ABSTRACT

Name: Annie P. Hurt

Department: Teaching and Learning

Title: The Impact of Professional Development on General-Education Teachers'
Attitudes Toward the Inclusion of Students with Disabilities in the Inclusive
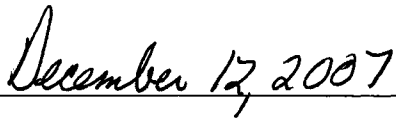Environment

Major: Curriculum and Instruction

Degree: Doctor of Education

Approved by:

Date:

Nina Dorsch *(signature)*

Dissertation Director

December 12, 2007 *(handwritten)*

NORTHERN ILLINOIS UNIVERSITY

ABSTRACT

The purpose of the study was (1) to identify the attitudes and concerns of general-education teachers responsible for the education of students with disabilities, and (2) to examine the extent to which professional development training influences general-education teachers' attitudes toward inclusion. Quantitative data were collected using a pre/post-test consisting of 16 closed-ended test items while qualitative data were collected using open-ended survey questions and five open-ended semistructured interview questions that addressed the research questions investigated in this study.

A mixed-method design was used to study 67 kindergarten through fifth-grade general-education teachers in three grade schools (K-1, 2-3, and 4-5) from a small suburban school district to assess their opinions and actions in their classroom settings regarding inclusion. Pretest data were analyzed using descriptive statistics (means and standard deviation) to assess teachers' attitudes toward inclusion and best teaching practices prior to training. A posttest was conducted following the training to determine to what extent professional development training influences teachers' attitudes and concerns. A paired *t*-test was used to compare the means of the two tests, and to test whether the differences between the means were statistically significant. The effect size was also calculated for each case school to summarize the

overall effect of professional development experience. Following the posttest, 10 general-education teachers were interviewed for the purpose of determining their attitudes toward inclusion and to determine how their attitudes changed towards students with disabilities after training. The results of this study indicated that professional development had a moderate effect on teachers' attitudes and that there is a need to provide ongoing professional development strategies to address the needs of general-education teachers, particularly pertaining to the integration of students with significant academic disabilities, or behavioral needs.

NORTHERN ILLINOIS UNIVERSITY

THE IMPACT OF PROFESSIONAL DEVELOPMENT ON GENERAL-

EDUCATION TEACHERS' ATTITUDES TOWARD THE INCLUSION OF

STUDENTS WITH DISABILITIES IN THE INCLUSIVE ENVIRONMENT

A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

DOCTOR OF EDUCATION

DEPARTMENT OF TEACHING AND LEANING

BY

ANNIE P. HURT

©2007 Annie P. Hurt

DEKALB, ILLINOIS

DECEMBER 2007

UMI Number: 3301632

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI®

Certification: In accordance with departmental and Graduate School policies,

this dissertation is accepted in partial fulfillment of degree

requirements.

Nina Dorsch

Dissertation Director

December 12, 2007

Date

ACKNOWLEDGMENTS

"If you believe it, you can achieve it."

I would like to acknowledge and thank all members of my dissertation committee, Dr. Nina Dorsch, Dr. Joyce Lieberman, and Dr. Thomas Smith, for all your support, guidance, and advice. I would like to express my gratitude for your encouragement, patience, and confidence.

In addition, I would also like to acknowledge my appreciation for the support and guidance provided by Dr. Douglas C. Hamilton, District Superintendent, Dr. Vinni Hall, Dr. Flora Luseno, Dr. Sheryl Campbell, and Dr. Dorothy Williams for your support, encouragement, and willingness to help.

Last but not least, I thank God for my husband, Walter L. Hurt, and my children, Charissa and Sean, for encouraging me to follow my dreams and goals. You were there every step of the way. This achievement is for you too.

DEDICATION

This dissertation is dedicated to my mother, Mrs. Catherine Humphreys. I could not have been what I am today without your support, love, and guidance. A dedication goes to Mrs. Mattie Woodard and Mrs. Ollie Spearman, my sisters, role models, and friends. You opened your doors when I needed you the most. Your faith and prayers inspired me to reach for the stars.

A special dedication also goes to my late father, Mr. Richard Humphreys. I could not have asked for a better father. You always encouraged me to be the best I could be. I only wish you were here to share in this precious moment with me. I miss you. You would have been proud. Rest in Peace.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

CHAPTER 1

INTRODUCTION TO THE STUDY

The current educational trend towards inclusion for students with disabilities

has been at the forefront of attention nationwide. The term "inclusion" is very

difficult to define because many interpretations exist in literature (Holmes, 1999). But

generally, inclusion is defined as "the full time placement of children with mild,

moderate, or severe disabilities in regular classrooms" (Stub & Peck, 1994/1995, p.

36). The National Association of School Psychologists builds upon this general

statement:

> Inclusive programs are those in which students, regardless of the severity of
> their "disability," receive appropriate specialized instruction and related
> services within an age-appropriate general-education classroom in the school
> they would attend if they did not have a disability. (Holmes, 1999, p. 12)

Before the date of the enactment of the Education for All Handicapped

Children Act of 1975 (Public Law 94-142), the special educational needs of children

with disabilities were not being met (Yell, 1998). More than one-half of the children

with disabilities in the United States did not receive appropriate educational services,

and it was estimated that 1 million of the children with disabilities were excluded

entirely from the public school system and did not attend school with their peers (U. S.

Department of Education, 1997).

Over the years, "the demand to educate students with disabilities in inclusive educational settings continues to grow" (Buell, Hallum, Gamely-McCormick, & Sheer, 1999, p. 143). The enactment and implementation of the Education for All Handicapped Children Act of 1975 ensured that children with disabilities would have full access to a free, appropriate public education (Individuals with Disabilities Education Act [IDEA] Law and Resources, 1997).

Over 20 years of research has demonstrated that the education of children with disabilities in the Least Restrictive Environment (LRE) has been made more effective by having high expectations for such children in the general education environment to the maximum extent possible (Fuchs & Fuchs, 2006). Today, "inclusive education has emerged as a schoolwide improvement approach for educating students with diverse abilities in general education classrooms" (Salisbury & McGregor, 2000, p. 259).

However, many barriers (cultural, social, organizational, and psychological) to inclusion (Buell et al., 1999) still exist in current educational service delivery models. In the United States, this dilemma has been reemphasized in the comprehensive system of personnel development sections of the 1997 amendments to the IDEA (PL 105-17), which mandates that states develop personnel systems that prepare all teachers to work with individuals with disabilities (IDEA, 1997). Therefore, it is imperative to design a professional development training model with inclusion in mind to meet the needs of general-educators by providing the necessary knowledge and skills needed to accommodate students with disabilities placed in the general-education environment.

The demand to educate students with disabilities in inclusive environments continues to grow, but there is a great need for knowledge on inclusion of students with special needs. Consequently, general-education teachers feel that they are not equipped to meet the needs of such students (Avramidis, Bayliss, & Burden, 2000; Monahan, 1996). The integration of children with special needs in the general-education classroom has been the key for the last 25 years and data show the importance of professional development in the formation of positive attitudes towards inclusion (Avramidis et al., 2000). Teachers with university-based professional development appear to hold more positive attitudes and are more confident in meeting the IEP requirements of students with disabilities. It is generally agreed that the school personnel who will be most responsible for the success of inclusion will be receptive to the principles and demands. Professional attitudes may well act to facilitate or constrain the implementation of policies for the success of inclusion, and must surely depend upon the cooperation and commitment of those most directly involved. The results of this study will help us to better understand teachers' attitudes towards inclusion and will provide ways to address issues relating to inclusion.

Historical Perspectives

Prior to PL 92-142, most students with learning disabilities received all of their education within general-education classroom settings. Other students with disabilities were identified by other special-education categories and received services in specialized settings (Vaughn & Klinjer, 1998). The passage of special education

laws (Public Law 94-142, Part B of the Education of the Handicapped Act [1975];

Public Law 101- 476, IDEA [1990] and Public Law 105-17, Amendments to the IDEA

[1997], and the No Child Left Behind Act [NCLB]) have led to the push for full

inclusion of all special-education students into the regular education classroom.

Public Law 94-142 (The Education of All Handicapped Children Act of 1975)

Federal legislation, known as Public Law 94-142 (The Education of All

Handicapped Children Act of 1975) became the ruling law for governing special

education in the mid-1970s. The primary provisions of the law required that certain

stipulations be met by state, local, and intermediate educational agencies in special

education programming if they were to receive federal education reimbursement.

Educational stipulations of Public Law 92-142 were that (education) schooling

must take place in the least restrictive environment (LRE), meaning children with

disabilities should be educated with their peers to the greatest extent possible where

they could attain educational benefit. Public school general-education teachers

became directly responsible for educating many students with disabilities who were

considered capable of being educated in the mainstream.

The IDEA

Since Public Law 94-142, the Education for All Handicapped Children Act,
was passed in 1975, and then reauthorized and renamed The Individuals with
Disabilities Education Act in 1990, the doors of public and general education
have been opened to students with special needs. (Snyder, 1999, p. 193)

The IDEA of 1990 reinforced the mandate that students with disabilities be educated with their peers without disabilities to the maximum extent appropriate. To ensure that such children are educated in regular education classrooms, the law provides federal money to assist state and local agencies in educating children with disabilities (Renaissance Group, 2003). To qualify for federal assistance, a state must submit a detailed plan for federal approval demonstrating that it has in effect a policy that assures all children with disabilities have the right to a "free appropriate public education." The policy must address the unique needs of each child by means of an "individualized educational program" (IEP). The IEP, with participation by the child's parents or guardian, must be prepared and reviewed annually by school officials. The IDEA also requires that a participating state adopts and implements specified administrative procedures by which the child's parent or guardian may challenge any evaluation changes.

Under the IDEA, each state is required to develop and implement a Comprehensive System of Personnel Development plan that ensures that an adequate supply of special education and related services personnel are available, and that these persons receive adequate and appropriate preparation and training. The most recent reauthorization of IDEA in 2004 included provision for Response to Intervention (RtI) approaches to the identification of and provision of services to students with disabilities in the general-education classroom.

> Different RTI versions have two to four tiers of instruction. The nature of the academic intervention changes at each tier, becoming more intensive as a student moves across the tiers. The first tier of intervention is the general-education classroom. . . . At each problem-solving level, the process is meant

to be the same: Practitioners determine the magnitude of the problem, analyze its causes, design a goal-directed intervention, conduct it as planned, monitor student progress, modify the intervention as needed (i.e., based on student responsiveness), and evaluate its effectiveness and plot future actions. (Fuchs & Fuchs, 2006, pp. 94-95)

This approach calls for intervention assistance teams comprised of general- and special-education teachers to work together to provide appropriate instructional interventions in the general-education classroom. Although the IDEA was the first law that made a significant push toward inclusion, the NCLB Act made it even more imperative that schools adopt and implement inclusive programs.

NCLB

The NCLB (2001) represents President Bush's education reform plan and contains the most sweeping changes to the Elementary and Secondary Education Act (ESEA) since it was first enacted in 1965. According to the National Association of Protection and Advocacy Systems, Inc. (2004), NCLB includes students with disabilities in the accountability system which requires standardized testing. Accommodations and alternate tests can be used as appropriate for students with disabilities, but a district cannot exclude students with disabilities from testing to avoid negative effects on accountability reports.

The inclusive movement defines the distinction between general- and special-education teachers. Due to recent legislation, the role of special education in schools has evolved from a classroom where customized education plans take place, to a set of services focused more on including the child with an IEP in the regular classroom. In

order for inclusion to work, the school staff and the entire student body, as well as experts in the field of special education, must be involved and work together, in concert, making the regular classroom setting one that incorporates and meets the needs of all students (Cawley, 2000).

In summary, as the inclusion reform movement continues to gain momentum, more students with disabilities will be educated in general-education classrooms. Planning and implementing a full inclusion program will require administrators to support teachers and provide the necessary training, appropriate resources and time that are critical to the success of all students in the inclusive environment. The use of effective inclusive practices will enhance the effectiveness of teachers in inclusive classrooms (Tanner, Linscott, & Galis, 1996).

Theoretical Perspectives on Full Inclusion

The purpose of this study is to examine general-education teachers' attitudes about inclusion and the extent to which professional development training influences their attitudes and concerns about inclusion. Teachers' attitudes have been found to have a serious impact on the effectiveness of inclusion. According to Brown (1997), teachers' attitudes are the single most important factor in determining success or failure of inclusion. While the majority of general-education teachers may agree with the general philosophy of inclusion, their attitudes toward including children with disabilities in their classrooms are frequently ambivalent or negative (Smith & Smith, 2001). Numerous studies identified the lack of training, adequate support and

resources as factors affecting teachers' attitudes (Burstein, Sears, Cabello, Spagna, &

Wilcoxen, 2004; McLeskey & Waldron, 2002; Schumm & Vaughn, 1992). One

conclusion emerging from the literature is that teachers feel that they are not equipped

to meet the needs of students with disabilities in the educational environment (Smith

& Smith, 2001).

Conceptual Framework

The conceptual framework for this study includes three major perspectives

designed to address issues and concerns relative to general-education teachers'

attitudes towards inclusion. For the purpose of this study, the researcher utilized Ely's

(1999) environmental conditions of change theory and Zaltman and Duncan's (1977)

resistance theory as an overall understanding of how change works in the inclusive

environment. Moreover, the work of Knowles (1984), also discussed in the literature

review in Chapter 2, was utilized to respectfully address teachers' concerns in the area

of training, support, and adequate resources. Below is a brief overview of each

component of the theoretical framework.

Ely's Environmental Conditions of Change Model

The eight conditions required for change identified by Ely (1999) are discussed

in this section:

(1) Dissatisfaction with the status quo. This is the most obvious condition

(i.e. something is not right; things can be done better). An implication of this

condition is that for change to be voluntarily embraced, participants must perceive the status quo to be even less comfortable;

(2)   Knowledge and skills exist. Ely contends that the people who will ultimately implement any innovation must possess sufficient knowledge and skills required to do the job;

(3)   Resources are available to make implementation work;

(4)   Time is available and needed to acquire knowledge and skills;

(5)   Rewards or incentives exist for participants for performance;

(6)   Leaders must be able to communicate explicitly that general participation is expected;

(7)   There must be commitment by those who are involved and continued support for implementation; and

(8)   Leadership is evident; for example, leaders must be present and clearly visible to all participants from the beginning to the end. (Ely, 1999)

Zaltman and Duncan's Resistance to Change Model

To provide an understanding of the concepts of resistance to change, Zaltman and Duncan (1977) enumerated several sources of resistance under the headings of cultural, social, organizational, and psychological barriers to change. These sources of resistance are quite interrelated and they may vary from situation to situation and from innovation to innovation within any given contextual environment. Some examples of the cultural barriers include cultural values and beliefs, cultural ethnocentrism, and

saving face. Social barriers represent characteristics of how individuals react as members of a social system (Ellsworth, 2000). In their book *Strategies for Planned Change,* Zaltman and Duncan (1977) discuss five examples of resistance: group solidarity; rejection of outsiders; conformity to norms; conflict; and group introspection.

