2) Prepare the school environment for inclusion – The school staff must be aware of potential major changes that could occur in the school operations. Teacher teams have proven effective when it comes to inclusion. Equality among schedules will be important among both regular and special education teachers in order to ensure a spirit of collaboration. Trainings and other strategies may also be necessary in helping the teachers to work effectively together. Principals will play an important role by rewarding and encouraging teachers' efforts. They also could play a part in the assigning of the students with disabilities amongst the regular classrooms (Stump, 2000).

3) Prepare teachers and staff for inclusion – It will be crucial for principals to provide training programs for teachers in order to guarantee their commitment to inclusion. Teachers and staff must understand the complexity of students with disabilities in order to help them meet their academic, as well as behavioral and emotional goals (Stump, 2000).

### *Related Inclusion Research*

Praisner (2000), in a doctoral research study, examined elementary school principals' attitudes toward the inclusion of students with disabilities. Based upon a survey of 408 elementary school principals from the Commonwealth of Pennsylvania, Praisner found that about one in five principals' attitudes toward inclusion are positive



while the rest surveyed remained uncertain. Praisner also found that principals who had positive experiences with disabled students and who had exposure to special education concepts had a more positive attitude toward inclusion. Further, she found that these principals with more positive attitudes and/or experiences were more likely to place disabled students in less restrictive settings. Praisner results are limited due to the sample size consisting of only the state of Pennsylvania.

Another study was conducted by Levy (1999) in his doctoral study investigating elementary principals' attitudes toward the restructuring for the inclusion of students with disabilities. In his study of 124 elementary school principals in the Brooklyn and Queens areas of New York City, Levy found that age was a variable that showed partial support for principals attitudes, while gender, teaching experience, years as an administrator, years of inclusion experience, and/or inclusion training had no significant relationship to principals' attitudes toward inclusion. Due to the small sample size and restricted sample area, the results of this study are limited.

In 1998, Geter conducted his doctoral research on secondary and elementary school principals' attitudes toward the inclusion of special education students. The study included 550 principals, 200 high schools, and 350 elementary schools from the state of Georgia. Geter found that there were no significant differences between Georgia high school and elementary school principals' attitudes toward the inclusion of students with disabilities in the regular classroom. He also found that there was no difference between Georgia high school and elementary school principals' attitudes toward inclusion of special education students with regard to principals' gender and in-service hours

completed in special education. The results of this study however are limited due to the sample being taken from only one state.

Another doctoral study was conducted in 1999 by Inzano, where he looked at the attitudes of public school principals in the state of New Jersey toward inclusive education and educational strategies related to its practice. This study also aimed to determine if there was a significant difference in attitudes towards inclusion among principals grouped by years of experience as a principal and school location. The results of the 167 usable surveys suggested that neither years of experience nor school location had any effect on principals' attitudes towards inclusion. The study also found that with the exception of students with the most severe disabilities, principals overall were in favor of including students with disabilities in the general classroom. This study as well is limited with its results due to the small size of the sample from a single area.

In 1998 a study by Barnett surveyed 115 randomly selected principals across the state of Illinois to examine principals' attitudes toward and knowledge of inclusion. The survey looked at gathering information from principals regarding definitions, leadership styles, and effectiveness and implementation of educational practices related to successful inclusion practices. The study found that no clear definition surfaced, but that most principals viewed inclusion as most appropriate for students with mild disabilities. The study also concluded that teachers were not sufficiently prepared to implement inclusive practices. The findings also raise issues concerned with administrators' understanding of practices that facilitate inclusion and how prepared they are to implement and support inclusive education.

### *Implications for Administrators and Leadership*

School principals have a great responsibility in the success of inclusion programs within their schools. Research states that it is first important for the principal to have a solid knowledge in special education law in order to avoid legal headaches down the road. Valesky and Hirth (1992) explain how the principal is the instructional leader and manager of not only the special education services, but of the total educational system of their campus. The authors go on to comment on how knowledge of special education law becomes essential to ensure the success of special education programs and to help avoid the potential for litigation in the future. In support of the idea of principal knowledge, a federally-funded study was conducted in 2002 by Collins and White from Lehigh University. The study examined pre-service education programs for school principals, to improve the implementation of special education services of their campuses. The study described the challenge for school principals to address inclusionary practices on their campuses. The outcome of the study stressed the importance of special education skill and knowledge areas integrated into principal preparation programs.

Educators are faced with new challenges when attempting to successfully integrate students with disabilities into the general education classroom. Decisions regarding shared teacher responsibility, instructional practice, classroom management, and classroom accommodations all need to be addressed in implementing inclusive education. The study by Connors-Gilmore (1997), examined the perspectives of general and special educators on the integration of students with disabilities into the general education classroom. The study explored the connection of teacher role, length of service, and experience with inclusion to attitude toward inclusion of children with

disabilities in general education classrooms and to judgments about the operations and value of inclusion. The findings from this study indicated that teacher role was more of an influence on a teacher's perspective toward inclusion than either length of service or experience with inclusion. General educators were less positive than their special education colleagues toward inclusion, although they did offer a large number of positive observations regarding effective educational environments for students with disabilities, characteristics of students who benefit from inclusion and circumstances under which inclusion works well.

The attitudes of the regular classroom teacher toward integrating a special needs student into the regular classroom need to also be examined. The teacher's attitude will have as much impact as anything else when determining whether inclusion will work successfully, because it will shape the emotional climate of the classroom (Raver, 1990). In some instances, the teacher may develop strong, rigid, and inaccurate expectations of the special student. The attitude of the teacher will convey an undercurrent to the regular students and they, too, will develop inaccurate ideas regarding special students. This is detrimental in several ways. First, the special student will be able to feel the effects of the attitude from the teacher. Second, the regular students will not be as accepting of the special student. Third, the special student will likely exhibit a self-fulfilling prophecy, turning into the inaccurate description that was attributed to them before they entered the regular classroom.

A study by Jordan and Stanovich (2001) compared the teachers who favor the traditional model of pulling kids out of the regular classroom if they have disabilities with the teachers who believe that it is their responsibility to adapt instruction for students

with disabilities. Results from this were compared to scores from the Piers Harris Children's Self-Concept Scale where children range from the typically achieving to the exceptional or at risk children. Results indicated that teachers who adapted their instruction to meet the needs of their students (Interventionists) were significantly more likely to engage the exceptional and at risk students at higher cognitive levels than the traditional teachers. The Interventionists also had significantly higher scores on the self-concept scale for both types of students than did the traditional teacher. These findings demonstrate the importance of teacher attitudes in inclusive classrooms and suggest that teaching styles amenable to inclusive settings can positively affect the self-concept of all students. Before inclusion can be successful, each teacher must feel good about the process and understand the purpose of inclusion (Raver, 1990).

On a more profound level, the teacher must "agree to accept the special student as an integral and equal part of the classroom" (Cannon, Idol, & West, 1992, p. 307). Otherwise, the special student will not feel as though he/she is part of the community of learners. Included in this topic is the teacher's expectation of the special student. A teacher may expect a special student to behave or speak in a certain way that may be viewed as misbehavior. Because the teacher might then look for those types of behaviors, there is a "self-fulfilling prophecy" of why special students should not be in the regular classrooms (Stewart, 1983, p. 40).

For teachers to agree to the process of inclusion, changes must take place. There must be changes in attitudes, policies, viewpoints, methodology, and resources, in order for the process of inclusion to be successful. Research lends credence to these ideas and often suggests strategies for successful change.

A dominant theme in the research on inclusion is the concept of *collaboration*. In a study by Purkey and Smith (1985), effective cultural change was found to be most successful when collaboration among the faculty is encouraged. Everyone involved must decide that diversity is valuable. Diversity, whether in abilities, race, etc., is not just a reality to be tolerated, accepted, and accommodated; it is reality to be valued (York, et al., 1993). Collaboration can serve as a tool for enhancing positive attitudes about inclusion, as well. According to a study by Jackson, Ryndak, and Billingsley (2000), the importance of collaboration and active promotion of inclusive values, as well as how the services are delivered are key themes or elements for a successful inclusion program. Collaboration can also serve as a method to maintain the focus on the best possible solutions and the best situations for the special students and the regular students. School principals are invaluable in the collaboration process.

When considering a move from traditional or regular special educational programming to a more inclusive approach, it is important that the entire school community be involved in a thoughtfully, carefully researched transition. Too often, schools go through a dramatic, top-down directive which ends up polarizing parents and teachers and creating an environment that is hostile to change. Change must be based on research and broadly shared beliefs and philosophies.

The National Education Association (0000) has made suggestions regarding making a smooth, more positive transition to a more inclusive environment. The suggestions include the following:

- A continuum of placements, supports, and services should be made available for all students, but always assuming that every student's first placement is in regular education.
- Placement decisions should be based on a well developed IEP with an emphasis on the needs of the child, his/her peers, and the reasonable provision of services.
- Before any new programs are developed, the school and/or district staff must agree on a clearly articulated philosophy of education. Teachers and support staff must be fully involved in the decision-making, planning, and evaluation processes for individual students and school-wide programs.
- Extensive staff development must be made available as a part of every teacher's and paraprofessional's workday. Areas of emphasis should include higher order thinking skills, integrated curricula, interdisciplinary teaching, multi-cultural curricula, and life-centered curricula.
- The administration should work toward unifying the special education and regular education teachers by using the same evaluators and evaluation systems instead of two separate systems.
- Ensure that sufficient licensed practitioners are employed to address the social, emotional, and cognitive needs of all students.
- It is necessary to have reduced class sizes or a greater number of teachers with the inclusion setting.
- Teachers need to have an appropriate appeal process when they believe that the implementation of the child's IEP or placement is inappropriate. The parent and the student should also be an integral part of the decision-making process.

Other ideas, such as team teaching, co-teaching, peer partners, cooperative learning, study team planning, parallel teaching, and station teaching, may be beneficial in the inclusion setting. After making changes, it is important to continue to assess and reevaluate the changes that have been made and reflect about which specific strategies work for both special students and regular students (National Education Association, 0000).

Also contributing to the teachers' attitudes is a shift in focus. Some teachers have negative feelings about inclusion and insist that inclusion is not in their job descriptions as regular education teachers. Waugh and Punch (1987) suggested that nonreceptivity towards inclusion stems from a conflict with traditions. Therefore, Villa and Thousand (1992) suggest that job descriptions explicitly state "that all teachers are expected to collaboratively plan for, teach, and share responsibility for even the most intensively challenged or challenging of the community's children" (p. 39). An added benefit of collaboration among regular and special educators is a breakdown in the typical barriers. Schattman and Benay (1992) point out that the collaborative decisions made in favor of inclusion, help break professional barriers, and keep the focus of education on the children. Collaboration helps establish collegiality among staff members.

High school educators tend to be more resistant to educating adolescents with disabilities in a mainstream classroom. Van Reusen, Shoho, and Barker (2000) focused their study on high school teachers' attitudes towards inclusion in four areas including preparation in serving special populations, academic climate, academic content/teacher effectiveness, and social adjustment. Similar to other studies, they also found that



teachers with a high level of special education training had significantly more positive attitudes towards inclusion than those with no or minimal special education training.

### *Summary and Conclusions*

Students with severe disabilities are attending their neighborhood schools more often than not. They have come from institutions, from self-contained special education schools, and from isolation at home. As educators move toward educational goals for the schools of the 21<sup>st</sup> century, the general direction is to serve students with special needs in inclusive settings. This integration has increased in U.S. schools, but barriers to total acceptance remain.

Experts agree that full acceptance of students with disabilities will happen only after long-term modifications in attitudes (Beattie, Anderson, & Antonak, 1997). Teacher attitude is one of the most important variables in innovative special education programs (Jobe, Rust, & Brissie, 1996; Stoler, 1992). Research shows that the attitudes of educators towards students with disabilities are complicated (Anderson & Antonak, 1992; Beattie, Anderson, & Antonak, 1997). Positive perceptions and feelings encourage appropriate policies and supportive integration of students with severe disabilities, but negative attitudes sustain low achievement expectations and unacceptable behaviors. If existing negative attitudes of educators can be positively modified, inclusion may extend to further lifting of the barriers in the larger society (Beattie, Anderson, & Antonak, 1997).