The five organizational barriers to change are organizational threat to power and influence, organizational structure, behavior of top administrators, climate for change in the organization, and technological barriers. These barriers to change arise when characteristics of the client system conflict with the demands of change (Zaltman & Duncan, 1997). Psychological barriers exist solely within the individual, and may be the most difficult to detect (Ellsworth, 2000). The authors identify four barriers discussed in detail in the literature in Chapter 2: perception, homeostasis, conformity and commitment, and personal factors.

Knowles's Adult Learning Model

Knowles's model of andragogy (teaching adult learners) was premised on at least five crucial assumptions about the characteristics of adult learners that are different from the assumptions about child learners on which traditional pedagogy is premised.

1. *Self-concept*: The learner is self-directing.

2. *Experience:* As a person matures he accumulates a growing reservoir of experience that becomes an increasing resource for learning.

3. *Readiness to learn*: As a person matures his readiness to learn becomes oriented increasingly to the developmental tasks of his social roles.

4. *Orientation to learning:* As a person matures his time perspective changes and his/her learning shifts from one of subject-centeredness to one of problem-cenetredness;

5. *Motivation to learn*: As a person matures the motivation to learn is internal (Knowles, 1984).

Adult learning should produce at least the following outcomes:

•   Acquire a mature understanding of themselves and necessary skills to achieve the potentials of their personalities. It should be the goal of education to give each individual those skills necessary for him/her to make full use of his/her capacities.

•   Develop an attitude of acceptance, love, and respect toward others and a dynamic attitude toward life. This attitude will go beyond acceptance, love, and respect to empathy and the sincere desire to help others.

•   Understand the essential values in the capital of human experience and their society. Participation in decision-making affects the entire social order. Adults should learn to react to the causes, not the symptoms, of behavior. Solutions to problems lie in their causes, not in their symptoms (Knowles, 1984).

Summary

The works of Ely (1999), Zaltman and Duncan (1977), and Knowles (1984) were used to address general-education teachers' attitudes, issues and concerns relative to inclusion. An alignment of Ely's Environmental Conditions of Change Model (1999) with Zaltman and Duncan's Resistance to Change Model (1977) is discussed in Chapter 2 to address current resistance to the inclusive process in the environment.

Historically, the needs of children with disabilities were not met before the enactment of the Education for All Handicapped Children Act of 1975 (Public Law 94-142). Children with disabilities were excluded from the public school system and were not educated with their peers without disabilities to the maximum extent appropriate. In spite of the IDEA law, teachers felt that they were not equipped to meet the needs of students in the general-education environment. Several researchers (Avramidis & et al., 2000; Brown, 1997; Cawley, 2000; Scruggs & Mastropieri, 1996) confirmed their fears and found that several factors influenced teachers' attitudes toward inclusion. They have studied and documented several issues that impact inclusion implementation: lack of training, support and resources. As mandated by the law, local education agencies need to maintain a continuum of services in order to be properly prepared to address the individual needs of all children with disabilities. Therefore, general-education teachers need to be prepared for change by adapting instructional strategies and modifying the curriculum to meet the needs of all children in the instructional environment. For inclusion to work, intense ongoing professional-

development needs to be provided incorporating appropriate theoretical frameworks (Ely, 1999; Knowles, 1984), for the purpose of addressing resistance to change in terms of training, support, and resources in the inclusive setting. In such a defined environment, an informed understanding of environmental implementation conditions (Ely, 1999; Zaltman & Duncan, 1977), adult learning theories (Knowles, 1984) and professional development training strategies are essential preventive tools that will significantly improve teachers' attitudes towards inclusion in today's general-educational setting. The application of Ely's Change Model (1999) and Knowles's (1984) adult learning theories associated with professional-development models of inclusion (collaborative and consultation, team-teaching, coteaching) ultimately act as solution strategies that will ultimately support change toward an inclusive environment for all children.

<div style="text-align:center">Problem Statement</div>

Since the mid-1970s, there has been a strong national movement to include all children in general-education classrooms within their public schools. This school reform movement has gained much support. For years, researchers and administrators have acknowledged the challenges and concerns teachers have, and still these pressing issues--such as lack of training and inadequate support--continue to plague our teachers. Teachers may feel challenged, hopeful, and desirous of what can be accomplished. They may also feel frustration, burdened, fear, lack of support, and

inadequate about their ability to teach children with different kinds of problems (Martinez, 2004).

Previous studies in the area of special education pertaining to inclusion clearly suggest that general-education (Martinez, 2004; Smith & Smith, 2001; Vaughn & Klinjner, 1998) and preservice teachers feel inadequately prepared to teach children who have disabilities (Vaughn & Klinjner, 1998). In addition, many general-education teachers feel that they are often unable or unwilling to adapt their teaching to meet the needs of individual students even though adapting instruction is critical to the success of students with learning disabilities who are educated in the general-education environment (Opdal & Wormnaes, 2001; Scruggs & Mastropieri, 1996).

While the majority of general-education teachers may agree with the general philosophy of inclusion, their attitudes toward including children with disabilities in the classroom are frequently ambivalent or negative and uncertain (Smith & Smith, 2001). The need to rectify these attitudes is of utmost importance if teachers are to meet the needs of students with disabilities. In order to change teachers' attitudes towards inclusion, there is a need to specifically identify their needs, and then begin to establish methods, solution strategies, and effective staff-development opportunities. In addition, it is imperative that ongoing training is considered to address inadequacies about general classroom teachers' abilities to teach children with different conditions in the areas of physical disabilities, academic modifications of the curriculum, behavioral problems, and social participation.

Purpose

The purpose of the study is to 1) identify the attitudes and concerns of general-education teachers responsible for the education of students with disabilities, and 2) to examine the extent to which professional development training influences general-education teachers' attitudes toward inclusion.

Research Questions

The following key questions will guide this study to address the issues, concerns and challenges teachers face when implementing an inclusion process:

1.   What attitudes and concerns about inclusion do general-education classroom teachers identify?

2.   To what extent does professional development training influence general-education teachers' attitudes and concerns about inclusion?

3.   How did teachers' practices in inclusion change after training that addresses their concerns?

Significance of the Study

The scope of this study is relevant to today's educational environment as the legal requirements governing special education and the mandated trends move toward full inclusion. Legislative actions such as the reauthorization of the IDEA passed in 1997 in the United States have placed new emphasis on inclusion (IDEA Law and Resources, 1997). As a result, general-education teachers are expected to function in

an expanded role in working with students with learning disabilities. Experience and empirical evidence suggest, however, that teachers lack the theoretical and practical understanding and training necessary to implement the inclusionary process (Avramidis et al., 2000). Training general educators to expand their knowledge about various disabilities is critical in ensuring that educational goals of students with all levels of disabilities can be successfully met in the inclusive teaching environment (Lipsky & Gartner, 1997).

In addition, IDEA requires that children with disabilities be educated in regular education classrooms (Renaissance Group, 2003). The requirements have impacted teacher certification requirements and renewal processes. As a result, general-education teachers are held responsible for satisfying these requirements for teacher certification renewal. In practice, there is a need to design continuing professional development activities for general-education teachers aiming at meeting their professional needs as well as academic needs of students with disabilities in the LRE. General-education teachers are in a key position to impact the acceptance of children with learning disabilities, and as inclusion of students identified with learning disabilities in the regular classroom setting becomes a reality within the public school system, it becomes necessary to assess general-education teachers' attitudes toward this concept (Opdal & Wormnaes, 2001; Wilczenski, 1992).

Due to the growing legal and professional mandates regarding the education of students with disabilities, there is a need to design a working model of inclusion professional development incorporating the most effective strategies to address

teachers' issues, professional training, and legal requirements of state and federal governing bodies.

As much progress has been made today to end the segregation of students with disabilities in public schools, there has been an increase in the development of new instructional and service delivery models in special education such as "Universal Design" (Orkwis, 1999) and Response to Intervention (Fuchs & Fuchs, 2006). These models maintain interdisciplinary, collaborative perspectives in their design and implementation. It is expected that students with disabilities remain in general-education classes. All who are interested in or charged with the responsibility of school improvement should examine their organizational structures, environmental conditions, beliefs and values because the structures and conditions facilitate or thwart the school's capacity to meet the needs of all students in general-education environments.

The results of this study can be used by schools and school districts (1) to implement effective inclusion strategies which may improve general-education teachers' attitudes about inclusion; (2) to design and provide professional development programming that may lead to higher student achievement for all children, including students with learning disabilities. In conclusion, there is a need to add to current research in the area of special education relevant to inclusion as related to professional development training.

Delimitations

This study will be conducted with the following delimitations:

1.   The study is delimited to the teachers in the selected elementary public school district, grades one through five.

2.   Only general-education teachers who teach students with disabilities were included in this study.

3.   Teachers' level of education, gender and ethnicity are not considered in this study.

Limitations

The schools selected for this mixed-methods design are geographically limited to three elementary schools located in a suburb located thirty miles south of Chicago, Illinois. Because this study uses a convenience sample of selected elementary schools, it is limited in its ability to generalize findings to other settings. For the purpose of quantitative research, the researcher acknowledges the limitations of the convenience sample and will not generalize the results beyond the small sample used in this study.

Definitions

In order to discuss the concept of inclusion, it is necessary to have a common vocabulary. The following definitions are used in this study.

Full inclusion: "The full time placement of children with mild, moderate, or severe disabilities in regular classrooms" (Stub & Peck, 1995, p. 36). All support

services must be taken to the child in that setting rather than moving the child to the services (Education Resources, 1996).

General education: The educational program generally offered by the local school district to the majority of its students.

Individualized education program (IEP): A written statement for a child with a disability that is developed, reviewed, and revised in a meeting in accordance with the provisions of IDEA (Illinois State Board of Education [ISBE], 2004).

Individuals with Disabilities Education Act (IDEA): Federal legislation that ensures all children with disabilities have available to them a free appropriate public education that includes special education and related services designed to meet their unique needs.

Least restrictive environment: To the maximum extent possible students with disabilities, including students in public and private school, are educated with students who do not have disabilities.

Special-education student: Student for whom an IEP has been implemented.

Specific learning disability: A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia (ISBE, 2004).

Methodology

The purpose of this case study was to examine attitudes of general-education teachers towards students with disabilities and to examine the extent to which targeted professional development influences their attitudes and concerns about inclusion. The mixed-method design presented for this study represented both quantitative and qualitative research techniques: including (a) a survey of teachers' attitudes toward inclusion, and (b) individual semistructured interviews. A combination of the methods provides for an in-depth understanding of the factors that may influence teachers' attitudes about inclusion.

A sample of 67 first- through fifth-grade general-education teachers from a small suburban school district was asked to complete a 16-item pre/post test using the *Attitudes Toward Inclusive Education Scale* (ATIES) developed by Wilczenski (1992). Two statistical analysis approaches were used in this study to answer the questions: descriptive statistics (pretest) and a paired *t*-test (pre/posttest). SPSS software was used to analyze quantitative data, and content analysis approach was used to transcribe and code all transcript recordings. Ten participants also participated in an interview process to determine how their attitudes and practices toward students with disabilities changed after training. The semistructured interviews were tape recorded with permission from each of the 10 participants. The five open-ended questions were coded using the content analysis process to determine common themes and patterns relevant to teachers' attitudes, challenges, feeling, beliefs, training and best practices regarding the inclusion of children with disabilities.

Organization of the Study

This study is organized into five chapters. Chapter 1 presented the introduction to the study followed by the historical and theoretical bases of inclusion, and conceptual framework. In addition, it provided a statement of the problem, purpose of the study, research questions to be answered, and significance of the study. Chapter 2 provides a comprehensive and up-to-date review of the literature relevant to inclusion and teacher attitudes toward inclusion. Sections in this chapter include a discussion of the historical and theoretical perspectives, teachers' attitudes and beliefs toward inclusion, and key elements of the conceptual framework to promote professional training for the purpose of enhancing teachers' attitudes towards inclusion. Chapter 3 outlines the methodology. The sections include purpose of the study, research questions, research design, the sample, instrumentation, and procedures for data collection and analysis. Also included is a section on informed consent and confidentiality followed by limitations. Chapter 4 discusses the findings based on the data collected. Chapter 5 concludes the study by providing a summary of the findings, discussion, conclusions, and recommendations for future research.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

This chapter provides a comprehensive and up-to-date review of the literature

regarding inclusion and teacher attitudes toward inclusion. The review of the

literature is divided into four sections. First, section one gives a brief overview of the

historical perspective of Public Law 94-142 (Education for All Handicapped Children

Act of 1975) through the reauthorization of Public Law 105-17 (IDEA of 1997) and

the Individuals with Disabilities Education Improvement Act (IDEIA) 2004 with its

emphasis on "Universal Design." Theoretical perspectives will be discussed relative

to inclusion. Next, section two presents research in the field of special education with

respect to the attitudes of general-education teachers toward inclusion. The section

also details key empirical research that has been conducted in the area of inclusion

concerning teachers' attitudes about training. The third section gives an overview of

the conceptual framework. Various professional development training models of

inclusion will be highlighted including the strengths, barriers to implementation, and

professional development needs associated with each. In addition, three theoretical

frameworks are presented to facilitate the change of teachers' attitudes and resistance

toward inclusion. Ely's Conditions of Change Model (Ellsworth, 2000; Ely, 1999)

and Zaltman and Duncan's (1977) Resistance to Change Model are used to address current resistance to the inclusive process as reported by general-education teachers. The works of Knowles (1984) is utilized to address teachers' concerns in the area of training, support, and adequate resources. The final section is a summary of key findings in literature in the area of special education relating to teachers' attitudes toward inclusion.

Historical and Theoretical Perspectives

The passage of special education laws (Public Law 94-142, Part B of the Education of All Handicapped Children Act (1975); Public Law 101- 476, IDEA (1990) & Public Law 105-17, Amendments to the IDEA (1997, 2004) has led to the push for full inclusion of all special-education students into the regular education classroom.

Legislative History

Public Law 94-142

Federal legislation known as Public Law 94-142 (The Education of All Handicapped Children Act of 1975) became the ruling law for governing special education. The primary provisions of the law required that certain stipulations be met by state, local and intermediate educational agencies in special education programming if they are to receive federal education reimbursement.

Further educational stipulations of Public Law 92-142 are that schooling must take place in the least restrictive environment (LRE), meaning that children with disabilities should be educated with their peers to the greatest extent possible where they can attain success. Public school teachers became directly responsible for educating many students with disabilities who can benefit by being educated in the mainstream.

Prior to PL 92-142, most students with learning disabilities received all of their education within general-education classroom settings. Other students with disabilities were identified by other special-education categories and received services in specialized settings (Vaughn & Klinjer, 1998).

This law provided federal money to assist state and local agencies in educating children with disabilities. To quality for federal assistance, a state must demonstrate, through a detailed plan submitted for federal approval, that it has in effect a policy that assures all children with disabilities have the right to a "free appropriate public education." The policy must be tailored to the unique needs of the child with learning disabilities by means of an IEP. The IEP must be prepared and reviewed at least annually by school officials with participation by the child's parent or guardian. The Act also required that a participating state provide specified administrative procedures by which the child's parent or guardian may challenge any changes in the evaluation.

IDEA

> Since Public Law 94-142, the Education for All Handicapped Children Act, was passed in 1975, and then reauthorized and renamed The Individual with Disabilities Act in 1990, the doors of public and general education have been opened to students with special needs. (Snyder, 1999, p. 193)

The IDEA was the reauthorization of PL 94-142 (Yell, 1998). The IDEA continued the provision that all children have a right to a free appropriate public education. Yell presents the major principles of IDEA as being: free appropriate public education, least restrictive environment, identification and evaluation, confidentiality of information, procedural safeguards, technology-related assistance, personnel development, and placements in private schools. The IDEA mandates that students with disabilities are educated with their peers without disabilities to the maximum extent appropriate. Under this law, each state is required to develop and implement a Comprehensive System of Personnel Development plan that ensures that an adequate supply of special-education and related services personnel are available, and that these persons receive adequate and appropriate preparation. The 1997 amendments to the IDEA require that children with disabilities be educated in regular education classrooms (Renaissance Group, 2003). In addition to the inclusion requirement of IDEA, transition services and assistive technology became requirements along with related services being expanded to include rehabilitation counseling and social work. Rights were also expanded more fully to include children with autism and traumatic brain injury (Messina & Messina, 2003).

NCLB

The most recent act affecting education for all children is the NCLB Act (US

Department of Education, 2003). According to the National Association of Protection

and Advocacy Systems, Inc. (2004), NCLB includes students with disabilities in the

accountability system which requires standardized testing. These students represent a

group that is in need of attention. Accommodations and alternate tests can be used as

appropriate for students with disabilities, but a district cannot exclude students with

disabilities from testing to avoid negative effects on accountability reports.

IDEA was the first law that made a significant push toward inclusion, and

NCLB has made it even more imperative that the schools adopt and implement

inclusive programs. The new law contains the most sweeping changes to the

Elementary and Secondary Education Act (ESEA) since it was enacted in 1965.

NCLB changes the federal government's role in education by asking America's

schools to describe their success in terms of what each individual student

accomplishes.

Today, there are a number of legal requirements governing special education

and the mandated trends are moving toward full inclusion (Renaissance Group, 2003).

The federal 1997 IDEA amendments make it clear that schools have to educate

children with disabilities in general-education classrooms. The inclusive movement

demands that attention be directed toward ensuring general-education teachers have

the expertise needed to work with students with disabilities in the regular classroom

(Bull et al., 2000).

Due to recent legislation, the role of special education in schools has evolved from a classroom where customized education plans take place to a service focused more on including the child with an IEP in the regular classroom. In order for inclusion to work, the school staff and the entire student body, as well as experts in the field of special education, must be involved and work together, in concert, to make the regular classroom setting one that incorporates and meets the needs of all students (Cawley, 2000). Because of the provisions of IDEA that have caused education to move toward inclusion, it is important that general- and special-education teachers determine strategies and implement procedures that will help special-education students to progress when they are educated in general-education classrooms (Hargrove, 2000).

IDEIA of 2004

The reauthorized IDEIA was signed into law on Dec. 3, 2004, by President George W. Bush. The provisions of the act became effective on July 1, 2005, with the exception of some of the elements pertaining to the definition of a "highly qualified teacher" that took effect upon the signing of the act (US Department of Education, 2003). According to Nolan (2004), the IDEA reauthorization of 2004 IDEIA (PL 108-466) promises to be the most contentious, and perhaps the most damaging to students with disabilities in terms of services denied, and increased accountability requirements. The IDEIA law links with NCLB in terms of testing and funding. Major features of the law include:

- Transition services to begin at age 14 (previously 16)

- A redefinition of Learning Disabilities to deemphasize the link between potential and performance;

- Stronger discipline language;

- More flexibility for states in spending federal money; and

- Links with NCLB in the areas of testing and "highly qualified" teachers.

Funding provisions and restrictions were put in place to guide local educational agencies (LEAs) in developing and implementing coordinated, early intervening services for students in kindergarten through 12th grade (with a particular emphasis on students in kindergarten through third grade) who are not currently identified as needing special-education or related services, but who need additional academic and behavioral support to succeed in a general-education environment.

"Early intervening services" were added under the IDEA regulations under the LEA which allowed activities in implementing coordinated early intervening services including:

- Professional development (which may be provided by entities other than LEAs) for teachers and other school staff to enable such personnel to deliver scientifically based academic and behavioral interventions, including scientifically based literacy, instruction where appropriate on the use of adaptive and instructional software; and

- Providing educational and behavioral evaluations, services, and supports, including scientifically based literacy instruction.

Under the 2004 IDEIA re-authorization, all students, regardless of their abilities, must be given the opportunity to become involved with, engaged and progress in the general-education curriculum. Every student must have access to the subject area regardless of his or her developmental level. Traditionally, to accommodate students' individual needs and to give them the opportunity to progress, educators have adapted or altered the curriculum materials or assessments to address cognitive disabilities and have employed several strategies, including a curriculum that has been universally designed for accessibility.

A universal design implies a design of instructional materials and activities that allow learning goals to be attainable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember. The universal design curriculum gives teachers the ability to provide each student access to the subject area without having to adapt the curriculum repeatedly (Orkwis, 1999) to meet the needs of diverse students. The universal design for learning formulated by the Center for Applied Special Technology (CAST) provides multiple means of representation, expression and engagement that are essential for universally designed curricula.

In summary, although inclusion is not a new concept, it is rapidly becoming an important issue in many schools today because changes are imposed on the teacher in the inclusive setting to alter instructional methods, adjust, modify and make the necessary accommodations to meet the diverse needs of students with disabilities in the regular classrooms. Becasue IDEA requires educators to implement best practices,

more schools will need a working model of inclusion (Kirk, 1996) that involves all kinds of theories, mandates, and best practices aimed at maintaining a full inclusion environment that is conducive for all learners. The theoretical perspectives discussed below detail the most common theories, mandates and best practices relative to the implementation of inclusion.

Theoretical Perspectives

There are a variety of theoretical perspectives that apply to full inclusion and effective instruction of students with disabilities. Some of these theories include social interaction theories such as Experiential Learning and Reconstructionist Theory. External and locally mandated practices include the LRE and curriculum based assessment. Best practices include Differentiated Instruction (Tomlinson, 1999), Howard Gardner's multiple intelligences (MI) and "Universal Design" for Learning. Because all children do not learn in the same way, it is important that a variety of these methods be incorporated into an inclusion program to ensure that individual needs of students with disabilities are met and maintained in an environment that is conducive to learning for all students.

<u>Theories</u>

The learning theories described support inclusive practices as those that contribute to self-realization, personal, academic achievement and social interactions for students with disabilities as well as all students. Experiential learning, a concept based on the theory that children learn by doing, benefits students with learning disabilities because often they learn through multisensory activities (Association for Experiential Education, 1999).

Reconstruction educators focus on a curriculum that highlights social reform as the aim of education and reflect the civil rights context of the original EAHC based on the premise that social interaction and acceptance help students with disabilities to learn (Cohen, 1999). Social interaction is a critical component of situational learning, the learning of skills that simulates the environment, in which the skills will be applied in real life as learners become involved in a community of practice (Kearsley, 2003).

<u>Mandated Practices</u>

The theory behind LRE is that students with disabilities have greater learning opportunities when interacting with their peers (Chow, Blais, & Hemingway, 1999; Kirk, 1996; Stanovich & Jordan, 1998). In the curriculum-based assessment approach, the children's developmental progress and learning styles are assessed through scientific observation by the classroom teacher, who directs the lessons and materials offered (American Montessori Society, 2003). Curriculum-based assessment generally has been associated with special education; however, the materials for

assessment are generally taken from instructional materials that are used with students in regular-education settings with reading, math, and written expression being the most common areas applied. The alternative assessment used for special-education students in lieu of standardized tests used for general-education students is also referred to as curriculum-based measurement (National Association of Test Directors, 2005).

RtI

From the 1990s to the early 2000s, RtI has been deeply entrenched in the federal law and policy, based on multiple policy analyses. These policy analyses are unanimous in recommending changes in current delivery systems that are consistent with RtI practices. RtI, by definition, is the practice of (1) providing high-quality instruction/intervention matched to student needs and (2) using learning rate over time and level of performance to (3) make important educational decisions. IDEA 2004 contains the provision to use scientific, research-based interventions as part of the process to determine eligibility for learning disabilities. LEAs have the option to use the RtI approach when determining the educational needs of a student. In other words, when determining whether a child has a specific learning disability, a local education agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, listening comprehension, mathematical calculation, or mathematical reasoning (20 USC. 1414(b)(6)(A). RtI is an educational resource delivery model and problem-solving

method that uses three tiers to efficiently differentiate instruction for all students: Tier 1 (Core Instructional Interventions) in the general-education classroom; Tier 2 (Targeted Group Interventions); and Tier 3 (Intensive, Individual Interventions). This three-tier service delivery model incorporates increasing intensities of instruction that provide students with direction in proportion to their individual needs. Embedded in each of the tiers is a set of unique support structures or activities that help general-education teachers implement research-based curriculum and instructional practices at levels designed to improve student achievement (National Association of State Directors of Special Education, 2005).

<u>Best Practices</u>

Though not a new concept, inclusion is rapidly becoming an important issue in many schools today because changes are imposed on the teacher in the inclusive setting to alter instructional methods. Additionally, teachers are required to collaborate and communicate because there is a need to adapt and modify instruction for students with disabilities using differentiated instructional strategies in conjunction with students' learning styles. Both differentiation and multiple intelligences apply to inclusion and both are advocated for all children.

The instructional models of differentiated instruction and learning styles are similar in nature because each requires general-education teachers to adapt to a new environment which requires training, support and change. The theory of differentiated instruction, personalized to students' individual needs and learning styles, reflects the

need for educators to strive to break traditional patterns of teaching while adapting instructional styles to student differences (Willis & Mann, 2000). According to Tomlinson (1999), teachers are diagnosticians prescribing the best possible instruction for their students using tools of their craft to address students' needs. Those who recognize that students are individuals do not reach for standardized, mass-produced instruction and assume that it will be a good fit for all students. Flexible grouping must be employed when attempting to differentiate instruction in the classroom. Without grouping students, trying to vary instruction will become too unwieldy (Willis & Mann, 2000). Curriculum can be differentiated by content, process, and product, and students can be grouped based on readiness, interest, or learning profile. Through knowledge and use of many different strategies in their educational repertoire, teachers can successfully differentiate instruction to meet the needs of all students. The more strategies that teachers have available to vary classroom instruction, the more they will be able to avoid lockstep instruction and the more likely they will reach every student regardless of his or her learning style (Willis & Mann, 2000).

Howard Gardner's multiple intelligence (MI) theory is well-known and growing in popularity as a means of addressing the unique needs of students with learning disabilities (Armstrong, 2001). The eight areas of intelligence according to MI are (a) visual or spatial, (b) musical, (c) verbal, (d) logical/mathematical, (e) interpersonal, (f) intrapersonal, (g) bodily or kinesthetic, and (h) naturalist. To effectively educate students with special needs, teachers need to provide

individualized instruction that appeal to the various areas of intelligence possessed by each student (Penn State College of Education, 2002). Therefore, they must be free of any barriers that may prevent them from practicing these strategies in the learning environment.

Universal Design (Orkwis, 1999) is a flexible, yet challenging curriculum that gives teachers the ability to provide each student access to the subject areas without having to adapt the curriculum repeatedly to meet special needs. The design includes three essential features:

- The curriculum provides multiple means of representation in which the subject matter can be presented in alternate modes for students who learn best from visual or auditory information who may need differing levels of complexity;

- The curriculum provides multiple means of expression to allow students to respond with their preferred means of control which accommodates the differing cognitive strategies and motor-system controls of students.

- The curriculum provides multiple means of engagement. Students' learning interests are matched with the mode of presentation and preferred means of expression. Motivation occurs when students are engaged with what they are learning. These best practices not only apply to students with disabilities in inclusive classrooms, but are effective with all students.

Teachers must also prepare regular education students for their role in the inclusive classroom; otherwise, the students may resist inclusion (Kirk, 1996). Brown (1997) confirmed that statement by saying that unsuccessful attempts at

inclusion could be partially attributed to the fact that regular-education students are not considered to be a key part of the puzzle in the learning environment. The teachers' attitudes and beliefs toward inclusion may affect how regular-education students are prepared for the inclusive classrooms (Campbell, Dodson & Bost, 1985).

Teachers' Attitudes and Beliefs Toward Inclusion

Teachers' attitudes have been found to have a significant impact on effectiveness of mainstreaming/inclusion. Results of studies by Wilczenski (1992) and Brown (1997) indicated that attitudes held by both regular and special educators towards students with disabilities determine the success or the failure of inclusion. Negative attitudes toward persons with disabilities in all aspects limit their opportunities to be integrated in the general-education classroom.