Consultation and collaboration are suggested as the only way to incorporate inclusion. For this to happen, teachers must have a willingness to work as part of a team, rather than in isolation. For some, collaboration produces feelings of professionalism and

expertise, as teachers are “consulted” for suggestions of improvement. These feelings help contribute to teachers feeling positive about inclusion (Cardinal, 1991, p. 72).

Wang, Walberg, and Reynolds (1992) view this concept as the breaking down of the disjointedness that is often found in special education. Furthermore, they suggest that regular teachers feel more at ease contributing to educational decisions when a special educator is used as a reference and balance check. Many regular educators do not feel equipped to singly determine solutions for special students. Therefore, regular educators can feel a sense of comfort when collaboration exists between regular and special educators.

Another aspect of attitude is commitment. Inclusion “requires commitment at every level to the principle that children given proper supports, and an unswerving commitment by administrators and the school board that resources will be reallocated to assure appropriate support to the regular education classroom” (Blackman, 1992, p. 29). Blackman touches on many things here, however this quote supports the previously mentioned aspects of teacher attitude. Knowing that he/she has support, the regular teacher can feel more confident in participating in inclusion. Building on a teacher’s confidence level, a positive attitude is more likely to develop (as opposed to a positive attitude in an insecure teacher).

According to a study conducted by Avramidis, Bayliss, and Burden (2000), teachers expressed greater stress and concern about the inclusion of children with emotional and behavioral disabilities than with children with other disabilities. They went on to conclude that teachers who had experience with inclusion and who had higher

levels of professional development had more positive attitudes toward inclusion and greater confidence in being able to meet a student's Individualized Education Plan.

There is research that suggests methods to overcome nonreceptive attitudes in teachers. Fundamental to nonreceptivity is a lack of knowledge on the part of the regular education teachers. A study by Stewart (1983) found that inservices and training provided to regular education teachers significantly improved the receptiveness of teachers to inclusion. This study found that when teachers had no prior training for, or knowledge of inclusion, their feelings and attitudes were negative. In other words, the teachers were less willing to participate in inclusion. However, after training, some feelings of negativity were resolved. Several of the teachers studied changed their attitudes and became willing to participate in inclusion. Stewart (1983) found that inservice training also aided the teachers in their expectations of the special students. Inservice training also helps teachers arrive at more realistic expectations and views of students who are mainstreamed.

Another study suggests that the attitudes of teachers can become more positive when they realize that they will receive support during inclusion (Wansart, 1990). A misconception about inclusion is that the handicapped or special student is placed in a regular class with no additional support for either the student or the regular educator. Wansart points out that support comes in many forms. A special educator may act as a consultant during the planning of the lesson. A paraprofessional may assist the regular education teacher in implementing lessons and activities. Support may also come from administrators by recognizing achievements and encouraging further implementation of inclusion. The PEAK Parent Center also suggests including the regular education teacher

in the Individualized Education Plan (IEP) Process (1988). In this way, the regular education teacher will feel that he/she is a part of the decision-making process for the student who will participate in inclusion. This process helps create a bonding between the special education teachers and the regular education teachers.

One of the greatest challenges contributing to the debate between segregating special students and inclusion is the lack of similarity between the regular and special education systems in today's districts and schools (Elliott & Riddle, 1992; Wang, Reynolds, & Walberg, 1988). Successful inclusion practices depend on restructured schools that allow for flexible learning environments, with flexible curricula and instruction. Under ideal conditions, all students work toward the same overall educational outcomes. What differs is the level at which these outcomes are achieved, the additional support that is needed by some students and the degree of emphasis placed on various outcomes. According to Guess and Thompson (1989) and Heshusius (1988), a restructured system that merges special and regular education must also employ practices that focus on high expectations for all and reject the prescriptive teaching, remedial approach that leads to lower achievement. Several different research studies have concluded that there are approaches through inclusion that are effective alternatives to remedial approaches and they have had positive changes in both regular education and special education students (Allington & McGill-Franzwen, 1990; Pinnell, 1991; Silver & Hagen, 1989). Some of the positive changes have included a reduced fear of human differences accompanied by increased comfort and awareness (Peck, Carlson, & Helmstetter, 1992), as well as growth in social cognition (Murray-Seegert, 1989), and an improvement in self-concept of non-disabled students (Peck et al., 1992).

In conclusion, the attitudes and actions of elementary principals relative to inclusion are important to successful implementation of inclusion concepts.

Predetermined ideas can be a foundation for failure. The question is: Is it possible to adequately change negative and predetermined ideas? To do so, misconceptions and fears must be addressed in teacher training. Regular education and special education educators who take full advantage of collaboration and consultation processes are more likely to have positive feelings about inclusion. Whether or not this is a reality remains to be seen. Now is the time to provide training and an increased awareness of all educators as to how they can prepare a student with a disability for graduation from high school, entrance into the community, and to fulfill their maximum potential.

## CHAPTER THREE

### Methodology

#### *Introduction*

This chapter will describe a study to investigate attitudes and perceptions of elementary school principals in the state of Texas relative to the inclusion of special education students in the general education setting and to analyze the information as it relates to this study. The study sought to determine if various characteristics of school principals are related to their attitudes and perceptions of inclusion. Chapter 3 includes a discussion of the procedure used in organizing the data, the population, the sample size, the description of the instrument, and the treatment of data. Each of these elements encompasses an accumulation of information that addresses principals' attitudes towards the inclusion of students with disabilities in the general school setting and examines the purpose, characteristics, experiences, and program factors associated with these attitudes.

#### *Research Questions*

Several questions will be examined to guide this study.

1. What are the attitudes and perceptions of elementary school principals in Texas towards inclusion programs?
2. Is there is a relationship between type and amount of principals' experience and their attitudes towards inclusion, including the following:
  - a. Years of experience in regular education classroom?
  - b. Years of experience in special education classroom?
  - c. Number of years as a principal?

3. Is there a relationship between principals' gender and their attitudes towards inclusion?
4. Is there a relationship between principals' age and their attitudes towards inclusion?
5. Is there a relationship between the number of special education college credits earned by principals and their attitudes towards inclusion?
6. Is there a relationship between the number of inservice training hours obtained by principals and their attitudes towards inclusion?
7. Is a relationship between the recency of training obtained by principals in the area of special education and their attitudes toward inclusion?
8. Is there a relationship between school size and principals' attitudes towards inclusion?
9. Is there a relationship between the percentage of special education students in a principal's school and their attitudes towards inclusion?
10. Is there a relationship between the principal's knowledge of special education law and their attitudes toward inclusion?
11. Is there a relationship between the principal's knowledge of special education terminology, such as least restrictive environment, learning disabled and emotionally disturbed, and their attitudes toward inclusion?
12. Is there a relationship between principals' knowledge of special education programs such as, resource room, life skills class, and content mastery, and their attitudes toward inclusion?
13. What are principals' perceptions toward appropriate placement of students with various disabilities?

14. Is there a relationship between the types of handicapping conditions on principals' school campuses and their attitudes towards inclusion?

### *Participants*

The participants in this study were selected from an e-mail list of elementary principals in Texas generated by the Texas Education Agency (TEA). The elementary school principals were randomly selected from the TEA list to assure that the correct population was surveyed. Upon receiving the surveys, statistics on gender and age were reported.

### *Sample Size*

The sample for this study was randomly selected from the total number of elementary principals in Texas. The number of elementary principals in the state of Texas is 4,123 as reported by the Texas Education Agency. The sample totaled 360, which is based on a formula derived by the research division of the National Education Association (Cornett & Beckner, 1975). The total number of respondents, meaning the total number of completed surveys, totaled 110. This number represents 32% of the sample surveyed. Please note there was some variability in the number of responses for each section, as some sections were left unanswered.

### *Description of the Instrument*

The instrument utilized in this study was an electronic questionnaire designed to examine whether demographics, training, experience, and program issues have an effect on principals' attitudes. The questionnaire was based on a survey, developed by Cindy L. Praisner (2000), entitled *The Principals and Inclusion Survey (PIS)*. Permission was



granted by the author in order to further expand the research. The questionnaire contained four sections including demographics, training and experience, attitudes towards inclusion, and principals' thoughts on placement. The researcher piloted the revised questionnaire to a small panel of experts within the field of special education and educational administration. The panel reviewed and evaluated the questions' validity for measuring the variables that may relate to the attitudes and perceptions of elementary school principals, as well as the amount of time required to complete the survey. Minor rewording changes were made as a result of the review. The researcher believes that the revisions made to the questionnaire were not extensive enough to affect validation.

Section I includes questions used to gather demographic information to describe the sample population. The questions were designed to gather basic information such as age, gender, the current number of students in their building, percentage of special education students within the principal's school, special education programs on their campus, handicapping conditions represented on their campus, the percentage of special education students included in regular education classrooms for at least 79% of their school day. *Note:* As defined by TEA, the 79% is determined by a student receiving resource room/services for less than 21% of the student's total instructional day. The questionnaire's developer, Dr. Praisner (2000) omitted the group of students in the gifted category. This would help to ensure continuity in responses among the principals.

Section II contains questions addressing the principal's training and experiences within education. Dr. Praisner (2000) chose the questions based on a review of inclusion literature to ensure test validity. To further ensure this section's validity, Dr. Praisner presented the questionnaire to a panel of four university professors, all of which had knowledge in the area of inclusion and/or educational administration.

In section III, items were extracted from the questionnaire items of the Superintendents' Attitude Survey on Integration (SASI), adapted by Stainback (1986) from the Autism Attitude Scale for Teachers (Olley, Devellis, Devellis, Wall, & Long, 1981). These questions were used to measure principals' attitudes toward inclusion.

Section IV listed all the possible handicapping conditions for special education students and what placements principals think might be most appropriate for these students. This could be used to get a better understanding of a principal's beliefs on the appropriate placement of special education students within their school.

The questionnaire was modified to fit this investigator's research questions within this study. Sections from Dr. Praisner's (2000) questionnaire were omitted and wording was updated to fit the definitions from the state of Texas.

A cover letter was developed to explain the study and the process for completing the questionnaire. The cover letter was attached to the questionnaire that was distributed via e-mail, and offered instructions for completing and returning the questionnaires. The questionnaire stated that all responses and information reported will be used confidentially. Table 1 is a matrix of the survey.

Table 1

*Survey Matrix*

Questions	Section I	Section II	Section III	Section IV
1. What are the attitudes of elementary school principals in Texas towards inclusion programs?			X	

*(table continues)*

Questions	Section I	Section II	Section III	Section IV
2. Is there a relationship between type and amount of principals' experience and their attitudes towards inclusion, including the following:		X		
a. Years of experience in the classroom?				
b. Years of experience in special education classroom?				
c. Number of years as a principal?				
3. Is there a relationship between principals' gender and their attitudes towards inclusion?	X			
4. Is there a relationship between principals' age and attitude toward inclusion?	X			
5. Is there a relationship between the number of special education college credits earned by principals and their attitudes towards inclusion?		X		
6. Is there a relationship between the number of inservice training clock hours or continuing education in the area of inclusion obtained by principals and their attitudes towards inclusion?		X		
7. Is there a relationship between the recency of training obtained by principals in the area of special education and their attitudes towards inclusion?		X		

(table continues)

Questions	Section I	Section II	Section III	Section IV
8. Is there a relationship between school size and principals' attitudes toward inclusion?	X			
9. Is there a relationship between percentage of special education students in a principal's school and their attitudes towards inclusion?	X			
10. Is there a relationship between the principal's knowledge of special education law and their attitudes towards inclusion?		X		
11. Is there a relationship between the principal's knowledge of special education terminology, such as Least Restrictive Environment, Learning Disabled and Emotionally Disturbed, and their attitudes towards inclusion?		X		
12. Is there a relationship between principals' knowledge of special education programs such as, Resource Room, Life Skills Class, and Content Mastery, and their attitudes towards inclusion?	X			
13. What are the perceptions of elementary principals towards appropriate placement of students with various disabilities?				X

(table continues)

Questions	Section I	Section II	Section III	Section IV
14. Is there a relationship between the types of handicapping conditions on a principal's school and their attitudes towards inclusion?	X			

*Note:* Section I-Demographic Information, Section II-Training and Experience, Section III-Attitudes Toward Inclusion of Students with Special Needs; Section IV-Most Appropriate Placement for Students with Disabilities

### *Methodology*

A modified version of the Principals and Inclusion Survey (PIS) developed by Praisner (2000) was sent out on May 4, 2006, by e-mail to 360 randomly selected elementary principals from the state of Texas. The data collection procedure used for study was a computerized, Web-based, self-administered questionnaire technique. A Web-based survey/assessment tool called Snap was used to administer the survey. The Snap tool provided confidentiality of the data while it recorded and stored the participant's responses to the survey. Through the use of Windows authentication, the Snap tool offered additional security with restricted access to survey responses.