Recent research (Martinez, 2004; Smith & Smith, 2001) also suggests that general-education and preservice teachers feel inadequately prepared to teach children who have disabilities. Some teachers feel that they are often unable or unwilling to adapt their teaching to meet the needs of individual students, even though adapting instruction is critical to the success of many students with disabilities who are educated in the regular environment.

Although findings on teachers' attitudes are somewhat contradictory (Villa, Thousand, Meyers, & Nevin, 1996), some clear patterns presented over the last 10 years can be observed. It was found that there are many similarities and differences in the literature in reference to teachers' attitudes and beliefs toward inclusion. Various

researchers (Avramidis et al., 2000; Monahan, 1996; Opdal & Wormnes, 2001; Scruggs & Mastropieri, 1996; Sebastian & Mathot-Buckner, 1999; Wilczenski, 1992) have investigated and documented several issues (i.e. lack of training, support and adequate resources) that contribute to teachers' attitudes towards the inclusion of students with disabilities.

Soon after IDEA 1997, a study conducted by Vaughn (1999) examined mainstream and special teachers' perceptions of inclusion through the use of focus group interviews. The majority of these teachers, who were not currently participating in inclusive programs, had strong, negative feelings about inclusion, and felt that decision-makers were out of touch with classroom realities. Other concerns that focused on teachers' views and attitudes toward inclusion were too much paper (in particular IEP), classes are too large to attend to individual needs, lack of knowledge in special education, and concerns regarding the "price" paid by the regular student in the inclusive environment.

Another problem with attitudes and beliefs as revealed by Kirk (1996) is that many educators feel that the inclusion of students with severe disabilities will disrupt regular instruction and learning, and that parents of regular education students are sometimes concerned that their children will be harmed by these children. In instances such as these, educators need to learn to accept such inclusion, and parents and students need to be educated in regard to the population of students being included into the classroom, including safety issues.

According to Smith and Smith (2001), while the majority of general-education teachers may agree with the general philosophy of inclusion, their attitudes toward including children with disabilities in their classrooms are frequently ambivalent or negative and uncertain. They may also feel frustration, burdened, fear, lack of support, and inadequacies about their ability to teach children with different kinds of problems (Martinez, 2004). Another concern was classroom management. Many of the teachers felt that they didn't have the skills to manage students with emotional and behavioral disorders. More, and more effective, training could possibly help to eliminate negative attitudes that teachers may have toward inclusion.

Training

Teacher training is critical to accomplishing the objectives of inclusion in a mainstream classroom. In order to break traditional patterns, the teachers themselves must be reeducated. Cawley (2000) addressed several important points that can benefit schools in the development of an inclusive culture, including staffing and pairing students, scheduling, and grading. These are not skills that come naturally. Teachers must be trained to effectively implement the strategies. Kirk (1996) introduced a successful model of inclusion that focuses on children helping children, another strategy that can be taught in teacher training.

Studies (Bender, Vail, & Scott, 1995; Scruggs & Mastropieri, 1996; Shoho, Katims, & Wilks,1997) conducted in the area of teachers' attitudes toward inclusion and teacher training revealed that there is a positive correlation between teachers'

attitudes, educational background and the number of years in the classroom and exposure to students with learning disabilities. Snyder, Garriott, and Aylor (2001) revealed that while two-thirds of the over 10,000 teachers surveyed agreed with the concepts of inclusive learning, only one-third of the regular-education teachers surveyed believe they have sufficient training, time, and resources to effectively manage an inclusive classroom environment. Clearly, the need to demythologize the requirements for teaching in such environments must be fulfilled before popular teacher opinion can be swayed and change can be effected. Campbell, Dodson, and Bost (1985) reminded us that an educator's attitude toward students with disabilities in inclusive environments is among the most critical of determining factors in the acceptance of disabled students by peers. Colarusso and O'Rourke (1999) further contended that teacher attitudes and expectations deeply affect the student-teacher relationship among students with disabilities as well as their peers. A relationship developed based on respect for all students and unwavering expectations for the fulfillment of educational goals must be established by educators to ensure the cohesive development of all students in an inclusive environment. Teachers must be trained not only to educate students with disabilities in a mainstream classroom with a flexible curriculum, but must also be instructed in the social and behavioral discrepancies of students with various and varying degrees of disabilities to ensure that the classroom experience is a positive one, and that classroom objectives are met for all students.

Baker and Zigmond (1995) asserted that while most teachers support inclusion practices, they lack the confidence in their abilities to meet the individual needs of students with disabilities, and have only a rudimentary understanding of how to transition to an inclusive environment. Given that general-education teachers tend to relate to their class as a wholly comprised unit, any reform that requires individualization and differentiation will be perceived as difficult to implement (Schumn & Vaughn, 1992). An inclusive classroom is only as effective as the teacher leading it, and a teacher without the confidence to facilitate such a program will likely not be successful in its implementation.

A voiced concern of general educators toward educating students with disabilities is how the different labels applied to students with disabilities affects an educator's willingness to modify programs to meet the specific needs of different disabilities. Lipsky and Gartner (1997) revealed that in a study of schools with partially inclusive and mainstreamed programs, few students with severe disabilities are among those integrated into the inclusive environment. This suggests that general educators may perceive students with severe disabilities as more difficult to include in the classroom and that educators are not confident in their abilities to effectively teach a curriculum or integrate such students with their peers. Training general educators to expand their purview to include a broad range of the idiosyncrasies and degrees of various learning disabilities is critical to ensure that the educational goals of students with all levels of disability can be successfully met in inclusive learning environments. O'Shea (1999) stated that regular-education teachers' outlooks on mandated inclusive

programs would benefit if continued support were provided before, during, and after their transition into forced inclusion.

Adequate Support

King-Sears (1996) identified communication as an effective tool, emphasizing the importance of a collaborative educational community, including school development of a vision for inclusion and identification of the means by which teachers will make the vision a reality. In addition to support from parents, administrators, special-education and resource teachers, and coworkers, teachers can benefit from inclusion itself. Baker and Zigmond (1995) reported that segregating children with different abilities caused a tendency for those children to perform at lower academic and social levels than they do in regular-education classes (Brown, 1997). The research results from Baker and Zigmond (1995) demonstrated benefits of inclusion, not only for the special-needs students, but also for the regular and special-education teachers. For the students, most of the benefits revolve around the social aspect of schooling, developing and maintaining friendships; for the teachers, the benefits lie in the area of flexibility which is offered by team teaching and a cushion of communal responsibility for educating each child. Without supports, such as teachers' involvement in curricular decisions and student grouping, training supports do not seem to be adequate for general educators to feel confident enough to provide services to children with learning disabilities in the environment (Monahan, 1996).

Schumn and Vaughn (1992) reviewed 18 studies conducted over a five-year period to determine the success of students with learning disabilities who were being served in an inclusive environment. They found that general educators felt a lack of preparation in planning and implementing instructional adaptations for students with disabilities. It was noted that general educators lack the opportunities for collaborative planning with special-education teachers. Consistent with this study, another study (Daane, Dierne-Smith, & Latham, 2000) was conducted in a school district serving approximately 8,000 students in the Southeast. General-education teachers, elementary special-education teachers, and their building administrators were included in the study. The items on the survey were grouped into four categories: (a) teacher collaborative efforts, (b) instruction of students with disabilities, (c) teacher preparedness for meeting the needs of students with disabilities, and (d) perceived achievement outcomes of students with disabilities. It was found that collaboration took place between special education and general-education teachers. When asked if they perceived teachers to be comfortable with collaboration, all three groups indicated they did not. During the interviews, teachers gave specific reasons: (a) conflict of personalities, (b) lack of planning time, and (c) limited time in the classroom by the special-education teacher. All teachers interviewed indicated that they needed more collaborative planning time.

Reports from school districts throughout the United States identify collaboration as a key variable in the successful implementation of inclusive education. Creating planning teams, scheduling time for teachers to work and teach

together, and effectively collaborating with parents are all dimensions reported as crucial to successful collaboration (National Center on Educational Restructuring and Inclusion, 1995). For inclusive education to work, educators must become effective and efficient collaborative team members. They must develop skills in creativity, collaborative teaming processes, coteaching, and interpersonal communication that will enable them to work together to craft diversified learning opportunities for learners who have a wide range of interests, learning styles and intelligences (Villa, Thousand, Meyers, & Nevin, 2003).

O'Shea (1999) stated that through continuing training and support, more classroom personnel, increased time to modify instruction and more parental involvement, regular-education teachers mandated to teach in inclusion settings may be more willing to take on the added challenges with less reservation than teachers with little or no training and support. O'Shea concluded, "Teachers need assistance if inclusion is to succeed" (p. 2).

Resources

In a synthesis of research related to inclusion, Scruggs and Mastropieri (1996) located 10 surveys that were conducted between 1974 and 1994 that investigated teachers' perceptions of themselves as having sufficient expertise/training for inclusion. Data from approximately 2,900 respondents from nine states in the Northeast, Midwest, South, and West showed that only 29.2% of the respondents agreed that general-education teachers had sufficient expertise or training for

mainstreaming. They supported the concept of mainstreaming/inclusion, but were concerned about the disabling condition of special-needs students and what obligations they would have. The teachers reported negative features of inclusion (Scruggs & Mastropieri, 1996). They reported that they were concerned about having sufficient time to work with all students. Resources were another point of contention. Many felt that their schools didn't provide enough materials for them to do an adequate teaching job with the students. They also felt that including students with special needs in their classroom would be a lot of work. They expressed that they did not have enough time to work with all the students in the classroom because the special-needs students required so much time (Monahan, 1996).

<u>Summary</u>

The proceeding section provides background for this study. This framework of synthesizing research has been used for the presentation of existing literature surrounding teachers' attitudes toward inclusion. Consistent themes emerging from the literature are the need for training, adequate support and resources. Similar conclusions were made concerning teachers' attitudes and concerns regarding inclusion. Several studies express that teachers refer to training (Avramidis et al., 2000; Lipsky & Gartner, 1997; Monahan, 1996; Opdal & Wormnes, 2001; Scruggs & Mastropieri, 1996; Villa & Thousands, 1996), lack of skills and time (Avramidis et al., 2000; Monahan, 1996; Scruggs & Mastropieri, 1996) inadequate support (Avramidis et al., 2000; Monahan , 1996; Opdal & Wormnes, 2001; Villa et al., 1996), lack of

resources (Scruggs & Mastropieri, 1996), collaborative planning (Monahan, 1996; Opdal & Wormnes, 2001), and program assessment (Monahan., 1996) as barriers to inclusion. In a study of 176 general-education teachers conducted by Hart (1997) in Mobile, Alabama, it was found that the perception of general-education classroom teachers' preparation was related to teaching experience, educational experience and degree. Hart elaborated on her research findings by stating, "One can conclude that this relationship did not happen by chance. Training was a major factor in this relationship" (p. 77).

<center>Conceptual Framework</center>

Attitudes of general-education teachers toward students with disabilities and the amount of training and academic preparation they receive in teaching students with disabilities determine the success of inclusion. In order to achieve successful outcomes, teachers must have the opportunities to participate in various types of training to adequately prepare them to meet the diverse needs of students with disabilities in the inclusive environment. Effective professional development to meet this need can be developed through the adoption of an appropriate and eclectic conceptual framework that is designed for this purpose.

The conceptual framework for this study is derived from the works and theoretical framework of Ely's (1999) Conditions of Change Model, Zaltman and Duncan's (1977) Resistance to Change Model, and Knowles's (1984) adult theory model. These frameworks were selected as solution strategies to address the issues

and concerns of general-education teachers in the areas of training, support, and adequate resources surrounding the subject of teachers' attitudes toward inclusion of students with learning disabilities in the regular classroom. This section highlights the works of Ely (1999), Zaltman and Duncan (1977) and Knowles (1984) to address the needs of general-education teachers pertaining to training, support, and resources through professional development strategies. In order to get a clear picture of each theory, an overview of each theoretical frame (Ely, 1999; Zaltman & Duncan, 1977; and Knowles, 1984) is presented followed by a change analysis incorporating each model for change. A brief overview of the professional development training model appropriate for inclusion is then discussed.

Ely's Conditions of Change Model

In order for mainstream assessment activities in the inclusion classroom to be effective, there needs to be a change in teachers' perceptions and motivation (Hargrove, 2000). A more empathetic attitude toward people with disabilities needs to be developed (Vash, 2001). Educational reform brings about vast changes in education environments, teaching strategies, and learning opportunities (Edvisors Network, 2002). To facilitate change, the practitioner should assess change to determine whether change is likely to succeed and thus whether it is worth pursuing, at least under the existing circumstances. After assessing the presence or absence of the conditions, the prospective change agent may find that this is a project that has a good chance of yielding the anticipated benefits, or that it is one best avoided. Based on

recent literature surrounding the attitudes of teachers toward inclusion, Ely's (1999) perspective is found to be an appropriate model to launch change in the inclusive environment. Ely's model of change has sought to understand educational change by analysis, breaking the process down to its component parts to facilitate change.

In order for a change agent to "get a handle" on educational and environmental change, Ely's (1999) eight conditions of change should be considered to facilitate productive learning in the environment in an attempt to change teachers' attitudes toward inclusion. The first condition, *dissatisfaction with the status quo*, is the most obvious; something is not right; things can be done better. A major implication of this condition is that for change to be voluntarily embraced, participants must perceive the status quo to be even less comfortable. The second condition in Ely's framework, *knowledge and skills*, recognizes that "the people who will ultimately implement any innovation must possess sufficient knowledge and skills required to do the job" (p. 68). The third condition requires that *resources* are available to make implementation work, and the fourth condition requires *time* needed to acquire knowledge and skills. The fifth condition requires an existence of *rewards or incentives*. The sixth condition is *participation*, including shared decision making, communication among all the parties involved in the process, and when direct participation is not possible, implementers should feel ideas are represented by surrogates. The seventh condition is *commitment* by those who are involved for continuing support for implementation of the innovation. An important implication of this condition is that change requires effort. The last and final condition is *leadership*, which is two-pronged: (1) leadership

of the executive officer of organization, and (2) project leadership, which is more closely related to day-to-day activities of the innovation being implemented.