The principals were selected from an on-line e-mail list of elementary principals on the Texas Education Agency (TEA) website. The sample surveyed totaled 360 principals. This number is based on a formula derived by the research division of the National Education Association (Cornett & Beckner, 1975) of the 4, 123 total elementary principals in the state of Texas, as reported by the Texas Education Agency (TEA). Each principal received an e-mail containing a cover letter explaining the purpose of the research and discussing consent, a hot link to access the survey on-line, and the researcher's e-mail address to allow participants to ask questions or report any technical

problems. Principals were asked to complete and submit the survey electronically on-line within two weeks of receipt. Once the surveys had been completed, they were sent back to the researcher's e-mail address in the form of raw data. The data did not record any personal information of the respondent in order to maintain anonymity and to assure confidentiality.

Over a period of one month participants received a total of three e-mail reminders about the survey. In the reminder e-mails, a hard copy of the survey was attached for those who had trouble accessing the on-line survey. This was done in order to have as many principals participate as possible. Of the 360 principals surveyed, 110 participants completed and submitted the survey. Only five participants returned the hard copy form of the survey via e-mail compared to the other 105 participants who submitted the survey electronically on line. Participation was voluntary and the survey could only be submitted one time.

### *Data Analysis*

In order to answer the research questions presented in this study, the variables were analyzed by using two methods. The first method was a univariate analysis of variance (ANOVA). In the first set of procedures, five ANOVAs were completed to evaluate the relationship between the independent variables of the demographic information taken from Section I of the Principals and Inclusion Survey (PIS) that included the following: age, gender, campus size, percentage of students included in special education, the percentage of special education students included in regular education, special education programs on principals' campuses and handicapping conditions represented of principals' campuses. Independent variables taken from

Section II of the PIS included the following: training and experience, special education terms and law, and the dependant variable of the attitude toward inclusion. The dependent variable used for all five ANOVAs was the total attitude toward inclusion score that was derived from the total raw score from Section III of the PIS. It is important to note that the likelihood of the Type I error increases when using ANOVAS. Note: This is that there could be a moderating variable that is actually causing there to be a relationship between the two variables. Lastly, a multivariate analysis of variance (MANOVA) was conducted that looked at the data between and within the groups of variables. A MANOVA was used because it can control for inflation of the type I error rate. Clinically significant results are defined as an alpha of  $p \leq .05$ . The descriptive statistics are explained in further detail in chapter 4.

## CHAPTER FOUR

### Results

#### *Purpose of Study*

The purpose of this study was to examine present attitudes and perceptions of elementary principals in the state of Texas relative to the inclusion of special education students in the general school setting. Additionally, this study attempted to determine various descriptives of school principals related to their attitudes and perceptions about inclusion.

#### *Method*

A modified version of the Principals and Inclusion Survey (PIS) developed by Praisner (2000) was sent out on May 4, 2006, by e-mail to 360 randomly selected elementary principals from the state of Texas. This number is based on a formula derived by the research division of the National Education Association (Cornett & Beckner, 1975) of the 4, 123 total elementary principals in the state of Texas, as reported by the Texas Education Agency (TEA). Instructions and procedures for responding were clearly explained in the e-mail. The principals had a two week timeline in which to complete and return the questionnaire via e-mail.

Upon receiving the questionnaires, they were examined and checked for full completion. The data collection procedure used for study was a computerized, Web-based, self-administered questionnaire technique. A Web-based survey/assessment tool



called Snap was used to administer the survey. After acquiring the highest number of respondents, the data analysis began.

### *Sample Size*

The inclusion survey was e-mailed to a total of 457 elementary principals in the state of Texas, with 360 reaching their destination. The original group consisted of 360 participants that were selected from a list of elementary school principals obtained from the TEA website. The participants were randomly selected by placing the elementary schools in alphabetical order and selecting every other principal for the sample. Of this first group, 41 e-mails were returned for being undeliverable or having incorrect e-mail addresses. A second group of 46 new randomly selected participants was e-mailed the survey in order to attempt to maintain a sample size of the required 360 participants, a number derived by the research division of the National Education Association (Cornett & Beckner, 1975). This group had 25 returned for again being undeliverable. A third group, consisting of 50 new randomly selected participants, was e-mailed in order to be closer to the number of participants needed for this survey. The third group had 30 returned.

In all, 360 principals presumably received the e-mailed survey, therefore having an opportunity to participate in the study. Each of the three groups was sent three e-mail reminders with the option of completing a hard copy form that could be e-mailed back as an attachment. The total number of completed surveys, or respondents was 110, which was 32% of the sample. Please note there was some variability in the number of responses for each section, as some sections were left unanswered.

### *Demographics*

On the survey, principals were asked to answer four questions to describe the demographic information of their particular school. The principals were asked to give the approximate number of students, the number of students in special education (with IEPs), the approximate percentage of special education students in their building that were included in general education classrooms for at least 79% of their school day (a student receiving resource room/services for less than 21% of the students total instructional day, as defined by TEA), the special education programs on their campus, and the handicapping conditions that were represented in their school. The total respondents for section I was 101. Nine of the responses had to be thrown out due to missing data. The values and subjects data for demographics are included in Table 2.

Table 2

#### *Demographic Information for Principal Sample*

Descriptives	N
<i>Age</i>	
31-41	19
41-50	44
51+	38
<i>Gender</i>	
Male	31
Female	70

*(table continues)*

Descriptives	N
<b>Campus Size</b>	
Less than 100	4
101-200	9
201-500	36
501-800	38
800+	14
<b>Percentage of Students in Special Education</b>	
0-5%	18%
6-10%	45%
11-20%	35%
21-30%	3%
<b>Percentage of Special Education Students Included in Regular Education</b>	
0-10%	25%
11-20%	12%
21-40%	14%
41-60%	12%
61+%	38%

*Attitudes of Elementary Principals in Texas Toward Inclusion*

One of the primary goals of this study was to determine the attitudes of Texas elementary principals toward the inclusion of special education students into the general education setting. The principals' attitudes were calculated by using section III of the PIS and determining a total attitude of inclusion score. The total respondents for section III was 108. Two of the responses had to be thrown out due to missing data. Based on the total score obtained from this section, ranging from 10-50, lower scores were an

indication of less favorable attitudes and higher scores were an indication of more favorable attitudes toward inclusion. The actual scores from principals ranged from the lowest score of 25 to the highest score of 50. The mean score was 41.1, the median was 41, the mode was 40, and the standard deviation was 5.22. The distribution of the scores is shown below in Table 3. The total attitude toward inclusion score will serve as the dependant variable for the statistical ANOVAS.

Table 3  
*Attitude Toward Inclusion Scores*

Scores	Frequency	Percentage
25	1	.9
28	1	.9
29	1	.9
30	4	3.7
31	1	.9
32	1	.9
34	1	.9
35	4	3.7
36	2	1.9
37	7	6.5
38	5	4.6
39	7	6.5
40	13	12.0

*(table continues)*

Scores	Frequency	Percentage
41	7	6.5
42	8	7.4
43	7	6.5
44	5	4.6
45	8	7.4
46	11	10.2
47	4	3.7
48	4	3.7
49	4	3.7
50	2	1.9

#### *Demographic ANOVA*

The first univariate analysis of variance looked at the relationship between the independent variables of age, gender, campus size, percentage of students included in special education and the percentage of special education students included in regular education, and the dependant variable of the attitude toward inclusion score taken from Section III of the PIS. The total number of respondents for this ANOVA was 101, taken from completed responses as shown in Table 1. Nine responses were eliminated due to missing data.

Based on age, there was no significant difference in the attitude rating toward inclusion ( $F(2, 101) = .35, p = .71$ ). Principal gender also seemed to have no significant relation to their attitude toward inclusion ( $F(1, 101) = 2.57, p = .12$ ). The study found that campus size was not a significant factor relative to the principal's attitude toward

inclusion ( $F(4, 101) = 2.22, p = .09$ ). The percentage of students in special education was not a significant factor in the principal's attitude toward inclusion ( $F(3, 101) = .54, p = .66$ ), nor did the percentage of special education students included in regular education ( $F(4, 101) = .58, p = .68$ ). Overall, the results of the Demographic ANOVA reported no significant relationship within or between the dependant variable of attitudes toward inclusion score and the groups of demographic variables. All reported statistics from the Demographic ANOVA are reported in Table 4.

Table 4

*Demographic ANOVA Results - Dependant Variable: Attitude Toward Inclusion*

Source	F	Sig.	Partial Eta Squared <sup>1</sup>
Age	.35	.71	.02
Gender	2.6	.12	.07
Campus Size	2.2	.09	.22
Percentage of Students included in Special Education	.54	.66	.05
Percentage of Special Education Students included in regular education.	.58	.68	.07

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

*Training/Experience ANOVA*

In the second univariate analysis of variance, the relationship between the independent variables, regular education teaching experience, special education teaching experience, elementary principal experience, inservice training hours in inclusion, special education college credits earned, and the time period in which the special education training occurred taken from Section II of the PIS and the dependant variable of the total

attitude toward inclusion score was examined. The total number of respondents for this ANOVA was 105, from completed responses. Five responses were eliminated due to missing data. The values and subjects for training and experience are shown here in Table 5.

Table 5  
*Training and Experience*

Descriptives	N
<b>Regular Education Teaching Experience</b>	
0	3
1-3	5
4-9	34
10-20	37
21+	26
<b>Special Education Teaching Experience</b>	
0	69
1-3	10
4-9	16
10-20	8
21+	2
<b>Elementary Principal Experience</b>	
0-3	32
4-9	43
10-20	27
21+	3

*(table continues)*

Descriptives	N
<b>Hours of Inservice in Inclusion</b>	
0	2
1-6	27
7-12	16
13+	60
<b>Special Education College Credits</b>	
0	36
1-6	36
7-12	10
13+	23
<b>Time Period of Special Education Training</b>	
1-6	44
6-10	30
11-20	17
21+	14

The first independent variable of regular education teaching experience had no significant effect on attitude toward inclusion ( $F(3, 105) = .17, p = .91$ ). Special education teaching experience did have a significant effect on principals' total attitude rating toward inclusion ( $F(1, 105) = 5.97, p < .05$ ). Elementary principal experience had no significant relationship to the attitude toward inclusion ( $F(3, 101) = 1.17, p = .34$ ). Based on inservice training hours in inclusion, there was no significant difference in principals' attitude rating toward inclusion ( $F(3, 105) = 2.01, p = .14$ ). Whether principals have earned college credit hours in special education had no significant relationship to their attitude toward inclusion ( $F(3, 105) = .48, p = .70$ ). The time period



since principals received their special education training also had no significant relationship to their attitude toward inclusion ( $F(3, 105) = .73, p = .54$ ). The results from the Training/Experience ANOVA are reported in Table 6.

Table 6

*Training/Experience ANOVA Results - Dependant Variable: Attitude Toward Inclusion*

Source	F	Sig.	Partial Eta Squared <sup>1</sup>
Regular Education Teaching Experience	.17	.91	.02
Special Education Teaching Experience	6.0	.02*	.17
Elementary Principal Experience	1.2	.34	.11
Inservice Training hours on Inclusion	2.0	.14	.17
Special Education College Credits Earned	.48	.70	.05
Time period of Special Education Training	.73	.54	.07

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

In all, only one variable, special education teaching experience, showed a significant relationship to principals' attitudes toward inclusion. The findings within the special education teaching experience, ranging from a low score (10) or lower attitude toward inclusion, to a high score (50) or higher attitude toward inclusion showed that principals with 1-3 years of special education reported a Mean score = 40.56, 4-9 years of special education teaching experience reported a higher attitude toward inclusion with a Mean score = 42.30. The principals with 10-20 years of special education teaching experience reported an even higher attitude toward inclusion with a mean score = 44.86, and principals with 21+ years reported a lower attitude toward inclusion with a Mean =

36.00. The means for the significant variable of special education teaching experience are reported in Table 7.

Table 7

*Means for Special Education Teaching Experience*

Special Education Teaching Experience (years)	Mean
1-3	40.56
4-9	42.30
10-20	44.86
21+	36.00

*Knowledge ANOVA*

The third univariate analysis of variance tested for a relationship between independent variables of knowledge of special education law and knowledge of special education terminology taken from Section II of the PIS and the dependant variable of the total attitude toward inclusion score from section III of the PIS. The total number of respondents was 108, taken from completed responses. Two responses were eliminated due to missing data. The value and subjects data for Knowledge are found in Table 8.

The knowledge of special education law did show a significant relationship to principals' total attitude rating toward inclusion ( $F(2, 108) = 3.58, p < .05$ ). The other variable of knowledge of special education terminology had no significant relationship to attitudes toward inclusion ( $F(2, 108) = 2.19, p = .12$ ). The results from the Training/Experience ANOVA are reported in Table 9.

Table 8

*Special Education Law and Terminology Knowledge*

Descriptives	N
<b>Special Education Law Knowledge</b>	
Minimal	2
Moderate	77
Expert	29
<b>Special Education Terminology Knowledge</b>	
Minimal	1
Moderate	53
Expert	54

Table 9

*Knowledge ANOVA Results - Dependant Variable: Attitude Toward Inclusion*

Source	F	Sig.	Partial Eta Squared <sup>1</sup>
Knowledge of Special Education Law	3.6	.03*	.07
Knowledge of Special Education Terminology	2.2	.12	.04

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

In conclusion, one of the two independent variables, knowledge of special education law, was significantly related to attitudes toward inclusion. The finding with the knowledge of special education law, ranging from a low score (10) or lower attitude toward inclusion, to a high score (50) or higher attitude toward inclusion showed that principals with minimal knowledge of special education law had a lower attitude toward inclusion with a Mean = 37.50. Principals reporting a moderate knowledge of special

education law had a higher attitude toward inclusion with a Mean = 40.53. Those principals stating they had an expert knowledge of special education law reported the highest attitude toward inclusion with a Mean = 42.76. The means for the significant variable of special education law knowledge are reported in Table 10.

Table 10

*Means for Special Education Law Knowledge*

Special Education Law Knowledge	Mean
Minimal	37.50
Moderate	40.53
Expert	42.76

*Programs ANOVA*

The third univariate analysis of variance tested for a relationship between independent variable of knowledge of special education programs, including the following: Content Mastery (CM), behavior unit, resource, life skills, PPCD, co-teaching, other inclusion and other pull-out taken from Section I of the PIS and the dependant variable of the total attitude toward inclusion score from section III of the PIS. The total number of respondents was 108, taken from completed responses. Two responses were eliminated due to missing data. The results from the Programs ANOVA are found in Table 11.

Principals' Knowledge of special education programs had a significant relationship to attitudes toward inclusion when it came to two programs, CM ( $F(1, 103) = 4.66, p < .05$ ), and other inclusion ( $F(1, 104) = 4.12, p < .05$ ). The other listed programs

including: behavior unit ( $F(1, 103) = .52, p = .47$ ), co-teaching ( $F(1, 100) = .76, p = .38$ ), resource ( $F(1, 103) = .10, p = .76$ ), life skills ( $F(1, 100) = .12, p = .73$ ), PPCD ( $F(1, 100) = .02, p = .90$ ), and other pull-out ( $F(1, 104) = 2.15, p = .15$ ), did not have significant relationships to the dependant variable of attitude toward inclusion.

Table 11

*Programs ANOVA Results - Dependant Variable: Attitude Toward Inclusion*

Source	F	Sig.	Partial Eta Squared <sup>1</sup>
Content Mastery	4.66	.03*	.04
Behavior Unit	.52	.47	.01
Resource	.10	.76	.00
Life Skills	.12	.73	.00
PPCD	.02	.90	.00
Co-Teaching	.76	.38	.01
Other Inclusion	4.12	.05*	.04
Other Pull-out	2.15	.15	.02

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

In conclusion, two of the eight independent variables, content mastery (CM) and other inclusion, were significantly related to attitudes toward inclusion. The finding for CM, ranging from a low score (10) or lower attitude toward inclusion, to a high score (50) or higher attitude toward inclusion showed principals that reported being familiar with CM reported slightly higher attitudes toward inclusion, (Mean for Principals having knowledge of CM = 41.35, Mean for Principals not having knowledge of CM = 37.00).

The finding for “other inclusion” ranging from a low score (10) or lower attitude toward inclusion, to a high score (50) or higher attitude toward inclusion showed principals that reported being familiar with “other inclusion” reported slightly higher attitudes toward inclusion, (Mean for Principals having knowledge of “other inclusion” = 41.93 Mean for Principals not having knowledge of “other inclusion” = 39.69). The Means for CM and “other inclusion” are reported in Table 12.

Table 12

*Means of CM and “Other Inclusion”*

Independent Variable	Mean
Knowledge of CM	41.35
No Knowledge of CM	37.00
Knowledge of “Other Inclusion”	41.93
No Knowledge of “Other Inclusion”	39.69

*Handicapping Conditions ANOVA*

The final univariate analysis of variance tested for a relationship between independent variable of types of handicapping conditions represented on a principal’s campus, including the following: learning disability (LD), emotionally disturbed (ED), mental retardation (MR), visual impairment (VI), speech impairment (SI), hearing impairment (AI), physical disability (OI), other health impaired (OHI), Multi-handicapped (Multi), and Autism from Section I of the PIS and the dependant variable of the total attitude toward inclusion score from section III of the PIS. The total number of

respondents was 108, taken from completed responses. Two responses were eliminated due to missing data. The results from the Programs ANOVA are found in Table 13.

Table 13

*Handicapping Conditions ANOVA Results - Dependant Variable:  
Attitude Toward Inclusion*

Source	F	Sig.	Partial Eta Squared <sup>1</sup>
LD	*	*	*
MR	2.64	.11	.03
ED	.29	.59	.00
VI	.35	.56	.00
AI	3.10	.08	.03
SI	.02	.89	.00
OHI	2.95	.09	.03
OI	.13	.72	.00
Multi	.75	.39	.01
Autism	.01	.92	.00

*Note:* \* No bases for comparison, all principals reported having LD represented. <sup>1</sup>Partial Eta Squared is the effect size of the study

The types of handicapping conditions represented on a principal's campus did not have a significant relationship to principals' attitudes toward inclusion. The handicapping conditions included: OHI ( $F(1, 99) = 2.95, p = .09$ ), LD had all 108 principals respond to having this handicapping condition on their campus, therefore no bases for comparison, ED ( $F(1, 104) = .29, p = .59$ ), MR ( $F(1, 100) = 2.64, p = .11$ ), VI ( $F(1, 100) = .35, p = .56$ ), SI ( $F(1, 99) = .02, p = .89$ ), AI ( $F(1, 99) = 3.10, p = .08$ ),

OI( $F(1, 99) = .13, p = .72$ ), Multi( $F(1, 100) = .75, p = .39$ ), and Autism( $F(1, 104) = .01, p = .92$ ), did not have significant relationships to the dependant variable of attitude toward inclusion.

### *MANOVA Results*

A Multivariate analysis of variance (MANOVA) was computed to test for statistical significance between the means of ten dependant variables and the six independent variables. The dependant variables consisted of the least restrictive environment (LRE) ratings from Sections IV of the PIS, and include the following: learning disability (LD), emotionally disturbed (ED), mental retardation (MR), visual impairment (VI), speech impairment (SI), hearing impairment (AI), physical disability (OI), other health impaired (OHI), Multi-handicapped (Multi), and Autism. The six independent variables, taken from Section II of the PIS include: special education teaching experience, elementary principal experience, inservice training hours on inclusion, time period of special education training, law knowledge, and terminology knowledge. The total number of respondents for this MANOVA is 98, taken from completed responses. Twelve responses were eliminated due to missing data.

Wilks' Lambda is the test used in MANOVAs to determine if differences do exist between the means of identified groups of independent variables on a combination of dependant variables (Everitt & Dunn, 1991). Through the Wilks' Lambda, the MANOVA produced significant findings for five of the six independent variables: special education teaching experience ( $p < .01$ ), elementary principal experience ( $p < .05$ ), inservice training hours on inclusion ( $p < .01$ ), time period of special education training ( $p < .01$ ), law knowledge ( $p < .01$ ). The MANOVA did not show a significant



relationship to the independent variable of terminology knowledge ( $p = .31$ ). The MANOVA is reported in Table 14.

Table 14  
*MANOVA Results*

Effect	Value	F	Sig	Partial Eta Squared <sup>1</sup>
Special Education Teaching Experience	.07	2.9	.00*	.49
Elementary Principal Experience	.27	1.6	.05*	.35
Inservice Training Hours on Inclusion	.16	2.4	.00*	.45
Time Period of Special Education Training	.15	2.6	.00*	.47
Law Knowledge	.28	2.6	.00*	.47
Terminology Knowledge	.70	1.2	.31	.30

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

#### *Pairwise Comparisons*

This section will examine the pairwise comparisons for each significant combination of dependant variables and will go into further detail about each relationship within those relationships. As shown in Table 13, all but one, terminology knowledge, had significant relationships to LRE ratings within the group.

#### *Pairwise Comparison 1: Special Education Teaching Experience*

All of the interactions between special education teaching experience and the dependant variables are shown in Table 15 and are explained in detail below.

*Special education teaching experience, independent variable and learning disability (LD), dependant variable.* The first significant effect was found with the independent variable of special education teaching experience. In looking at special education teaching experience in relation to each dependant variable from the LRE

Table 15

*Between Subjects Tests for Special Education Teaching Experience and Principals' LRE Ratings among all Disability Groups*

Dependant Variable	F	Sig	Partial Eta Squared <sup>1</sup>
LD	3.32	.02*	.26
MR	1.61	.19	.15
ED	1.41	.25	.13
VI	6.40	.00*	.40
AI	6.64	.00*	.41
SI	1.47	.23	.13
OHI	1.68	.18	.15
OI	.74	.57	.07
Multi	4.62	.00*	.33
Autism	2.23	.11	.18

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

ratings, principals who had 0 years of special education experience compared to those with 10-20 years of special education teaching experience had a less positive view of inclusion of LD students with a mean difference of -.91 and a more positive view of including LD students as compared to principals with 21+ years of special education experience with a mean difference of 1.8.

Principals with 1-3 years of special education teaching experience compared to those with 10-20 years of special education teaching experience had a less favorable view of including students with LD with a mean difference of -.91 and a more positive attitude of inclusion of LD students compared to principals with 21+ years of special education teaching experience having a mean difference of 1.7.

Principals with 4-9 years of special education teaching experience had a less positive view of inclusion of LD students than principals with 10-20 years of special education experience with a mean difference of -.95 and a more positive view of inclusion of LD students as compared to principals with 21+ years of special education teaching experience, mean difference of 1.8.

Overall, principals in the 10-20 years of special education teaching experience, favored inclusion of LD students as compared to all of the other years of experience ranges including 0 years (mean difference of .91), 1-3 years (mean difference of 1.0), 4-9 years (mean difference of .95), and 21+ years (mean difference of 2.7) of special education teaching experience.

In the 21+ years of special education teaching experience, principals had a more negative view of inclusion towards students with learning disabilities than all other years of experience ranges including 0 years (mean difference of -1.8), 1-3 years (mean difference of -1.7), 4-9 years (mean difference of -1.8), and 10-20 years (mean difference of -2.7) of special education teaching experience.

*Special education teaching experience, independent variable and mental retardation (MR), dependant variable.* In the 1-3 years of special education teaching experience, principals reported a less favorable view of inclusion when it came to MR

students compared to both 4-9 years(mean difference of -.58) and 10-20 years(mean difference -.83) of special education teaching experience.

*Special education teaching experience, independent variable and visual impairment (VI), dependant variable.* Principals with 0 years of special education teaching experience had a more positive view of inclusion of VI students then principals with 1-3 years (mean difference of 1.5) and 21+ years ( mean difference of 1.9) of special education teaching experience.

*Special education teaching experience, independent variable and physical disability (AI), dependant variable.* Elementary principals with 0 years of special education teaching experience favored inclusion of AI students compared to principals with 1-3 years (mean difference of 2.0), 10-20 years (mean difference of 1.5) and 21+ years (mean difference of 1.6) of special education experience.