Zaltman and Duncan's Resistance to Change Model

Social change involves an alteration in the status quo. Whenever change is attempted, resistance is likely to appear (Zaltman & Duncan, 1977). Resistance is a positive force when the advocated change is harmful to the society or to a group. Persons who are threatened may want to diffuse resistance to counter the efforts of others trying to diffuse the change in question.

In their book *Strategies for Planned Change*, Zaltman and Duncan (1977) discuss several sources of resistance under the headings of cultural, social, organizational, and psychological barriers to change. These sources of resistance are quite interrelated because they may vary from situation to situation and from innovation to innovation within any given contextual environment. The concept of resistance, specific to cultural, social, organizational, and psychological barriers, will be briefly discussed in the light of Ely's (1999) Environmental Conditions of Change, Knowles's (1984) Adult Learning Theory, and Zaltman and Duncan's (1977) planned strategies for change in relation to the sources of resistance in the inclusive environment.

<u>Cultural Barriers to Change</u>

The first category of resistance that Zaltman and Duncan discuss is the cultural

barrier to change. One major barrier to change stems from values and beliefs that are

often religious (Zaltman & Duncan, 1977). Ethnocentrism is another barrier to

change. For example, a change agent who comes from a different culture may view

his or her own culture as superior to others, and may passively resist borrowing or

adopting artifacts from other cultures. Yet another source of cultural resistance is

saving face. As a cultural barrier, saving face may carry two main lessons for the

change agent: (1) highlight the "enhanced" benefit and avoid overemphasizing the

direct comparison between innovation and current practice that may attach a negative

stigma to the past behavior; and (2) take the time to identify the root causes of

resistance to prevent the misunderstanding of the client value system embedded in the

implementation plan (Ellsworth, 2000).

<u>Social Barriers to Change</u>

Social barriers represent characteristics of how individuals react as members of

a social system. Zaltman and Duncan (1977) discuss five examples: group solidarity;

rejection of outsiders; conformity to norms; conflict; and group introspection. Related

to group solidarity is the issue of interdependence. Readiness for change in one part of

a system may be negated by the unwillingness or inability of other interdependent

parts to change. Rejection of an outsider is another source of resistance to change that

is related to ethnocentrism. Rejection of outsiders is often expressed as a belief that

no one outside the school system could understand the initiative well enough to produce an innovation of value to it. Conformity to norms provides stability and behavioral guidelines that defines what individuals can expect from one another. They are essential for the conduct of any social system. Conflict is a means of introducing change. When conflict exists within an organization, any change that one group adopts in the conflict may automatically be rejected by other groups. Group insight/group introspection is one of the major barriers to change in small groups. Concerns with this general problem have led to various kinds of organizational development techniques, such as survey feedback and collective decision-making/problem-solving techniques.

Organizational Barrier to Change

Threats to power and influence, organizational structure, behavior of top administrators, climate for change in the organization, and technological barriers for resistance are five organizational barriers to change. These forms of change resistance arise when characteristics of the system itself conflict with the demands of change (Zaltman & Duncan, 1977). Change or innovation may be seen as a threat to the power or influence of various parts of the organization. For change and innovation to succeed in an organization, it is important that the structure of the organization in terms of authority patterns, channels of communication, division of labor, rules and procedures be compatible or supportive of the change. Various change specialists have indicated that change should be initiated from the top so that all organizational

participants can know there is support and commitment from the top regarding program change. Top-down change, according to Zaltman and Duncan (1977), is very important when the change is a radical change regarding how people see themselves and behave on their job. The notion of climate for change focuses on organizational members' perceptions of the change process. One real source of resistance to change in the workplace is the absence of necessary technical human skills to implement the change adequately. The barriers arise when the schools lack the institutional knowledge to understand, accept, or apply the innovation (Zaltman & Duncan, 1977). The change agent must target specific interventions that provide a least a baseline of technological standing of the individual.

Psychological Barriers to Change

Psychological barriers exist solely within the individual, and may be the most difficult to detect. The authors identify three barriers: perception, homeostasis, and conformity and commitment. Selective perception and retention may prevent a person from seeing that the status quo is inadequate. For various reasons, a person may not "see" problems requiring significant change for remedial purposes or not "see" solutions even if a problem is recognized. Homeostasis is the natural desire to maintain a comfortable level of stability. Understanding the issues and concerns at each state of implementation will go a long way toward containing the discomfort that can lead to homeostasis resistance. Conformity is a major force working against change. People need to be liked, to be correct, and to participate in the fruits of

achieving collective goals. Commitment is a powerful force working against change. Teachers may support or resist an innovation based on commitment to their concept or their professional role.

Knowles's Adult Learning Model

Knowles (1984) was convinced that adults learned differently than children and that this provided the basis for a distinctive field of inquiry: andragogy. His adult learning model has been widely adopted or adapted in a variety of programs from individual courses at every level of education to total programs of in-service education, undergraduate education, graduate education, continuing education, human resources development, continuing professional education, technical training, remedial education, and religious education. Andragogy can serve as the foundation for a unifying theory of adult education. The basic format of the andragogical model is a process design. The andragogical model assigns a dual role to the facilitator of learning (a title preferred over "teacher"): first and primarily, the role of designer and manager of processes or procedures that will facilitate the acquisition of content by the learner; and only secondarily, the role of content resource. The andragogical model assumes that there are many resources for learning other than the teacher, including peers, individuals with specialized knowledge and skill in the community, a wide variety of material media resources, and field experiences. One of the principal responsibilities of the andragogue is to know about all these resources and to link learners with them.

According to Knowles (1984), an andragogical process design consists of two elements: (1) in planning procedures for climate setting, attention should be given to two aspects of climate: physical environment and psychological atmosphere (mutual respect, collaborativeness, trust, supportiveness, authenticity, pleasure, and humanness), and (2) the design must involve learners and participants in mutual planning, in diagnosing their own needs for learning, in formulating their learning objectives in designing learning plans, in evaluating their learning by carrying out their own plans.

For Knowles (1984), andragogy was premised on at least five crucial assumptions about the characteristics of adult learners that are different from the assumptions about child learners on which traditional pedagogy is premised:

1.   As a person matures his self concept moves from one of being a dependent personality toward one of being a self-directed human being;

2.   He/she accumulates a growing reservoir of experience that becomes an increasing resource for learning;

3.   Readiness to learn becomes oriented increasingly to the developmental tasks of his social roles;

4.   Time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centeredness to one of problem-centeredness; and

5.   Motivation to learn is internal.

According to Knowles (1984), every adult group, of whatever nature, must become a laboratory of democracy, a place where people may have the experience of learning to live co-operatively. Attitudes and opinions are formed primarily in the study groups, work groups, and play groups with which adults affiliate voluntarily. Their goals largely determine the goals of our society. Adult learning should produce several outcomes:

1.   Adults should acquire a mature understanding of themselves and necessary skills to achieve the potentials of their personalities.

2.   Adults should develop an attitude of acceptance, love, and respect toward others and a dynamic attitude toward life.

3.   Adults should understand the essential values and respect that bind people together in the world in which they live.

4.   Adults should understand their society and should be skillful in directing social change.

5.   Adults should learn to react to the causes, not the symptoms, of behavior. Solutions to problems lie in their causes, not in their symptoms

Change Analysis

Students with disabilities were placed in segregated classrooms prior to the passing of PL 94-142, 504, and IDEA (Yell, 1998). The passage of these laws began a movement to place students with disabilities back into the regular-education classroom. All along, there was resistance from parents, administrators, and teachers.

In order to change teachers' attitudes towards inclusion, there is a need to specifically identify their resistance to inclusion and begin to establish methods, solution strategies, and meaningful professional development opportunities. Therefore, the focus of this study is to address current resistance to the inclusive process as reported by teachers and then provide professional development that incorporates strategies to overcome resistance towards inclusion utilizing the works of Ely (1999), Zaltman and Duncan (1977) and Knowles (1984) to address teachers' concerns in the area of training, support, and resources

Though not a new concept, inclusion is rapidly becoming an important issue in many schools today because political and legal pressures are being imposed upon schools to implement a system-wide program that will help all children, including children with disabilities, to learn. Smith and Smith (2001) found that there were many issues and concerns expressed by the teachers. Class load was a concern because if there are too many children in one classroom it is extremely difficult to meet diverse needs. Teachers felt that classroom support should be given. Collaborative planning was another issue because teachers feel that there is a limited amount of time for collaboration and communication among staff members. An important component of the inclusionary process is training and continual assessment of the program. Teachers expressed that their issues and concerns were vital to the success of inclusion (Smith & Smith, 2001). Although many issues were documented throughout literature concerning inclusion, there are three main barriers to the

inclusive process as identified by general-education teachers, who are pivotal in this process. They are lack of training, lack of support, and inadequate resources.

It is the purpose of this section to present a synthesis on these major areas of teachers' concerns or resistance to inclusion as documented in literature, and then connect this synthesis to how resistance might be overcome based on an understanding of change theory and adult learning theory. For each area of resistance presented, this section will first discuss major areas of resistance towards inclusion according to general-education teachers' views from literature. In addition, the researcher will align Ely's (1999) environmental conditions needed for change with Zaltman and Duncan's (1977) resistance to change theory as applied to teachers' resistance to inclusion. Finally, to address the resistance to inclusion, Knowles's (1984) adult learning theory will be presented followed by a summary of several strategies to overcome resistance to change based on change theory and adult learning theory to address the issue of lack of training, support and inadequate resources.

<div align="center">Lack of Training</div>

"Studies have shown that there is a relationship between teachers' positive attitudes toward inclusion and specific education and training" (College Student Journal, 2003, p. 1). General-education teachers feel that they are unprepared to meet the needs of children with disabilities in the inclusive environment. The research related to general-education teachers' attitudes of preparation to work with special-education children is limited. According to Shoho et al. (1997), if teachers gain more

knowledge about including students with disabilities and how their learning needs can be addressed, they may have less negative attitudes about inclusion. O'Shea (1999) stated that through continuing training and support, more classroom personnel, increased time to modify instruction and more parental involvement, regular-education teachers who teach in inclusion settings may be more willing to take on the added challenges with less reservation than teachers with little or no training and support. O'Shea concluded, "Teachers need assistance if inclusion is to succeed" (p. 2).

Teachers who will ultimately implement inclusion must possess sufficient knowledge and skills to do the job (Ely, 1999). According to Ely, people may believe that changes are in order, but without the specific knowledge and skills to bring about change, the individuals are helpless. He stated that training is overlooked in education change efforts. One of the most common causes of nonadoption or discontinuance is insufficient training of teachers and staff. Training often is an ill-conceived, last-minute add-on to the implementation plan.

According to Zaltman and Duncan (1977), one of the major causes of resistance to educational change is the development of changes or innovation without prior assessment of the potential users' perceived need for the change or even a systematic assessment of whether a perceived need could be established among adopters through appropriate communication and demonstrations. Because adults manage different aspects of their lives, they are capable of directing, or at least assisting, in planning their own learning (Knowles, 1984).

Knowles (1984) emphasized that adults are self-directed and expect to take responsibility for decisions. They are most interested in learning subjects that have immediate relevance to their job or personal life. Therefore, to address resistance to inclusion, teachers need to be involved in the planning and evaluation of their learning. They need to know why they need to learn about something (Knowles, 1984).

Traditionally trained teachers lack preparedness to leave their isolated learning environment to share in the collaborative setting. Foreign to traditionally trained teachers are the new concepts of differentiation and individual learning styles. They experience inadequacies in meeting the challenges of diversifying classrooms (Mastropieri & Scruggs, 2000). Based on this research, the two characteristics that seem clearly needed in professional development are that training should be structured and purposeful (Knowles, 1984). In order to ensure that teachers are well-prepared for successfully developing and implementing inclusive programs, sufficient opportunities for professional development must be provided by the school and district (Ely, 1999).

In summary, the concerns of teachers about meeting student needs and ensuring student success must be addressed. The activities must be individually tailored to the unique qualities of each school and implemented in different ways depending on such issues as whether teachers team teach or one teacher is responsible for a classroom. To address the teachers' attitudes toward inclusion and resistance, one must first identify, through a needs assessment, the sources of educators' negative attitudes and plan activities to address these concerns (Knowles, 1984, Zaltman &

Duncan, 1977). Such a process would involve general-education teachers in planning and evaluating all aspects of inclusion programs. In terms of training, a needs assessment would identify general educators' needs for training so that systematic, ongoing, coordinated, and well-planned staff development activities can be offered (Ely, 1999). To promote self-directed learning, teachers need access to professional journals and other resources addressing current trends, models, research, and strategies. Knowles (1984) advocates the implementation of a learning contract program to help teachers identify resources and strategies to accomplish their objectives. A learning contract, the focal point of self-directed learning, is a means of blending job requirements and goals with the individual's personal goals and objectives. It makes clear the mutual responsibilities of the teacher and administrators in facilitating or meeting educational goals. A cooperative teaching program requires training on different approaches such as coteaching, teams, and shared problem solving to address teachers' attitudes and concerns about their lack of training, resources, and support relevant to inclusion.

<u>Lack of Support</u>

Recent research (Martinez, 2004; Smith & Smith, 2001) suggests that general education and preservice teachers feel inadequately prepared to teach children who have disabilities. Some teachers feel that they are often unable or unwilling to adapt their teaching to meet the needs of individual students, even though adapting instruction is critical to the success of many students with disabilities who are

educated in the regular environment. According to Smith and Smith (2001), while the majority of general-education teachers may agree with the general philosophy of inclusion, their attitudes toward including children with disabilities in their classrooms are frequently ambivalent or negative and uncertain. They may also feel frustration, burdened, fear, lack of support, and inadequacies about their ability to teach children with different kinds of problems (Martinez, 2004). Furthermore, it is very difficult for teachers to meet during the day to discuss practice. If this is the only practice that teachers experience, the process may become a routine and unreflective (Robbins, 1991).

According to Ely (1999), leaders, supervisors, informal role models, mentors, or advisors must provide those around them with inspiration and encouragement throughout all phases of implementation. These individuals are there to encourage teachers when failure occurs. The identification of effective peers to provide support is frequently not seen as priority until a crisis arrives. It is imperative that the availability of effective support throughout the inclusion process is a key factor in avoiding discontinuance and achieving institutionalization. Ely (1999) asserted that those who will provide support (i.e. administrators, immediate supervisors) should be present and clearly visible to all teachers from the beginning.