In the 1-3 years of special education teaching experience, principals had a less favorable view of inclusion of AI students compared to 4-9 years (mean difference of - 1.8) of special education experience. The 4-9 years of special education experience also had a more positive view of the inclusion of AI students then principals with 10-20 years (mean difference of 1.3) of special education teaching experience.

*Special education teaching experience, independent variable and speech impairment (SI), dependant variable.* Principals with 10-20 years of special education teaching experience had a more positive view of the inclusion of SI students compared to principals with 0 years (mean difference of .61) and 1-3 years (mean difference of .78) of special education teaching experience.

*Special education teaching experience, independent variable and multi-handicapped (Multi), dependent variable.* In the 21+ years of special education teaching experience group, principals were less favorable toward the inclusion of Multi students than principals with 0 years (mean difference of -1.3), 4-9 years (mean difference of -1.4), and 10-20 years (mean difference of -2.0) of special education teaching experience.

*Special education teaching experience, independent variable and autism, dependant variable.* Principals with 21+ years of special education teaching experience had a more negative view of the inclusion of students with autism compared to principals with 4-9 years (mean difference of -2.3) of special education experience.

*Pairwise Comparisons 2: Elementary Principal Experience*

All of the interactions between elementary principal experience and the dependant variables are shown in Table 16 and are explained in detail below.

Table 16

*Between Subjects Tests for Elementary Principal Experience and Principals' LRE Ratings among all Disability Groups*

Dependant Variable	F	Sig	Partial Eta Squared <sup>1</sup>
LD	.90	.45	.07
MR	.06	.98	.00
ED	4.25	.01*	.25
VI	1.08	.37	.08
AI	1.35	.27	.10

*(table continues)*

Dependant Variable	F	Sig	Partial Eta Squared
SI	1.22	.32	.09
OHI	.56	.64	.04
OI	.25	.86	.02
Multi	1.72	.18	.12
Autism	.59	.62	.05

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

*Elementary principal experience, independent variable and emotional disturbance (ED), dependant variable.* The only finding in this combination found that Principals with 21+ years of elementary principal experience favored the inclusion of ED students compared to principals with 4-9 years (mean difference of 1.34) of elementary principal experience.

*Elementary principal experience, independent variable and visual impairment (VI), dependant variable.* There is only one significant finding in this combination, Principals with 4-9 years of elementary principal experience had a more favorable view of the inclusion of VI student then did principals with 10-20 years (mean difference of .86) of elementary experience.

*Elementary principal experience, independent variable and hearing impaired (AI), dependant variable.* This combination had principals from 4-9 years of elementary principal experience favoring the inclusion of AI students compared to principals with 10-20 years (mean difference of .66) of elementary principal experience.

*Elementary principal experience, independent variable and speech impaired (SI), dependant variable.* In this final comparison with elementary principal experience as the independent variable, principals with 0-3 years of elementary principal experience had a more negative view of the inclusion of SI students than principals with 4-9 years (mean difference of -.51) of principal experience, but had a more positive view than the principals with 21+ years (mean difference of .97) of elementary principal experience. The 4-9 years of elementary principal experience also had a more positive view of the inclusion of SI students than both the 10-20 years (mean difference of .55) and the 21+ years (mean difference of 1.48) of elementary principal experience.

*Pairwise Comparisons 3: Inservice Hours in Inclusion Practices*

All of the interactions between the number of inservice hours in inclusion practices and the dependant variables are shown in Table 16 and are explained in detail below.

Table 16

*Between Subjects Tests for Inservice Hours in Inclusion Practices and Principals' LRE Ratings among all Disability Groups*

Dependant Variable	F	Sig	Partial Eta Squared <sup>1</sup>
LD	.68	.57	.05
MR	2.57	.07	.17
ED	.20	.90	.02
VI	2.10	.12	.14
AI	1.86	.15	.13

*(table continues)*

Dependant Variable	F	Sig	Partial Eta Squared <sup>1</sup>
SI	1.92	.14	.13
OHI	.72	.55	.05
OI	.56	.64	.04
Multi	.32	.81	.03
Autism	1.44	.25	.10

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

*Hours of inservice in inclusion practices, independent variable, and mental retardation (MR), dependant variable.* Principals with 13+ hours of inservice on inclusion practices viewed the inclusion of MR students more positively as compared to principals with 1-6 hours (mean difference of .67) and principals with 7-12 hours (mean difference of .43) of inservice in inclusion practices.

#### *Pairwise Comparisons 4: Time Period of Special Education Training*

All of the interactions between the time period (years) of special education training in inclusion practices and the dependant variables are shown in Table 17 and are explained in detail below.

*Time period of special education training, independent variable, and learning disabled (LD), dependant variable.* Principals having special education training occurring within the last 21+ years had a more positive view of the inclusion of LD students compared to principals that had received special education training within the last 1-5 years (mean difference of .90) and those receiving training within the last 11-20 years (mean difference of .82).



Table 17

*Between Subjects Tests for Time Period of Special Education Training and Principals' LRE Ratings among all Disability Groups*

Dependant Variable	F	Sig	Partial Eta Squared <sup>1</sup>
LD	2.72	.06	.18
MR	3.02	.04*	.19
ED	2.43	.08	.16
VI	4.12	.01*	.25
AI	3.75	.02*	.23
SI	6.00	.00*	.32
OHI	1.98	.13	.14
OI	.89	.45	.07
Multi	2.78	.05*	.18
Autism	4.76	.01*	.27

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

*Time period of special education training, independent variable, and mental retardation (MR), dependant variable.* Elementary principals having special education training occurring within 21+ years were more favorable toward the inclusion of MR students than principals who had training within 1-5 years (mean difference of .54) and principals who had training 6-10 years (mean difference of .53).

*Time period of special education training, independent variable, and emotionally disturbed (ED), dependant variable.* Principals who had special education training within the last 21+ years had a more favorable view of inclusion of ED students as compared to principals having had training within 6-10 years (mean difference of .98)

and principals having had special education training with in 11-20 years (mean difference of 1.34).

*Time period of special education training, independent variable, and visual impairment (VI), dependant variable.* Principals having had special education training within the last 11-20 years were less favorable with the inclusion of VI students compared to principals who had special education training within 6-10 years (mean difference of -.81) and 21+ years (mean difference of -.152).

*Time period of special education training, independent variable, and hearing impairment (AI), dependant variable.* Principals who had training within the last 21+ years were more favorable of the inclusion of AI students then principals who had special education training within 11-20 years (mean difference of .98).

*Time period of special education training, independent variable, and speech impairment (SI), dependant variable.* Principals who had special education training within the last 6-10 years were less favorable toward the inclusion of SI students then all three other time periods, within the last 1-5 years (mean difference of -.51), within the last 6-10 years (mean difference of -.67), and within the last 21+ years (mean difference of -.83)

*Time period of special education training, independent variable, and multi-handicapped (multi), dependant variable.* Principals having had special education training within the last 21+ years favored the inclusion of Multi students over principals who had special education training within the last 1-5 years (mean difference of .86).

*Time period of special education training, independent variable, and autism, dependant variable.* Principals having had special education training within 1-5 years were less favorable towards the inclusion of students with autism then principals having had special education within the last 21+ years (mean difference of -1.19).

*Pairwise Comparisons 5: Special Education Law Knowledge*

All of the interactions between principals' special education law knowledge and the dependant variables are shown in Table 18 and are explained in detail below.

Table 18

*Between Subjects Tests for Principals' Special Education Law Knowledge and Principals' LRE Ratings among all Disability Groups*

Dependant Variable	F	Sig	Partial Eta Squared <sup>1</sup>
LD	.72	.49	.04
MR	5.91	.01*	.24
ED	1.04	.36	.05
VI	4.99	.01*	.21
AI	6.03	.01*	.24
SI	.84	.44	.04
OHI	1.58	.22	.08
OI	1.88	.17	.09
Multi	8.23	.00*	.30
Autism	.65	.53	.03

*Note:* \* Significant finding; <sup>1</sup>Partial Eta Squared is the effect size of the study

*Special education law knowledge, independent variable, and mental retardation (MR), dependant variable.* Principals who stated that they had expert knowledge of special education law favored inclusion of MR students over principals who stated they had minimal (mean difference of 1.15) and moderate (mean difference of .76) knowledge of special education law.

*Special education law knowledge, independent variable, and speech impairment (SI), dependant variable.* Principals reporting moderate knowledge of special education law were less favorable of the inclusion of SI students then principals reporting expert (mean difference of -.43) knowledge of special education law.

*Special education law knowledge, independent variable, and multi-handicapped (multi), dependant variable.* Principals reporting having minimal knowledge of special education law viewed the inclusion of Multi students less favorable then did principals reporting moderate (mean difference of -1.30) and expert (mean difference of -1.59) knowledge of special education law.

#### *Additional Findings*

There are multiple interaction effects among the independent variables and the dependant variables on placement recommendations. The extensiveness of the interaction effects is beyond the scope of this study and may be reported at a later date.

## CHAPTER FIVE

### Discussion and Conclusions

#### *Introduction of Study*

The purpose of this study was to determine the attitudes and perceptions of Texas elementary school principals related to the inclusion of students with disabilities into the general education setting. The study investigated elementary principals' overall attitude toward inclusion and how demographic information, training, and experience affected their attitudes. The study also examined principals' perceptions toward appropriate placement of students with disabilities based on the type of disability.

In conducting the research, a Web-based survey was used to collect the data. The principals were solicited by an e-mail list obtained from the Texas Education Agency (TEA). Principals were randomly selected to complete the Principals and Inclusion Survey (PIS) developed by Praisner (2000). The PIS contained four sections including demographics, training and experience, attitudes toward inclusion and most appropriate placement for students with disabilities. The sample surveyed totaled 360 principals, with 110 completing the survey. Each principal received an e-mail containing a cover letter explaining the purpose of the research and discussing consent. Once the data were collected, it was analyzed using univariate analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA). The MANOVA was used to examine data between and within the groups of variables. The ANOVAs were completed to evaluate the relationship between the independent variables of the demographic information taken from Section I of the Principals and Inclusion Survey (PIS) that included: age, gender,

campus size, percentage of students included in special education, the percentage of special education students included in regular education, special education programs on principal's campus, and handicapping conditions representative of principal's campus, Section II of the PIS that included: training and experience, special education terms and special education law, and the dependant variable of the attitude toward inclusion that was taken from Section III.

### *Summary of Study*

The intention of this study was to investigate the attitudes and perceptions of Texas elementary school principals related to the inclusion of students with disabilities into the general education setting. The study examined elementary principals' overall attitude toward inclusion and how demographic information, training, and experience affected their attitudes. The study also looked at principals' perceptions toward appropriate placement of students with disabilities based on the type of disability. The research questions for this study included the following:

1. What are the attitudes and perceptions of elementary school principals in Texas towards inclusion programs?

Based on the total score obtained from section III of the PIS, ranging from 10-50, lower scores were an indication of less favorable attitudes and higher scores were an indication of more favorable attitudes toward inclusion. The actual scores from principals ranged from the lowest score of 25 to the highest score of 50. The mean score was 41.1, the median was 41, the mode was 40 and the standard deviation was 5.22. These results suggest that principals' attitudes tend to be more favorable toward the inclusion of students with disabilities in the general education setting. Principals'

perceptions also tend to be favorable toward inclusion as computed from section IV of the PIS. Principals' perceptions of students among all handicapping conditions were examined based on independent variables, taken from Section II of the PIS include: special education teaching experience, elementary principal experience, inservice training hours on inclusion, time period of special education training, law knowledge, and terminology knowledge. Significant findings for five of the six independent variables: special education teaching experience ( $p < .01$ ), elementary principal experience ( $p < .05$ ), inservice training hours on inclusion ( $p < .01$ ), time period of special education training ( $p < .01$ ), law knowledge ( $p < .01$ ). These data suggest that principals' perceptions of appropriate placement of students with disabilities depended on the particular training, experience or knowledge related to special education. Special education terminology did not have a significant relationship to principals' perceptions of appropriate placement of students with disabilities.

2. Is there is a relationship between type and amount of principals' experience and their attitudes towards inclusion, including the following:

a) Years of experience in regular education classroom?