Change should be initiated from the top so that all teachers can know there is support and commitment regarding program change. Top-down change is very important when the change is a radical change regarding how people see themselves (Zaltman & Duncan, 1977). Yet teachers often get their "backs up" when change is

top-down--they often see that as something being done to them. Knowles (1984) revealed that people learn better when they feel supported rather than judged or threatened. Adult learning is problem-centered rather than content-centered. They approach learning as problem solving and are interested in immediate application of knowledge.

To overcome the resistance to inclusion, leaders need to establish guidelines that define what teachers can expect from one another (Ely, 1999, Zaltman & Duncan, 1977). Providing a physical and psychological environment of "adultness" will help adults feel accepted, respected, supported and a spirit of mutuality between teachers (Knowles, 1984). As Ely (1999) observes, teachers are looking for firm and visible evidence that there is endorsement and continuing support for implementation. Support must be reinforced at all levels of leadership since an innovation supported by just one individual can be discontinued as soon as he/she leaves the organization. Moreover, the decisions on what kind of support, and how it is delivered needs to include the voices of the teachers.

In summary, all of these supports, when used in conjunction with technological support (Zaltman & Duncan, 1977), can provide a comprehensive support network for teachers in the inclusive classroom to make inclusive education a reality. To address the issue of support, one must first examine existing arrangements for providing instructional support (Ely, 1999, Knowles, 1984, Zaltman & Duncan, 1977). Support can be provided by involving a variety of educators and specialists to give assistance and/or suggestions through informal and formal consultation, collaboration and

various integrations of teams. Providing general educators with greater support from special educators such as paraprofessionals, and ancillary support personnel such as speech teachers, social workers, and psychologists, is another solution strategy to address resistance to inclusion. Shared problem solving (Knowles, 1984) is another approach that can be used to address the issue of support. Time for teachers to meet to problem solve and to assist one another in daily classroom activities is required to promote the confidence and information sharing necessary to develop successful inclusive classrooms.

Lack of Resources

Snyder et al., (2001) revealed that while two-thirds of over 10,000 teachers surveyed agreed with the concepts of inclusive learning, only one-third of the regular-education teachers surveyed believe they have sufficient training, time, and resources to effectively manage an inclusive classroom environment. Resources are broadly defined as those tools and other relevant materials that are accessible to assist learners to achieve objectives. If resources are unavailable, according to Ely (1999), acquisition of those learning objectives will be significantly impeded. General-education teachers feel that there is a limited amount of time for collaboration and communication. Teachers must have time to learn, adapt, integrate, and reflect on what they are doing (Ely, 1999). They will more likely resist or reject inclusion if they believe an investment of time will not be compensated (Ely, 1999). Change requires new competencies to support new procedures. Those expected to implement

inclusion will need time to develop or redevelop support materials. According to Ely (1999), time is a vital element in the total process of educational change. It is important to make sure that existing rules and procedures in the organization support change (Zaltman & Duncan, 1977) for inclusion. The development of such procedures for implementation reduces this resistance.

For many kinds of learning in adult education, peers are the richest resources for learning. Competitiveness makes those resources inaccessible. During workshops and courses, placing participants into a sharing relationship from the outset reduces competitiveness. "For the sake of the goal of learning how to learn, staff must remain firmly as facilitators of the learning process, and respond only to participants' initiated requests for content delivery" (Knowles, 1984, p. 21).

What procedures can be used to help the learners identify resources and devise strategies for using these resources to accomplish their objectives? According to Knowles (1984), administrators should encourage learners to develop contracts. To overcome the lack of resources, Knowles (1999) suggested that the leaders should focus on the teachers' experiences and analysis of the experiences to connect knowledge to life. He proposes that teachers should be used as resources. He suggested laboratories, role plays, discussions and field experiences as preferred techniques. Team/coteaching is also preferred because this model may be used for "improving the delivery of educational services to all students, including those with disabilities" (Lipsky & Gartner, 1997, p. 125).

In summary, a key to overcome this resistance is to use identified staff as resources to be used by participants according to their learning goals. To assist this process, staff should list their areas of expertise and post the list in a room where other resources are displayed. Staff should also declare the time they are available during the school day. If the situation warrants, staff may be willing to work beyond the school day. As an extension of staff knowledge of resources and skills, a list of topic areas could be explored experientially in groups (Knowles, 1984). If a specific topic (such as classroom management or differentiated instruction) is desired, the initiating participant should be encouraged to organize a group of interested teachers.

During workshops, using participants as resources brings a wealth of experiences and skills to a workshop. Participants are asked to provide a wider range of human resources and to encourage sharing of knowledge. This process in itself is a learning experience for some participants, who may realize for the first time that they have personal skills. Enhancement of self-esteem can result (Knowles, 1984).

Overcoming resistance to inclusion relevant to lack of resources may involve employing flexible scheduling to provide educators with the time to collaborate and communicate. Maintain appropriate caseloads for educators. The change agent must work to ensure that necessary resources are both generally available and equitably available to each teacher or student (Ely, 1999). A final strategy is to schedule regular meetings among staff for collaboration and communication. This can be done during school with special schedules designed for that intended purpose. Workshops and

meetings can take place before or after school where teachers can be compensated for their time.

Summary

Attitudes of both regular and special educators towards students with disabilities will determine the success or failure of inclusion programs (Wilson, 2003). These attitudes affect the ability of teachers to teach students with disabilities. For inclusion to be successful, teachers need to have positive attitudes and beliefs about students with disabilities and need to feel confident in their own abilities to teach a diverse student population. Mendez (2003) pointed out that teacher feelings and attitudes about inclusion are a key element that needs to be considered and investigated in order for an inclusion program to be successfully and effectively implemented. In framing inclusion programs, teacher beliefs, perceptions, and attitudes must be determined and examined because they affect teacher practices and decisions when dealing with students with disabilities in inclusive settings. There also must be close cooperation between general and special-education teachers (Mendez, 2003).

It was the purpose of this section to present a synthesis on three major areas of teachers' resistance to inclusion (lack of training, support and resources) as documented in literature, and how resistance might be overcome based on change theory and adult learning theory. For each area of resistance presented, this section briefly discussed the major areas of resistance towards inclusion according to general-

education teachers' views from literature aligned with Ely's (1984) environmental

conditions needed for change and Zaltman and Duncan's (1977) resistance to change

theory as applied to teachers' resistance to inclusion. The resistance to change also

was addressed looking at Knowles's adult learning theory. Several strategies were

proposed to overcome resistance to change based on change theory and adult learning

theory. It was found that there is no one way to address general-education teachers'

attitudes and resistance to inclusion. Therefore, an eclectic approach (Ely, 1999;

Zaltman & Duncan, 1977) was utilized to address the needs of teachers as adult

learners (Knowles, 1984) to improve their attitudes toward inclusion.

Interestingly, studies have shown that there is a direct correlation between

teachers' positive attitudes toward inclusion, specific education, training, experience,

and exposure to teaching students with disabilities (Bender & et al., 1995; College

Student Journal, 2003; Hart, 1997). A review of literature consistently reveals that

general-education teachers felt that they were not adequately trained and were

unprepared to meet the needs of students with disabilities in the inclusive

environment. A mandated inclusion program can be beneficial for both teachers and

students if continued support was provided before, during, and after the transition into

forced inclusion (O'Shea, 1999). A major concern with respect to teachers' attitude

toward inclusion is the issue of inadequate resources and time. Teachers believed that

they do not have sufficient time to work with all students in the inclusive environment

because the special-needs students require so much of their time (Monahan, 1996). A

key part of the puzzle is collaboration. Structures for collaboration are central to various models of inclusion.

Models of Inclusion

Inclusion has caused uncertainty about the roles and responsibilities of regular- and special-education teachers (Price, 2001). Since the 1975 implementation of the EHAC (PL 94-142), the federal law has stated that children with disabilities have the right to a free and appropriate education in the LRE.

Throughout literature, general classroom teachers have consistently reported lack of support as the key barrier to successful inclusion, noting other concerns as time, personnel, materials, class size, severity of disabilities, and training (Burstein et al., 2004; McLeskey & Waldron, 2002; Schumn & Vaughn, 1992). Resources are needed to support the substantial efforts of district reorganization, internal coordination, and shared planning.

Reports from school districts throughout the United States identify collaboration as a key variable in the successful implementation of inclusive education. Creating planning teams, scheduling time for teachers to work and teach together, and recognizing teachers as problem solvers are all dimensions reported as crucial to collaboration (Villa & Thousand, 2003). To help general educators to make this shift from a traditional environment to a collaborative culture, schools must clarify the new roles, for example, by making teachers aware of their legal responsibilities for meeting the needs of children with disabilities in the least restrictive environment

(Villa & Thousand, 2003). In addition, schools must provide meaningful training through a variety of vehicles, including inservice opportunities, coursework, coteaching, support network groups, and other coaching and mentoring activities.

Villa and Thousand (2003) conducted a study of more than 600 educators and found that collaboration emerged as the only variable that predicted positive attitudes toward inclusion among general and special educators as well as administrators. The literature on collaboration, relative to inclusion, is full of statements about people sharing goals, being able to listen and respond in productive ways. For inclusive education to work, educators must become effective and efficient collaborative team members and coteachers who work together to craft diversified learning opportunities for students with disabilities who have a wide range of interests, learning styles, and intelligences.

For the purpose of this study, the collaborative and consultation models were utilized as a general framework to address the issues of inclusion in respect to training, adequate support, and resources. Collaboration is appropriate for full inclusion because it allows educators to work together in many diverse ways to deliver services to all students, including students with disabilities. It is viewed as a style for direct interaction between at least two coequal parties voluntarily engaged in shared decision-making as they work toward a common goal (Karge, McClure, & Patton, 1995).

Collaborative consultation is an interactive process that enables teams of people with diverse expertise to generate creative solutions to mutually define

problems. The outcome produces solutions that are different from those that the individual team member would produce independently (Morsinki & Correa, 1991).

As more and more students with disabilities are being placed in general-education classrooms, it is imperative that teachers be well prepared to accept new roles and responsibilities for inclusive programs to be successful. In order for teachers to be prepared, high-quality and meaningful professional development must take place. Continued professional development is required for maintaining a successful inclusive environment (McLeskey & Waldron, 2002). Teachers need to expend a great deal of time and energy to pursue continuous professional development and adaptation of practice (Weiner, 2003). They must grow and mature through ongoing learning from experience, reflection, and problem solving, and theorizing about how to best meet the needs of students individually and collectively. General-education teachers must have time and ongoing learning through collaboration with colleagues.

The following factors were identified by McLeskey and Waldron (2002) as those which ensure professional development is effective and will lead to changes in teacher practices, attitudes and improved educational experiences for students with and without disabilities:

- School-based programs

- Use of coaching and other follow-up procedures

- Collaboration embedding professional development in their daily lives (p. 161).

Two approaches to collaboration, coteaching and cooperative teaching, are introduced in the following sections.

Coteaching Model

Coteaching has been identified as the most widely used model of teacher collaboration (Kerzner-Lipsky & Gartner, 1997). It has become a viable approach for instruction in many school situations and received increasing attention as a means of integrating students with disabilities into general-education classes (Cook & Friend, 1993). This model has also been used as an enrichment model for special-education students at the middle school or high school level (Graham & Harris, 1999).

The following variations of coteaching may be used for improving the delivery of educational services to all students, including those with disabilities (Kerzner-Lipsky & Gartner, 1997).

1.   One teach, one support: One teacher leads the class while another circulates and provides individual support or observes to gather data. This approach has serious liabilities. If the same teacher consistently observes or assists, that teacher may feel like a glorified aide and the students may have trouble responding to him or her as a real teacher (Cook & Friend, 1993).

2.   Station teaching: Teachers divide content and students, unlike parallel teaching, where the content is essentially the same. One drawback of this approach is that the noise and activity level may be unacceptable to some teachers (Cook & Friend, 1993).

3.   Parallel teaching: The teachers divide the class into heterogeneous groups and teach them simultaneously. The primary purpose is to lower the class size. This

approach has a drawback in that the noise and activity level must be monitored (Cook & Friend, 1993).

4. Alternative teaching: One teacher leads enrichment or alternative activities, while the second teacher reviews concepts with small groups needing re-teaching. There is a risk of stigmatizing students with disabilities by repeatedly grouping them for this purpose (Cook & Friend, 1993).

5. Team teaching: The teachers work together to deliver the same material to the entire class. In this approach, both teachers share the instruction of students. This is the type of approach that teachers may never enjoy (Cook & Friend, 1993) as it is most rewarding for veteran coteachers.

Cooperative Teaching Model

Cooperative teaching refers to a restructuring of teaching procedures in which two or more educators possessing distinct sets of skills work in a coactive and coordinated fashion to jointly teach heterogeneous groups of students in a general classroom (Bauwens & Hourcade, 1995). "Cooperative teaching occurs when educators change the way they teach something to facilitate a mutually beneficial learning environment" (Hewit & Whittier, 1997, p. 253). In cooperative teaching, two or more school professionals possessing a cluster of educational knowledge and skills complement each other's presence simultaneously in the general classroom for some part of the instructional day. Cooperative teaching has grown from a somewhat limited program that involved only general and special educators to a more expansive

and extensive integrated system involving all professional school support staff (e.g.,

speech therapists, school counselors, special educators, teachers of English as a second

language, Title I teachers, gifted/talented facilitators, school nurse) working and

teaching directly with their general-education colleagues (Bauwens & Hourcade,

1995).

Summary

According to Lombardi (1994), to be effective, responsible inclusion will

require consultation and collaboration. The differences between these two models are

the degree of responsibility for direct service to students with disabilities. The

consultant's role is to provide information and guidance; they usually have specialized

knowledge in such areas as behavior management, physical interventions, and

communication development. Collaborators, on the other hand, share teaching and

training responsibilities. They know how to use and modify teaching and testing

practices to accommodate a broad range of learning levels and styles. Often

collaborative and consultation services are combined into a collaborative/consultation

model. In a collaborative consultant model, the special-education teacher serves as a

"consultant" to one or more general-education teachers (Gartner & Gartner, 1997).

The organizational consultation focuses upon the process of change in the systems of

an organization or group of people. There are mutual interactions among the

intervention assistance teams such as shared decision making, and communication

skills are highlighted in this model. The consultant is the facilitator of the group (Morsinki & Correa, 1999).

Summary of Literature Review

This review of recent literature surveyed literature and research pertaining to the problem of this study. The problem discussed in this study states that general-education teachers feel that they are ill-prepared to meet the needs of students with disabilities in the inclusive environment. Their attitudes toward the education of students with disabilities in the general-education classroom do not universally regard the practice of inclusion as the solution strategy to the challenge of improving outcomes for students with disabilities. They repeatedly question their abilities to be successful in teaching students with special needs and believe that there is a need for more support from others, staff training to implement inclusion effectively, and a need for collaboration and communication among staff members.

The literature review shed light on the problem and confirmed much of the understanding of the problem. An overview of key research in the area of inclusion was discussed. It was found that general-education teachers' attitudes toward inclusion are the single most important factors in determining success in the inclusive environment. The real task in overcoming the problems regarding inclusion is to establish a uniform awareness of strategies for successful inclusion within the teaching community (Robinson, 1995). The trend toward serving children with disabilities in inclusive settings has resulted in the need for instructional approaches (i.e.,

differentiated instruction, multiple intelligences) that can be implemented in ongoing

classroom activities and routines. These must extend beyond a core curriculum to

include peer collaborative learning, flexible and customizable teaching materials, and

collaboration between special and general educators (Hemmeter, 2000). Continued

professional development in the area of collaborative and consultative strategies are

needed to maintain a successful inclusive and supportive environment for students

with disabilities or special needs in today's inclusive environment.

CHAPTER 3

METHODOLOGY

Chapter 3 describes the methodology used in this study. It is divided into the following sections: purpose of the study, the research questions to be answered, the research design, target population to be studied, instrumentation, procedures for data collection and data analysis, informed consent and confidentiality.

Purpose of the Study

The purpose of this case study was to (1) identify the attitudes and concerns of general-education teachers responsible for the education of students with disabilities, and (2) examine the extent to which professional development training influences general-education teachers' attitudes and practices regarding inclusion. Quantitative data were collected via a pre/post tests while qualitative data were collected via open-response survey questions and individual semistructured interviews to determine whether and how teachers' attitudes and practices in inclusion changed after training that addressed their concerns. An analysis of general educators' attitudes toward inclusive practices assisted in identifying issues and concerns for professional development training. Several areas addressed in this research included the attitudes and concerns of general-education teachers about inclusion, and how professional

development training impacts their attitudes and practices in the inclusive environment. Thus, questions examining teachers' attitudes toward students with disabilities and training were included in the survey instrument and semistructured interview process.

Research Questions

The study set out to address the following questions:

1. What attitudes and concerns about inclusion do general education classroom teachers identify as needing to be addressed through professional development?

2. To what extent does professional development training influence general-education teachers' attitudes about inclusion?

3. How did teachers' practices in inclusion change after training that addressed their concerns?

Research Design

The mixed-method design used in this study included (a) an assessment of teachers' attitudes toward inclusion and training through pre and post tests, and (b) individual semistructured interviews to determine how teachers' attitudes change toward students with disabilities after training.

Mixed-Method Design

This study used a case study approach (Mertens, 2002). The case was defined as the elementary schools within a suburban pre-K-8 school district. A description of the school district, the demographic profile of the communities it serves, and academic achievement (AYP) data are presented in subsequent sections of this chapter. Quantitative data were generated through pre/post tests that identified teachers' attitudes, professional development needs, and the extent to which training influences general-education teachers' attitudes and concerns about inclusion. Because a survey could not probe deeply into participants' beliefs, attitudes and inner experience (Gall et al., 2003), the researcher used a semistructured interview and open-ended survey items as a qualitative method to attain in-depth information regarding concerns and practices after training. Both methods presented can benefit from triangulation in this mixed-methods study, where one set of data corroborates another (Gay & Airasian, 2003). In this mixed-method methodology design, the researcher used both descriptive and narrative data. Mixed-method data analysis strategies were used. Sequentially, the quantitative data analyses were followed by qualitative data collection and analysis to gain more insight from the data collected from participants elicited for this study (Tashakkori & Teddlie, 1998).

Context of the Study

To acquaint the reader with the case context for this study, the following sections describe the school district, the communities it serves, and the teacher participants.

Description of Community

Four communities comprise the school district selected for this study. The district has three elementary schools, one middle school, and an administrative center. Rather than elementary schools serving specific geographical areas, each elementary school serves specific grade levels--pre-K through first grade, second and third grade, and fourth and fifth grade. The middle school serves all sixth through eighth grade students in the district. Students attending the four schools live in one of four communities (Communities 1, 2, 3, and 4). The 2000 US Census reported that the communities have many social issues that affect student learning. The unemployment rate was recorded as 8.7 % in Community 1, 5.2% in Community 2, 3.8% in Community 3, and 4.9% in Community 4. The per capita income was $12,336 in Community 1, $14,321 in Community 2, $26,536 in Community 3, and $20,750 in Community 4. In addition, the median income was $35,378 in Community 1, $32,687 in Community 2, $67,451 in Community 3, and $52,725 in Community 4 (see Appendix A). Census 2000 information also reported that 45.4% of children are raised by grandparents, 13.3% are raised in households run by women (the children's fathers are not present), and 33% of the women with children have never been

married. There has been a 25% increase, since the 1990 census, in the number of foster children, children being raised by grandparents and other relatives, and extended families living together.

In terms of education, according to the 2000 census, 9% of the adult population has less than a 9th-grade education; 15% have completed between 9th and 12th grade and have no diploma; and 27% have a high school diploma or General Educational Development (GED) certificate. Only 10% have a college degree. The 2000 Census data also reported that 10% of the community spoke a language other than English in the home. Appendix A shows the general demographics of the communities involved in this study.

<p align="center">Description of District</p>

According to the 2005 School Report Card Data, School A's (PreK-1st grade) enrollment was 372. Fifty-two percent of the students were economically disadvantaged, 12.6 had limited English proficiency, 2% had disabilities, and the mobility rate in School A was 41.7%. In terms of ethnicity, 4.6% of the students were White, 62.6% of the students were Black, 32.3% were Hispanic, and 0.5% of the students were Multi-racial/Ethnic (see Appendix A).

According to the 2005 School Report Card Data, School B's (2nd and 3rd grade) enrollment was 337. Of School B's students, 77.4% were economically disadvantaged, 12.6% had limited English proficiency, 43% had disabilities, and the mobility rate was 44%. In terms of ethnicity, 1.2% of the students were White, 79.5%

of the students were Black, 19% were Hispanic, and 0.3% were Asian/Pacific Islander (see Appendix A).

According to the 2005 School Report Card Data, School C's (4th – 5th grade) enrollment was 325 and 73.5% were economically disadvantaged, 9.8% had limited English proficiency, 30% had disabilities, and the mobility was 12.3%. In terms of ethnicity, 1.2% of the students were White, 81.50% of the students were Black, 16.6% were Hispanic, and 0.1% were Native American or Alaskan Native (see Appendix A).

In terms of academic performance, the district report card (Smith, 2004) data show that all subgroups except students with disabilities met or exceeded target levels for adequate yearly progress (AYP) in reading and math. Data show that only 21.1% of students with disabilities met or exceeded state standards in reading compared to 52.1% of all students. Not quite 30% of students with disabilities met or exceeded standards in math compared to 51.8% of all students who took the state assessment. The district failed to make the State AYP minimum target in reading and math (47.5) due to the low performance of students with disabilities (see Appendix B). Like many school districts, this district's overall passing rates on state tests met AYP criteria, yet performance by the students with disabilities subgroup affected the district's AYP status.

Participants

While the schools in the district could be considered a typical case (Gall et al., 2003) in terms of the district AYP profile, the participants selected for this case study

were a convenience population of 67 kindergarten through fifth-grade general-education teachers employed by a small school district located 30 miles south of Chicago, Illinois. Potential participants were chosen based on their convenience and availability (Creswell, 1994). The researcher acknowledges the limitations of the convenience population and will not generalize the results beyond the population used in this study. Although all teachers are involved in district and site-based professional opportunities, only those general-education teachers in grades K through five participated in this study, because they are working in a self-contained setting with a class size averaging about 25 to 29 students. The 2004 data on the Interactive Illinois Report Card (Smith, 2004) showed that the 91 teachers in the district had an average of 10 years teaching experience. The average class size is 27 students. In terms of gender, data show that 17.8% of the teachers were males compared to 82.2 % females.

In examining the qualifications of all 91 teachers, it was found that 69% of them had a bachelor's degree, 31% had a master's degree, and 4.8% had an emergency or provisional certificate. Two percent of the teachers held provisional certificates and had not met state licensing criteria, but were teaching under an emergency certificate and held a bachelor's degree or graduate certificate or degree in a nonteaching subject area.

To meet teachers' professional development needs, workshops are presented throughout the year to integrate reading/language arts programs, math, and writing using high quality programs, on-line curriculum and assessment tools. Teachers participate in summer academies focusing on the school improvement process,

curriculum alignment, development of common lesson plans, and engaged learning strategies to meet the needs of all students. Because the district is an approved state professional development service provider, teachers receive Continuing Professional Development Unit (CPDU) credits toward their certification renewal plan, which requires them to acquire 20% of the recertification units in special education. They are required to attend professional development workshops for a certain number of hours, and the courses offered enable teachers to receive continuing education units or college coursework credits while meeting the district's training goals.

In regard to professional development, all teachers participate in the extensive ongoing professional development opportunities provided throughout the year. Four district institute days are scheduled each year. In addition, school improvement planning days are scheduled for one half day each month. These half-day workshops cover topics such as school improvement strategies, language acquisition strategies, math concept strategies, technology, and special education and are mandatory for all teachers to attend. Each Wednesday, an additional hour after school is scheduled for curriculum and collaborative planning. In-service training is occasionally scheduled during the summer months and on Saturdays. Teachers receive a stipend for training that occurs in the summer, on Saturday, or outside of the regular school day.

Sixty-seven general-education teachers were asked to complete a 16-item survey developed by Wilczenski (1992) to determine their attitudes about inclusion (see Appendix C). Two open-ended questions were added to the survey to ascertain teachers' professional development needs. Information was provided at the beginning

of the survey that explained the purpose of the research and how it would be used.

The researcher explained that all information provided was confidential. It was also

stated that completing the survey implied consent for participation. As a follow-up,

ten volunteer teachers participated in a follow-up interview process to gain in-depth

and deeper perspectives about inclusion, training and practices. Table 1 describes the

interview participants from School A, B, and C.

Table 1

Interview Participants

Teacher	School	Gender	Years of Experience	Grade
1	A	Female	20	K
2	A	Male	14	1
3	A	Female	5	1
4	B	Female	11	2
5	B	Female	5	3
6	B	Female	10	3
7	C	Female	20	4
8	C	Female	5	4
9	C	Female	20	5
10	C	Female	5	5

Table 1 shows that 30% of the interviewees were from School A, 30% from School B

and 40% from School C. Ninety percent were female compared to 10% male. The

average years of teaching experience was 11.5.

Instrumentation

The purpose of this study was to examine general-education teachers' attitudes

and beliefs towards students with disabilities and to determine to what extent

professional training influenced their attitudes and practices. This was done by using a pre/post test and follow-up interviews. Permission was granted to reprint and use a survey instrument developed by Wilczenski (1992) (see Appendix D for permission to use this instrument). The *Attitudes Toward Inclusive Education Scale* (ATIES) was developed in 1992 by Felicia L. Wilczenski, State University of New York at Buffalo. The ATIES is a Likert scale with six response options (6=Strongly Agree, 5=Agree, 4=Agree Somewhat, 3=Disagree Somewhat, 2=Disagree, and 1=Strongly Disagree). The scale contains a definition of inclusion followed by 16 items related to the placement of students with disabilities (physical, academic, behavioral, and social) in a general-education classroom. Two open-ended questions were added to the instrument to identify areas of focus for professional development experiences. Demographic information was requested on the teacher survey instrument and was located at the end of the instrument to determine teacher background including experience, gender, number of years teaching, grade level and certification.

Validity and Reliability of the ATIES

The ATIES has been used by various researchers and tested for validity and reliability by its author (Wilczenski, 1992). The conceptual framework for this scale uses the work of Berryman (1989) concerning the measurement of attitudes toward mainstreaming. Sixteen items describing the four categories of social, physical, academic, and behavioral problems that may affect functioning in the classroom are contained in the ATIES. Items were constructed to address each of the four categories

of accommodations and after a pilot test, four statements pertaining to each category were retained for the final form of the scale (Wilczenski, 1992). Composite scores for each category were obtained by averaging responses across the items within the category.

To assess the validity of the ATIES, Wilczenski (1992) conducted a study using responses from 301 New Hampshire teachers to determine whether four measurable constructs (physical, academic, behavioral, and social) were present in the original 32-item scale. The teachers represented urban, suburban, and rural school districts across the state. Principal components analysis yielded four factors with values above 1.0. Items were assigned to factors on the basis of highest factor loadings. After examining the factor loadings, a decision was made to reduce the number of items in the scale from 32 to 16. Factor I was concerned with the integration of students whose physical disabilities required physical accommodations in the regular classroom. Items of concern in this factor addressed modifications that would be necessary when mainstreaming students with physical disabilities. Statements covered accommodations needed by students with sensory or motor impairments. No items covered intellectual, social, or behavioral disabilities. Factor II dealt with the integration of students requiring academic modification of the regular curriculum. Statements included in this factor dealt with type or degree of instructional modification that a student might require--from minor adjustments in regular classroom program to an entirely individualized curriculum. Items in Factor III addressed accommodations for students whose behavior was disruptive in class.

Statements that loaded highly on Factor IV dealt with the integration of students

whose social participation in the general-education class was deficient.

The four factors had sufficiently high reliability coefficients to indicate

adequate internal consistency. The factorial results supported the construct validity of

the scale. The four hypothesized dimensions of integration (physical, academic,

behavioral and social) of students with disabilities emerged as distinct factors in the

scale. Factor intercorrelations were moderate but low enough to indicate that the

teachers' attitudes toward inclusive education were multidimensional. Findings

indicated that teachers favored mainstreamed students with social deficits rather than

those needing physical accommodations. They were more agreeable to

accommodating students with physical disabilities than students needing academic

modifications, and more inclined to accommodate students with academic needs than

students with behavioral problems.