Regular education teaching experience had no significant effect on attitude toward inclusion ( $F(3, 105) = .17, p = .91$ ).

b) Years of experience in special education classroom?

Special education teaching experience did have a significant effect on principals' total attitude rating toward inclusion ( $F(1, 105) = 5.97, p < .05$ ).

c) Number of years as a principal?

Elementary principal experience had no significant relationship to the attitude toward inclusion ( $F(3,101) = 1.17, p = .34$ ).

3. Is there a relationship between principals' gender and their attitudes towards inclusion?

Principal gender seemed to have no significant relation to their attitude toward inclusion ( $F(1,101) = 2.57, p = .12$ ).

4. Is there a relationship between principals' age and their attitudes towards inclusion?

Based on age, there was no significant difference in the attitude rating toward inclusion ( $F(2, 101) = .35, p = .71$ ).

5. Is there a relationship between the number of special education college credits earned by principals and their attitudes towards inclusion?

Whether principals have earned college credit hours in special education had no significant relationship to their attitude toward inclusion ( $F(3, 105) = .48, p = .70$ ).

6. Is there a relationship between the number of inservice training hours in the area of inclusion obtained by principals and their attitudes towards inclusion?

Based on inservice training hours in inclusion, there was no significant difference in principals' attitude rating toward inclusion ( $F(3, 105) = 2.01, p = .14$ ).

7. Is there a relationship between the recency of training obtained by principals in the area of special education and their attitudes towards inclusion?

The time period since principals received their special education training also had no significant relationship to their attitude toward inclusion ( $F(3, 105) = .73, p = .54$ ).



8. Is there a relationship between school size and principals' attitudes toward inclusion?

The study found that campus size was not a significant factor relative to the principal's attitude toward inclusion ( $F(4, 101) = 2.22, p = .09$ ).

9. Is there a relationship between percentage of special education students in a principal's school and their attitudes towards inclusion?

The percentage of students in special education was not a significant factor in the principal's attitude toward inclusion ( $F(3, 101) = .54, p = .66$ ).

10. Is there a relationship between the principals' knowledge of special education law and their attitudes towards inclusion?

The knowledge of special education law did show a significant relationship to principals' total attitude rating toward inclusion ( $F(2, 108) = 3.58, p < .05$ ).

11. Is there a relationship between the principal's knowledge of special education terminology, such as least restrictive environment, learning disabled and emotionally disturbed, and their attitudes towards inclusion? Principals' knowledge of special education terminology had no significant relationship to attitudes toward inclusion ( $F(2, 108) = 2.19, p = .12$ ).

12. Is there a relationship between principals' knowledge of special education programs such as, resource room, life skills class, and content mastery, and their attitudes towards inclusion?

Principals' Knowledge of special education programs had a significant relationship to attitudes toward inclusion when it came to two programs, CM ( $F(1, 103) = 4.66, p < .05$ ), and other inclusion ( $F(1, 104) = 4.12, p < .05$ ). Principals that reported

being familiar with CM reported slightly higher attitudes toward inclusion, (Mean for Principals having knowledge of CM = 41.35, Mean for Principals not having knowledge of CM = 37.00). Principals that reported being familiar with “other inclusion” reported slightly higher attitudes toward inclusion, (Mean for Principals having knowledge of “other inclusion” = 41.93 Mean for Principals not having knowledge of “other inclusion” = 39.69).

13. What are principals’ perceptions towards appropriate placement of students with various disabilities?

A Multivariate analysis of variance (MANOVA) was computed to test for statistical significance between the means of 10 dependant variables and the six independent variables. The dependant variables consisted of the least restrictive environment (LRE) ratings from Sections IV of the PIS, and include the following: learning disability (LD), emotionally disturbed (ED), mental retardation (MR), visual impairment (VI), speech impairment (SI), hearing impairment (AI), physical disability (OI), other health impaired (OHI), multi-handicapped (Multi), and Autism. The six independent variables, taken from Section II of the PIS include: special education teaching experience, elementary principal experience, inservice training hours on inclusion, time period of special education training, law knowledge, and terminology knowledge. The MANOVA produced significant findings for five of the six independent variables: special education teaching experience ( $p < .01$ ), elementary principal experience ( $p < .05$ ), inservice training hours on inclusion ( $p < .01$ ), time period of special education training ( $p < .01$ ), law knowledge ( $p < .01$ ). This can be interpreted to mean that principals with these types of experiences tend to place students with disabilities in less

restrictive environments than principals without these experiences. The MANOVA did not show a significant relationship to the independent variable of terminology knowledge ( $p = .31$ ).

14. Is there a relationship between the types of handicapping conditions on a principal's school and their attitudes toward inclusion?

The types of handicapping conditions represented on a principal's campus did not have a significant relationship to principals' attitudes toward inclusion. The handicapping conditions included: OHI ( $F(1, 99) = 2.95, p = .09$ ), LD had all 108 principals respond to having this handicapping condition on their campus, therefore no bases for comparison, ED ( $F(1, 104) = .29, p = .59$ ), MR ( $F(1, 100) = 2.64, p = .11$ ), VI ( $F(1, 100) = .35, p = .56$ ), SI ( $F(1, 99) = .02, p = .89$ ), AI ( $F(1, 99) = 3.10, p = .08$ ), OI ( $F(1, 99) = .13, p = .72$ ), Multi ( $F(1, 100) = .75, p = .39$ ), and Autism ( $F(1, 104) = .01, p = .92$ ), did not have significant relationships to the dependent variable of attitude toward inclusion.

#### *Attitudes of Texas Principals Toward Inclusion*

Principals can play an important role in the process of inclusion. It is the focus of this research to take a deeper look into this role. Looking at section III of the PIS, which examined principals attitudes toward inclusion, 108 principals successfully responded and showed a more favorable than unfavorable attitude toward the inclusion of students with disabilities into the general education setting. Attitude toward inclusion score showed that principals' attitudes were more positive toward the inclusion of students with disabilities, with 73 of the 108 principals having scores falling in the 40 to 50 range on the determined scale of a score of 10 representing less favorable attitudes and a score of

50 representing more favorable attitudes toward the inclusion of students with disabilities. Overall, principals reported a more positive than negative attitude toward the inclusion of students with disabilities. This differs from previous research by Praisner (2000) who found that only one in five principals had positive attitudes toward inclusion while the rest surveyed remained uncertain. These findings can be useful in the implementation of inclusion programs at this elementary level and also suggest further research in the area how principals' attitudes affect the implementation of inclusion models within the schools.

In exploring specific questions for the attitudes toward inclusion section, principals primarily favored classrooms having both students with and without disabilities in order to profit from one another. Most principals believed that general education teachers can help a student with a disability to succeed. Most principals also agreed that students without disabilities could profit from contact with students with disabilities. A smaller majority of principals felt that general education should be modified to meet the needs of all students, including those with disabilities. Principals were less certain, but still favored policy established that mandates students with disabilities be integrated into the general education programs. Overall in this section, principals tend to present a favorable attitude toward inclusion.

ANOVAs were conducted to determine specifically what factors played a role in principals' attitudes toward inclusion. It was determined by principals' responses that the following demographic categories, age, gender, school size, the percentage of special education students included in the general education setting, and the percentage of students in special education, did not have a significant effect on principals' attitudes

toward inclusion. These findings support past research (Hof, 1999; Levy 1999; Praisner, 2000) on age and gender, but differ slightly from (Levy, 1999), who found a negative relationship between attitude and age. It was determined that principals' training and experience, including regular education teaching experience, special education teaching experience, elementary principal experience, inservice hours in inclusive practices, number of college credits in special education, and the time frame of their special education training did not affect their attitudes toward inclusion with the exception of principals' special education teaching experience. Principals who had special education teaching experience reported having a more positive attitude toward inclusion. The analysis reported that within the sample of principals with special education teaching experience, those with little special education teaching experience had less favorable attitudes toward inclusion, those with moderate special education teaching experience had more favorable attitudes toward inclusion and finally those with the most special education teaching experience had a drop in their attitudes toward inclusion. This study supports previous research (Hof, 1994; Inzano, 1999; Levy, 1999; Praisner, 2000; Villa, et al., 1996) that found no significant relationships between principals' attitudes, and regular education experience and/or elementary principal experience, but differs from the above with the finding on relationship between principals' attitudes and special education experience.

It was determined that principals' knowledge of special education programs had a significant relationship to attitudes toward inclusion when it came to two programs, content mastery (CM) and "other inclusion". The other listed programs, including

behavior unit, resource, life skills, PPCD, co-teaching, and other pull-out did not have significant relationships to the dependant variable of attitude toward inclusion.

When examining the handicapping conditions represented on the principal's campus and attitude toward inclusion, no significant relationships were found. The handicapping conditions included the following: learning disability (LD), emotionally disturbed (ED), mental retardation (MR), visual impairment (VI), speech impairment (SI), hearing impairment (AI), physical disability (OI), other health impaired (OHI), multi-handicapped (multi), and autism. This is in agreement with past research (Levy, 1999) which also found no relationship between experience principals' attitudes and different disability categories.

The last two factors examined for an effect of principals attitudes toward inclusion were their knowledge of special education law and special education terminology. Principals' knowledge of special education law did affect their attitudes toward the inclusion of students with disabilities. Principals' attitudes increasingly grew more favorable as their perceived knowledge of special education law increased. The knowledge of special education terminology had no significant relationship to principals' attitudes toward inclusion. These findings suggest the importance of principals' knowledge of special education law, not only to prevent the loss of funding and lawsuits, but to the successful implementation of inclusion programs in general. These data are also important in examining curricula not only in educational administration programs but in training and inservice on the topic of inclusion.

### *Summary of Attitudes of Texas Principals Toward Inclusion*

The information gathered from this study can help schools assess principals for their attitudes toward inclusion in both the hiring and evaluation processes. The findings from this study, especially in regards to special education law knowledge, special education teaching experience and awareness of CM and “other inclusion” programs on campuses, can help educational administration programs with the preparation process of elementary school principals in developing stronger, more positive attitudes toward inclusion as they prepare for the important role of director of school programming.

### *Most Appropriate Placement Perception of Elementary Principals*

Through the results of this study, it was revealed that principals’ perceptions of appropriate placement for students with disabilities varied depending on the type of the disability and the principal’s training and experiences. Findings from this study suggest that principals’ special education teaching experience plays a role in the determined placement of LD, VI, AI, and Multi-handicapped students. Placement of ED students was related to years of principal experience. MR, VI, AI, SI, Multi-handicapped, and Autistic students perceived placements were affected by the amount of time period of principals’ special education training. Principals’ knowledge of special education law had an effect on the principal’s perceptions of placement for MR, VI, AI and Multi-handicapped students. The disabilities that were affected by principals’ perceptions varied from severe to mild disabilities, no one category was prevalent. These findings support Praisner (2000) who also found that principals with positive special education experiences were more likely to place disabled students in less restrictive settings.

### *Summary of Most Appropriate Placement Perception of Elementary Principals*

The results from this section of the study give support to the importance of principals' perceptions of the inclusion of special education students in regards to placement decisions. Principal support of inclusion is necessary for the successful implementation of less restrictive placements. It is also imperative to consider findings of the relationship between principals' perceptions of appropriate placement and their training and experiences within education when developing educational administration programs as well as implementing inclusion programs on campuses. Principals must be aware of the various types of programs offered through special education. These findings could lead to future research in the area of inclusion and principal training.

### *Limitations of Results*

There are numerous limitations to consider within this study. One limitation to be considered is the sample being limited to the state of Texas. This sample may not represent the true characteristics of the population due to this limited sample population and being exclusive to elementary principals.

Associated with this limitation are the definitions and concepts used within this study. These terms are used within the state of Texas, and each state may define inclusion differently, therefore making it difficult to generalize across larger areas.

Another limitation may be the survey instrument and the possibility for different interpretations. Since the survey was in a self-report design, participants may give the answers that they believe the researcher may want to hear and not what they may truly believe. Principals may read the questions and, depending on different circumstances, may answer differently than perceived. Also the principals that responded may not



represent the attitudes of the total population, fewer or more responses could change the outcome of the results.

Associated with this limitation is the issue of the sample size and the difficulty in recruiting volunteers to participate in the study. The fact that participation was voluntary effected the randomization of the sample and also had an effect on the total number of respondents.

Another limitation of the survey is the fact that it was Web-based. Internet is increasing in popularity and consumer use, however, not everyone uses the internet. This can affect the researcher's ability to assemble a representative sample of a particular population (Dominelli, 2003). Granello and Wheaton (2004) report that internet use in the United States is growing at a tremendous rate of 2 million new users a month. Dominelli (2003) also reports that participants change their e-mail address more often than their mailing address, which as a result can affect participation rates due to non-delivery of the Web-survey. This describes another limitation associated with Web-based surveys which is lower response rate. Granello and Wheaton (2004) and Umbach (2004) suggest that multiple e-mail reminders be sent out when conducting on-line surveys. This research showed that sending out reminders can improve the response rate dramatically.

Another limitation experienced with the Web-based survey was the technical difficulties that occurred. Several principals reported technical problems with attempting to respond to the survey. Granello and Wheaton (2004) also support this limitation by stating how technical problems can hinder response rate.

Though there are many limitations, this study produced many significant findings that can contribute to the research knowledge base in the area of principals and their attitudes toward the inclusion of students with disabilities.

### *Implications for Research and Practice*

The results from this study indicate that principals' attitudes play an important role in the process of inclusion at the campus level. Principals are known to serve as the program facilitators on their campus, and set the tone for the success or failure of not only inclusion programs, but all programs on their campus. This knowledge can be implemented into practice as principals attempt to integrate general and special education students within their schools. The findings from this study can aid educational administration programs in better preparing principals for this role as a program facilitator. The data also present a case for having a strong special education component in administrator preparation programs, due to the increasing trend of special education students entering the general education setting. Special education is a highly complex area with detailed guidelines that when known and followed can prevent lawsuits and maintain funding for these programs. It is also important for principals to be aware of special education issues in regards to Adequate Yearly Progress (AYP) for No Child Left Behind and the Academic Excellence Indicator System (AEIS) as reported in Texas and how inclusion may affect these accountability systems for their school.

Another area needing mention is inservice training for new and experienced principals. Particular attention must be paid to the area of special education law and services when it comes to providing training. As this study reports, principals understanding of special education law improves their overall attitude toward the

inclusion of students with disabilities into the general education setting. Principals must receive at least yearly inservice in special education law, as it is constantly updated. Principals must also share this knowledge of special education law with their faculty and staff in order to promote an overall improved attitude toward inclusion campus wide. More specifically, special education directors and staff can offer principals the opportunity to observe successful inclusion programs. The special education staff should also be available to provide support to principals who are attempting to supervise inclusion programs on their campus and provide inservice on the disability groups that may be a particular difficult group for principals.

Inservice training can bring about another issue in regards to inclusion which is funding. Money for funding programs such as inclusion can be hard to come by on a campus. These types of programs can be expensive when properly maintained due to the cost of appropriate support. Therefore, it is important for principals to have knowledge of special education funding.

This study derived useful data on the implications of principals' attitudes toward and perceptions of the inclusion of students with disabilities in the general education setting. Principals' attitudes did play a role in placement settings of students with disabilities. It is crucial that principals are aware of the different special education services and programs that one can have on their campus. This is important for school districts and for educational administration programs in the training of principals in inclusion practices.

Another beneficial finding from this study is that principals with special education teaching experience tend to have more positive attitudes toward the inclusion of students

with disabilities into the general education setting. This is important to consider in hiring principals on campuses that already are implementing inclusion programs.

The results from this study demonstrate that principals' attitudes and perceptions can affect the successful implementation of inclusion programs and play an important part in their success. This study also brings to light the importance of special education law, special education teaching experience, and awareness of programs such as content master (CM) and "other inclusion" to the positive attitudes of elementary principals to inclusion of special education students. These findings bring us one step closer to a better understanding of the role of principal attitude and perception toward the inclusion of students with disabilities into the general education setting.

The findings from this study brought about a few points of interest for the researcher. In examining the data, it was surprising how many principals were very black or white in their answers. It was also surprising to see the total attitude toward inclusion score fall so high on the scale. This may be an indication that elementary principals are becoming more familiar with, and possibly more supportive of the process of inclusion. It was also surprising to see so many significant relationships that have an impact on the inclusion process within a school, and how having a different principal, with different experiences can change the spirit of inclusion within that particular school.

#### *Implications for Future Research*

An area to be considered for future research is to focus on the role of education and how education affects principals' attitudes toward inclusion. To expand the sample size to include a larger sample from a broader range area, possibly comparing states, and to specifically look at the type and level of education principals are receiving and if this

affects their attitudes toward inclusion. This information could help not only educational administration programs but school campuses implementing inclusion programs.

Future studies could be conducted to examine if there are any differences that exist within the special education placements and handicapping conditions, and if they have an affect on principals' attitudes toward inclusion.

Future studies could examine if educational administration programs play a role in principals' attitudes toward inclusion, and examining what type of role they play. Studies could be done to investigate how principals' attitudes affect the implementation of specific inclusion models within the schools.

Another interesting area to explore would be to see if the inclusion of special education students into a particular general education classroom affects standardized tests scores within that classroom. Related to this would be to examine the academic achievement of general education and special education students within an integrated classroom and to explore if the scores differ from one another.

### *Conclusion*

The results of this study are beneficial in gaining a deeper understanding of just how principals' attitudes and perceptions affect the inclusion of students with disabilities into the general education setting. Through this insight, educational administration programs, as well as district and campus level inservice training can better prepare principals in implementing special education programs on their campuses. As discovered through this study, once principals have a better attitude toward inclusion, then they can share this positive attitude with their campus as a whole.

## APPENDIX

## APPENDIX A

## Survey Instrument

**Principals and Inclusion Survey**

The purpose of this survey is to determine the opinions of elementary principals toward the inclusion movement and to gather information about the types of training and experience that principals have. There are no right or wrong answers so please address the questions to the best of your knowledge and provide us with what **you believe**. This information will remain confidential as to individual responses.

\*\*\*\*\*

**SECTION I- Demographic Information**

The following information will be only be used to describe the population being studied.

1. Your age:

- Less than 30     31-40             41-50             51 +

2. Gender:     Male             Female

3. Approximate number of all students in your building:

- Less than 100     101-200             201- 500             501-800             801+

4. Approximate percentage of students in special education (with IEPs) in your building: (*Do not include gifted*)

- 0-5%             6-10%             11-20%             21-30%             31% +

5. Approximate percentage of special education students (with IEPs) in your building that are included in regular education classrooms for at least 79% of their school day: (*Do not include gifted. Can use PEIMS Codes 00, 40 and 41; Pull-out services <21% of the day.*)

- 0-10%             11-20%             21- 40%             41-60%             61% +

6. Special education programs on your campus:

- Content mastery             Behavior unit     Resource  
 Life skills                     PPCD             Co-teaching  
 Other inclusion             Other pull-out/self-contained

7. Which of the following handicapping conditions are represented on your on your campus?

- Learning disabled             Emotionally disturbed             Autism/PDD  
 Multihandicap             Mental retardation             Visual impairment  
 Hearing impaired             Speech/language impairment  
 Physical disability             Other health impaired

## SECTION II- Your (Principals') Training and Experience

1. Years of full-time regular education teaching experience:
  - 0                       1-3                       4-9                       10-20                       21+
2. Years of full-time special education teaching experience:
  - 0                       1-3                       4-9                       10-20                       21+
3. Years **completed** as an elementary school principal:
  - 0-3                       4-9                       10-20                       21+
4. Approximate number of inservice training clock **hours** or continuing education in inclusive practices:
  - 0                       1-6                       7- 12                       13+
5. Approximate number of special education college **credits** in your formal training:
  - 0                       1-6                       7-12                       13+
6. Most of your special education training has occurred within the last \_\_\_\_ years:
  - 1-5                       6-10                       11-20                       21+
- 7) What would you say is your level of understanding of special education law?
  - Minimal                       Moderate                       Expert
- 8) What would you say your level of understanding of special education terminology, such as least restrictive environment, learning disabled and emotionally disturbed?
  - Minimal                       Moderate                       Expert
- 9) Identify the special education programs with which you are familiar:
  - Content mastery                       Behavior unit                       Resource room
  - Life skills                       PPCD                       Co-teaching
  - Other inclusion                       Other pull-out/self-contained



### SECTION III- Attitudes Toward Inclusion of Students with Special Needs

Please mark your response to each item using the following scale:

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. Only teachers with extensive special education experience can be expected to deal with students with disabilities in a school setting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Classrooms with both students with disabilities and without disabilities enhance the learning experiences of students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Students with severe/profound disabilities are too impaired to benefit from the activities of a regular school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. An effective general educator can help a student with a disability to succeed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. In general, students with disabilities should be placed in special classes/schools specifically designed for them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Students without disabilities can profit from contact with students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. General education should be modified to meet the needs of all students including students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is unfair to ask/expect general education teachers to accept students with disabilities into their classrooms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. No discretionary financial resources should be allocated for the integration of students with disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. It should be policy and/or law that students with disabilities are integrated into general educational programs and activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SECTION IV- Most Appropriate Placements for Students with Disabilities

Although individual characteristics would need to be considered, please mark the placement that, in general, **you believe** is most appropriate for students with the following disabilities. **Please mark only one per section:**

### Specific Learning Disability

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Mental Retardation

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Serious Emotional Disturbance

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Blindness/visual impairment

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Deafness/hearing impairment

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Speech and language impairment

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Other health impairment

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Physical Disability

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Multihandicap

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

### Autism/pervasive developmental disorder

- Special education services outside regular school
- Special class for most or all of the school day
- Part-time special education class
- Regular classroom instruction and resource room
- Regular classroom instruction for most of day
- Full-time regular education with support

*Thank you for taking the time to answer all of the questions on this survey. We appreciate your assistance with this study!*

## APPENDIX B

## Permission Letter

Jan. 12, 2006

Roxanna,

I would be happy to give you permission to use the PIS survey in your own research.

Best Wishes,

Cindy Praisner

Roxanna Ramirez wrote:

Cindy,

My name is Roxanna Ramirez and I had e-mailed you in 2003 about carrying out a similar study on inclusion here in Texas. I wanted to touch base with you and again get your permission to use the survey that you developed for my dissertation. You had given my permission back then but I wanted to make sure once more. I would of course cite you when appropriate. If you have any questions please feel free to ask.

Thank you so much,

Roxanna

## APPENDIX C

## Consent Letter

May 4, 2006

Dear Elementary Principal:

Since the passage of Public Law 94-142 in 1975, there has been a steady rise in the number of students with disabilities served within the mainstream of general education. The current movement toward inclusion emphasizes this participation in general education classes for even the most disabled students. As a result, principals have been asked to take on an increasingly more active and direct role in the educational programming of students with disabilities.

As a doctoral candidate at Baylor University, I have designed a study to investigate the relationship between principals and inclusion. Specifically, it intends to ascertain Texas elementary principals' attitudes toward inclusion, their beliefs about most appropriate placements, and the type and length of their training and experiences with inclusion. You have been randomly selected to participate in the study and we would greatly appreciate your assistance.

Attached here is a link that will connect you to a website where the survey titled *Principals and Inclusion* is located. To complete the questionnaire please click on the following link:

[http://www1.baylor.edu/surveys/principal\\_inclusion/principals\\_inclusion.htm](http://www1.baylor.edu/surveys/principal_inclusion/principals_inclusion.htm)

Please take fifteen to twenty minutes to complete the survey and reply via e-mail to sender by *May 20, 2006*. If you are a principal for more than one building, complete the survey with information for only one school. If you have any questions regarding this study you may contact Roxanna Ramirez at 210-421-0200 or via e-mail [Roxanna\\_Ramirez@baylor.edu](mailto:Roxanna_Ramirez@baylor.edu) or Dr. Weldon Beckner, Faculty Advisor, Baylor University, at 254-710-6112 or via e-mail [Weldon\\_Beckner@baylor.edu](mailto:Weldon_Beckner@baylor.edu).

The information you provide will remain confidential and the reporting of the results will be by group analysis only. The surveys have serial numbers for computing purposes only. Although you may not receive any direct benefit from participating in this study, your participation may help to increase the knowledge base in the area of inclusion that might benefit others in the future. Participation is voluntary and refusal to participate will involve no loss or penalty of benefits, and you may choose to discontinue participation in this study at any time without penalty. Upon request, I will be glad to e-mail a summary of this research study.

Your participation in this study would be greatly appreciated.

Sincerely,

Roxanna Ramirez  
Ed.D. Candidate  
Baylor University  
Phone number: 210-421-0200

## REFERENCES

- Allington, R. L., & McGill-Franzwen, A. (1990). Comprehension and coherence: Neglected elements of literacy instruction in remedial and resource room Services. *Journal of Reading, Writing, and Learning Disabilities International*, 149-182.
- Anderson, R. J., & Antonak, R. F. (1992). The influence of attitudes and contact on reactions to persons with physical and speech disabilities. *Rehabilitation Counseling Bulletin*, 34, 240-247.
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs the ordinary school in one local education authority. *Educational Psychology*, 20(2), 191-211.
- Baker, E. T., Wang, M.C., and Wahlberg, H. J. (1994-1995). The effects of inclusion on learning. *Educational Leadership*, 33-35.
- Barnett, C., & Monda-Amaya, L. E. (1998, May/June). Principal's knowledge of and attitudes toward inclusion. *Remedial & Special Education*, 19(3), 181-193.
- Beattie, J. R., Anderson, R. J., Antonak, R. F. (1997). Modifying attitudes of prospective educators toward students with disabilities and their integration into regular classrooms. *The Journal of Psychology*, 131(3), 245-258.
- Blackman, H. P. (1992). Surmounting the disability of isolation. *The School Administrator*, 49(2), 28-29.
- Boyd, K. D. (2001). A case study: Climate, best practices, administrative support, and staff attitudes in a middle school inclusion program. (Doctoral dissertation, University of Central Florida, 2001). *UMI Proquest Digital Dissertation*, DAI-A 62/01, p. 126.
- Brotherson, M. J. Sheriff, G., & Milburn, P. (2001, Spring). Elementary school principals and their needs and issues for inclusive early childhood programs. *Topics in Early Childhood Special Education*, 21(1), 31-45.
- Burstein, N., Sears, S., Wilcoxon, A., Cabello, B., & Spagna, M. (2004, March/April). Moving toward inclusive practices. *Remedial and Special Education*, 25(2), 104-116.
- Cannon, G. S., Idol, L., & West, J. F. (1992). Educating students with mild handicaps in general classrooms. *Journal of Learning Disabilities*, 25, 300-317.

- Cardinal, D. N. (1991). How to stay current with special education issues. *NASSP Bulletin*, 75, 71-77.
- Connors-Gilmore, M. (1997). Teacher perspectives on inclusion in an urban district: A formative evaluation. (Doctoral Dissertation, University of Pittsburgh, 1997).
- Cook, B., Semmel, M. I., & Gerber, M. M. (1999, July/August). Attitudes of principals and special education teachers toward the inclusion of students with mild disabilities: Critical differences of opinion. *Remedial and Special Education*, 20(4), 199-207.
- Cornett, J. D., & Beckner, W. (1975). Introductory statistics for the behavioral sciences. Charles E. Merrill Publisher.
- Daane, C. J., Beirne-Smith, M., & Latham, D. (2000). Administrators' and teachers' perceptions of the collaboration efforts of inclusion in the elementary grades. *Education*, 121(2), 2.
- Diebold, M. H., & VonEschenbach, J. F. (1991). Teacher educator predictions of regular class teacher perceptions of mainstreaming. *Teacher Education and Special Education*, 14, 221-227.
- Dominelli, A. (2003). Web surveys-benefits and considerations. *Clinical Research and Regulatory Affairs*, 20(4), 409-416.
- Doyle, L. H. (2001). Leadership and inclusion: Reculturing for reform. Paper presented at the annual meeting of the American Educational Research Association, Seattle, Washington, April 10-14, 2001.
- Education for All Handicapped Children Act of 1975*. (1975). (PL 94-142).
- Elliott, B., & Riddle, M. (1992). *An effective interface between regular and special education: A synopsis of issues and successful practices*. Council of Administrators of Special Education, Inc., Indiana University, Bloomington.
- Fuchs, D., & Fuchs, L. S. (1994, February). Inclusive schools movement and the radicalization of special education reform. *Council for Exceptional Children*, 60(4), 294.
- Fuchs, D., & Fuchs, L. S. (1995, January). Sometimes separate is better. *Educational Leadership*.
- Geter, A. G. (1998). Secondary and elementary school principals' attitudes toward inclusion of special education students. (Doctoral Dissertation, South Carolina State University, 1998). *UMI Proquest Digital Dissertation*, DAI-A 62/08.
- Goor, M. B., Schwenn, J. O., & Boyer, L. (1997, January). Preparing principals for leadership in special education. *Intervention in School and Clinic*, 32, 133-41.

- Granello, D. H., & Wheaton, J. E. (2004, Fall). Online data collection: Strategies for research. *Journal of Counseling and Development, 82*, 387-393.
- Griffith, J. (1999, April). The school leadership/school climate relation: Identification of school configurations associated with change in principals. *Educational Administration Quarterly, 35*(2), 267-291.
- Guess, D., & Thompson, B. (1989). Preparation of personnel to educate students with severe and multiple disabilities: A time for change?" *Critical Issues in the Lives of People with Severe Disabilities*.
- Heshusius, L. (1988, September). The arts, science, and the study of exceptionality. *Exceptional Children, 60*-65.
- Inzano, F. (1999). The attitudes of public elementary school principals toward inclusion education and educational strategies related to its practice. (Doctoral Dissertation, Seton Hall University, 1999) *UMI Proquest Digital Dissertation, DAI-A 60*/11.
- Jackson, L., Ryndak, D. L., & Billingsley, F. (2000). Useful practices in inclusion education: A preliminary view of what experts in moderate to severe disabilities are saying. *Journal of the Association for Persons with Severe Handicaps, 25*(3), 129-141.
- Jenkins, J. R., & Pious, C. G. (1991, May). Full inclusion and the REI: A reply to Thousand and Villa. *The Council for Exceptional Children, 57*(6), 562-3.
- Jordan, A., & Stanovich, P. (2001). Patterns of teacher-student interaction in inclusive elementary classrooms and correlates with student self-concept. *International Journal of Disability, 48*(1), 33-52.
- Kauffman, J. M., Gerber, M. M., & Semmel, M. I. (1988, January). Arguable assumptions underlying the regular education initiative. *Journal of Learning Disabilities, 21*(1).
- Kavale, K. A., & Glass, G. V. (1982). The efficacy of special education interventions and practices: A compendium of meta-analysis findings. *Focus on Exceptional Children, 1*-14.
- Kennedy, C. H., Shikla, S., & Fryxell, D. (1997). Comparing the effects of educational placement on the social relationships of intermediate school students with severe disabilities. *Exceptional Children, 64*(1), 31-48.
- Keyes, M. W., Hanley-Maxwell, C., & Capper, C. (1999, April). "Spirituality? It's the core of my leadership": Empowering leadership in an inclusive elementary school *Educational Administration Quarterly, 35*(2), 203-237.

- Kluth, P., Villa, R. A., & Thousand, J. S. (December 2001/January 2002). "Our school doesn't offer inclusion" and other legal blunders. *Educational Leadership*, 59(4), 24-27.
- Levy, S. N. (1999). Attitudes of elementary school principals toward restructuring for inclusion. (Doctoral Dissertation, Walden University, 1999). *UMI Proquest Digital Dissertation*, DAI-A 60/08.
- Lilly, S. (1988). The regular education initiative: A force for change in general and special education. *Education and Training in Mental Retardation*, 23, 253-260.
- Lipsky, D. K. (2003, March). The coexistence of high standards and inclusion. Whole school approaches can satisfy requirements of IDEA and "No Child" Act. *The School Administrator web addition*.
- Lipsky, D. K., & Gartner, A. (1996, Winter). Inclusion, school restructuring, and the remaking of American society. *Harvard Educational Review*, 66(4).
- Livingston, M. (2001). Attitudes of rural school principals toward inclusive practices and placements for students with severe disabilities. *Journal of Research for Educational Leaders*.
- Mayrowetz, D., & Weinstein, C. S. (1999, August). Sources of leadership for inclusive education: Creating schools for all children. *Educational Administration Quarterly*, 35(3), 423-449.
- McLeskey, J., & Waldron, N. L. (2002, September). School change and inclusive schools: Lessons learned from practices. *Phi Delta Kappan*, 84(1), 65-77.
- McLeskey, J., Henry, D., & Hodges, D. (1998). Inclusion: Where is it happening? *Exceptional Children*, 31(1), 4-9.
- Murray-Seegert, C. (1989). *Nasty girls, thugs, and humans like us: Social relations between severely disabled and nondisabled students in high school*. Baltimore: Paul H. Brookes.
- O'Shea, D. J., & O'Shea, L. J. (1998, September/October). Learning to include. *Teaching Exceptional Children*, 31(1), 40-8.
- Patterson, J. A., Marshall, C., & Bowling, D. (2000, February). Are principals prepared to manage special education dilemmas? *NASSP Bulletin*, 84(613), 9-20.
- Peck, C. A., Carlson, P., & Helmstetter, E. (1992). Parent and teacher perceptions of outcomes for typically developing children enrolled in integrated early childhood programs: A statewide survey. *Journal of Early Intervention*, 53-63.
- Pinnell, G. S. (1991). *Restructuring beginning reading with the reading recovery approach*. Bloomington: Phi Delta Kappa.



- Praisner, C. (2000). Attitudes of elementary principals toward the inclusion of students with disabilities. *Council for Exceptional Children, 69*(2), 135-145.
- Praisner, C. (2000) Attitudes of elementary school principals toward the inclusion of students with disabilities in general education classes. (Doctoral dissertation, Lehigh University, 2000). *UMI Proquest Digital Dissertation, DAI-A 61/07*, p. 2661.
- Roach, V. (1995, December). Supporting inclusion. Beyond the rhetoric. *Phi Delta Kappan*.
- Sax, L., Gilmartin, S. K., & Bryant, A.N. (2003, August). Assessing response rates and nonresponses bias in web and paper surveys. *Research in Higher Education, 44*(4), 409-432.
- Scruggs, T. E., & Mastropieri. (1996). Teacher perceptions of mainstreaming/inclusion. *Exceptional Children, 63*(1), 59-74.
- Sharpe, W. (2001). Special education inclusion: Making it work *Education World*, Curriculum Article.
- Silver, L. B. (1989). The assessment of learning disabilities: Preschool through adulthood. Boston: Little Brown.
- Stainback, W., & Stainback, S. (1990). *Support networks for inclusive schooling: Interdependent integrated education*. Baltimore: Paul H. Brookes.
- Stoler, R. D. (1992). Perceptions of regular education teachers toward inclusion of all handicapped students in their classrooms. *The Clearing House, 66*(1), 60-62.
- Strike, K. A. (1999, February). Can schools be communities? The tension between shared values and inclusion. *Educational Administration Quarterly, 35*(1), 46-70.
- Strike, K. A. (1999, February). Can schools be communities? The tension between shared values and inclusion. *Educational Administration Quarterly, 35*(1), 46-70.
- Stump, C. S. (2000, Winter). Plan for a successful inclusion program: Meeting the needs of students with mild/moderate disabilities. *NAESP, 1-3, 6*.
- “The Inclusive School.” (December 1994/January 1995). *Educational Leadership, 4*.
- “The integration of students with special needs into regular classrooms: Policies and practices that work.” (1992) Washington, DC: National Education Association.
- Umbach, P. D. (2004, Spring). Web surveys: Best practices. *New Directions for Institutional Research, 121*, 23- 38.

- Van Reusen, A. K., Shoho, A. R., & Barker, K. S. (2000). High school teacher attitudes toward inclusion. *High School Journal*, 84(2), 7-20.
- Wang, M. C., Reynolds, M. C., & Walberg, H. J. (1988). Serving students at the margins. *Educational Leadership*, 12-17.
- Weiner, R. (1985). *Impact on the schools*. Capitol Publications.
- “Winners all: A call for inclusive schools.” (1992). Alexandria, VA: National Association of State Boards of Education.
- Yell, M. L., & Drasgow, E. (1999, Spring). A legal analysis of inclusion. *Preventing School Failure*, 43(3), 118-123
- York, J., et al. (1993). *Creating inclusive school communities*. Minneapolis: University of Minnesota.