Interview Protocol

Data were collected through in-depth interviews to provide a qualitative

measure of inclusion attitudes and how teachers' practices changed after training that

addressed their concerns. The interview protocol (see Appendix E), comprised of five

open-ended questions, was designed to elicit respondents' attitudes toward inclusion

and best practices. The semistructured interview questions complemented the initial

two open-ended questions on the pretest and the major categories (academic, physical,

behavioral and social) on the instrument developed by Wilczenski (1992).

Data Collection

This section will provide information about how the quantitative and qualitative data were collected and analyzed and how participants were selected for the pretest/posttest and semistructured interviews.

A mixed-methods case study design was used that included collection of both quantitative and qualitative data to provide an in-depth analysis of how teachers feel about inclusion and to determine their professional development needs for training. A survey instrument and personal interviews were used to address the questions for this study. Sixty-seven first through fifth grade general-education teachers were administered the pre/post survey first in August and then in November 2006. Ten volunteer teachers were interviewed after the post test to elicit information regarding their practices and concerns after training.

Procedures for Data Collection

This study was conducted during the fall semester of the 2006 school year. After receiving permission to proceed from Northern Illinois University's Institutional Review Board, the investigator submitted a letter to the district superintendent requesting permission to conduct the study and use the district's secretary intraoffice and mail system to disseminate the survey materials to the schools. A meeting was held with each building principal to explain the study to be conducted and timelines.

The following procedures were used for the data collection process for Questions 1 and 2:

1. To assure both the confidentiality of individual responses on the surveys, the intra-office secretary assigned a coding number (01-67) printed on each survey. Each participant's name was checked off the list when the survey returned. The coding numbers written on each survey were provided solely for the purpose of determining participants and the number of surveys distributed and subsequently returned (Gay & Airasian, 2003). The list of names was locked in a file to prevent individual names from being connected to the results in any way.

2. In early August, an introductory letter was sent to each potential participant explaining the study to be conducted (see Appendix F). During the August teachers' institute day, a letter, along with the Informed Consent and survey was given to each teacher in a sealed envelope. A cover letter accompanied the survey, to explain the purpose of the research, what would occur during the research study, and the participants' rights to freely choose to decline participation without penalty. A letter to obtain Informed Consent from participants to participate in the interview process was included (see Appendix G). Teachers were asked to complete the 16 closed-ended survey items and two open-ended questions and return to the secretary. The survey took approximately 10-15 minutes to complete.

3. Teachers who failed to return the survey were sent a form from the intra-office secretary within three days. The sample letter is included in Appendix H.

4. After all surveys were collected, the secretary forwarded them to the researcher. The researcher then analyzed the data to identify areas that would be the focus of the training and professional development experience. These areas are described in Chapter 4.

5. During the months of September through November 2006, professional development training occurred. The initial training took place on September 22 and 23, 2006. Because the researcher is a Director of Curriculum and Assessment in the case district, training was conducted by presenters other than the researcher.

6. A detailed professional development plan based on the pretest was provided for the presenters. Training took place on three half days on September 22, October 20, and November 7, 2006, and two full days on days on September 23 and October 21, 2006 (see Appendix I for Professional Development Agendas).

7. At the end of professional development training, participants were asked to complete the posttest on November 7, 2006. The same coding numbers (01-67) were assigned to each participant.

8. In the second week of November to December 2006, to maximize range across buildings, three teachers from School A, three teachers from school B and four teachers from School C were interviewed. Regular-classroom teachers with four or more years of teaching experience in the regular classroom were chosen through a random stratified hat pull from the thirty survey respondents who indicated willingness to participate in the follow-up interviews.

9. Interview questions were used for the purpose of determining teachers' attitudes toward inclusion and to determine how teachers' attitudes and practices changed toward students with disabilities after training. See Appendix E for the interview protocol.

The following procedures were used for the purpose of collecting and analyzing qualitative data for Question 3:

1. Teachers were notified via a letter that they had been selected to participate in the interview process. Specific times were scheduled for an interview.

2. During the interview process, the interviewer informed the participants of the purpose and made assurances that responses would be treated confidentially.

3. The researcher asked five open-ended questions during separate interviews which lasted from approximately 30 to 40 minutes. The same protocol was used with each of the 10 teachers interviewed.

4. The interviews were tape recorded with permission granted from each respondent. Member checks were conducted and transcripts were given to each interviewee following each interview to ensure validity (Mertens, 2002).

5. In November, data analysis was performed to determine any change in teachers' attitudes and practices after training.

Procedures for Data Analysis

Quantitative data were collected using 16 closed-ended test items while qualitative data were collected using open-ended survey questions and five open-

ended semistructured interview questions that addressed the research questions
investigated in this study.

For quantitative analysis, the Statistical Package for the Social Sciences 13
(SPSS) was used to perform the statistical procedures. The software was used to
compare the pretest/posttest scores for the same group of general-education teachers in
this study (Gay & Airasian, 2003). For data analysis, descriptive statistics (pretest)
and Cohen's d and a paired t-test (posttest) were used. Descriptive statistics were used
to address Question 1: What attitudes and concerns about inclusion do general
education classroom teachers identify as needing to be addressed through professional
development? The paired t-test and Cohen's d was used to answer Question 2: To
what extent does professional development training influence general-education
teachers' attitudes and concerns about inclusion? Differences were measured using
the comparison of the baseline data before and after professional development training
using the ATIES (Wilczenski, 1992).

A qualitative interpretation helped to explain or elaborate on the quantitative
results. A coding process of the two open-ended questions on the pretest was
completed and a summary of patterns that emerged through the process were used to
determine professional development training. Interviews were used to address
questions that illuminate issues that cannot be addressed by quantitative methods (Gay
& Airasian, 2003) and to study the perspectives of the research participants toward
events, beliefs, or practices. The responses to five semistructured open-ended
interview questions were coded using the content analysis process (Fraenkel &

Wallen, 2000) to determine teachers' attitudes, challenges, feeling and beliefs,

training, and additional concerns they had regarding the inclusion of students with

disabilities. The themes and patterns were analyzed, in conjunction to the researcher,

by two external raters (Gall et al., 2003) who have doctoral degrees and are working in

the field of special education, who were assigned to examine the qualitative data after

a content analysis was completed. The interview transcriptions were examined to

locate common themes and patterns that emerged through content analysis. A coding

sheet was used to look for common patterns that emerged under the four major

categories: academic achievement, physical disabilities, behavioral and social

integration. In addition, other key terms that dealt with several issues noted throughout

recent literature--training, support, resources and other words or phrases related to the

core categories--were also included on the coding sheet.

After the analysis process, a meeting was scheduled with both reviewers

separately in December, 2006 to share a summary of the themes and patterns that were

identified through the coding process. At that time, reviewers were asked to code,

tally and tabulate the frequency occurrences of words, phrases and sentences specified

by the researcher on the coding sheet. Reviewers were encouraged to add other

themes and patterns they felt should be included on the coding sheet. Both external

reviewers met separately again with the researcher in January 2006 to summarize their

findings of common themes, patterns and key phrases that emerged to verify data

collected to address how teachers' practices in inclusion changed after training. Both

reviewers agreed with the researcher's coding system, findings of the themes and patterns that related to the responses of the 10 general-education teachers in the study.

To conclude, the verification of the qualitative data provided accurate reporting of the events, concerns and issues that contribute to inclusion as perceived by the participants in this case study. Data analysis was based on categorizing and interpreting the interviews. In summary, the pre/post test used items with a Likert response scale in which the individuals were asked to indicate their level of agreement with various statements. The triangulation with the qualitative data facilitated accurate reporting of the events, concerns and issues that contribute to inclusion as perceived by the participants in this case study. A coding process was utilized to assign teachers' responses to the initial open-ended survey questions into categories that formed the basis for planning professional development experiences. In analyzing interview data, the researcher identified discernible themes and patterns (Gall et al., 2003) to gain in-depth and deeper perspectives about teachers' attitudes and practices about inclusion.

<div align="center">Summary</div>

The purpose of this case study was to examine the extent to which professional development influences teachers' attitudes and concerns about inclusion. A mixed-method design was used to study 67 general-education teachers in a small district to assess their opinions and actions in their classroom settings regarding inclusion. Teachers were asked in August 2006 to complete the ATIES as a pretest developed by

Wilczenski (1992) to identify their attitudes, concerns and professional development needs. Pretest data were analyzed using a descriptive statistics (means and standard deviation) technique to inform professional needs for training to occur to increase teachers' knowledge of inclusion and best teaching practices. A posttest was conducted following the training to determine to what extent professional development training influences teachers' attitudes and concerns. A paired t-test was used to compare the means of the two tests, and to test whether the differences between the means are statistically significant. In addition, the effect size was also calculated for each case study to summarize the overall effect of professional development experience (Gay & Airasian, 2003). Following the posttest, 10 teachers were interviewed for the purpose of determining their attitudes toward inclusion and to determine how their attitudes changed towards students with disabilities after training.

CHAPTER 4

FINDINGS

Introduction

The purpose of this case study was to (1) identify the attitudes and concerns of general-education teachers responsible for the education of students with disabilities, and (2) examine the extent to which professional development training influences general-education teachers' attitudes and practices regarding inclusion. This chapter presents the findings of the study based on the mixed data collected for this case study. The quantitative data were collected through pre-and posttests and analyzed using the SPSS version 13.0 statistical software package. The pretest data were analyzed using descriptive statistics. The pre- and posttest data were used to compare data using a paired t-test. The effect size was calculated to measure the difference between the pre-post test mean scores. The qualitative data were collected through two open-ended questions at the end of the pretest and ten semistructured interviews conducted at the end of the posttest. Semistructured interview transcripts were coded to illuminate further how teachers' attitudes toward inclusion and practices changed after training that addressed their concerns.

Findings, according to the research questions, are based on both quantitative and qualitative data presented in the following sections of this chapter.

An analysis of the quantitative data is presented in two sections:

1. Demographic description of the participants in the study, and

2. School A, B, and C survey findings are related to the three research questions.

The survey findings are presented in two parts. The first part is the pretest data and the frequencies in terms of percentages associated with the responses, including a narrative explaining the results. The second part is the posttest data with narratives explaining significant differences or notable changes between the pretest and posttest. An analysis of the qualitative data is also presented followed by a summary.

For this study, a total of 67 general-education kindergarten through fifth grade certified teachers were invited to participate. The following section describes the demographics of the study participants in this study.

Descriptive Profile of Case Study Participants

In September 2006, 67 pretests were distributed to K through fifth-grade regular-education teachers. The return rate was 100%. In November, 67 posttests again were redistributed to K through 5th-grade study participants with a return rate of 50 or 75%. Study participants completed a demographic section at the end of the pre- and post tests. The demographic data have been used to describe the study participants in the subsequent tables.

Table 2 describes the gender of the participants who completed the pretest only and those who completed both the pre-and posttest in this study.

Table 2

Gender of School A, B, and C Participants

Gender	Number of Teachers Pretest Only	Percentage	Number of Teachers Pre & Posttest	Percentage of Sample
Female	60	90%	44	88%
Male	7	10%	6	12%
Total	67	100.0	50	100.0

The following tables describe the teaching demographics of participants in this study. These data are essential to understand the experience and certification of the participants. Table 3 presents information regarding the grade level assignments of the study participants during the time of the study for the pre-post test. Pretest data indicate that 39 % of the participants were teaching in School A, grades K and first. Kindergarten is a full day program and the average class size of K-1 is 20. The data also indicated that 33% were teaching in School B, grades second and third, and 28% were teaching in School C, grades four and five, with an average class size of 26. Data indicated that 30% of the teachers who completed the pre/post test taught in K and first grade, 38% in grades two and three, and 32% of the teachers taught in grades four and five.

Table 3

Grade Levels Taught at School A, B, and C

Grade Level	Number of teachers pretest only	Percentage	Number of Teachers pre & posttest	Percentage of Sample
School A: K-1	26	39%	15	30%
School B: 2-3	22	33%	19	38%
School C: 4-5	19	28%	16	32%
Total	67	100%	50	100%

Table 4 presents the frequency information regarding teaching certification for the study participants. The data indicate that for the pretest, 96% of the participants held an Illinois type 03 elementary education teaching certificate compared to 94% for the pre/posttest. For the pretest 4% held an Illinois type 04 early childhood teaching certificate compared to 6% for the pre/post test. It was found that three participants are pursuing a Type 75 in educational administration certification.

Table 4

Teacher Certification for School A, B, and C Study Participants

Type of Certifications	School A Frequency		School B Frequency		School C Frequency		Percentages	
	Pretest only	Pre & post test	Pretest only	Pre & post test	Pretest only	Pre & post test	Pretest only	Pre & post test
Type 03	23	12	22	19	19	16	96%	94%
Type 04	3	3	0	0	0	0	4%	6%

Table 5 indicates the total number of years of teaching experience for the participants in this study. Pretest data illustrate that 49% of the participants had 0-5 years of teaching experience compared to 38% for the pre/post test. Twenty-four percent had 6-10 years of teaching experience for the pretest and 24% for both pre/post test. Data also indicated that 17% of the participants had 11-20 years of teaching experience compared to 22% for the pre/post test. Ten percent of the pretest participants had 20+ years of teaching experience compared to 16% of those who completed both pre/post test. These data include the total years of teaching experience including experience in any school district prior to employment in the case schools.

Table 5

Study Participants' Number of Years in the Education Profession

Number of Years	Number of teacher pretest only	Percentage Pretest only	Number of Teachers Pre & Posttest	Percentage Pre & Posttest
0-5	33	49%	19	38%
6-10	16	24%	12	24%
11-20	11	17%	11	22%
20+	7	10%	8	16%
Total	67	100%	50	100%

Survey Findings

This section presents the results of the pre- and posttest data analysis based on

the research questions of this dissertation study. The pretests (n = 67) by case schools

(A: K-1; B: 2-3 and C: 4-5) were analyzed using the descriptive statistics and

frequency distribution. The posttest data (n = 50) were analyzed using the paired t-test

to compare the mean scores at the significance level of 0.05. Data were collected on

both the pre-and posttest regarding each of the four factors described in Chapter 4:

academic, physical, behavioral, and social. The pretest data were analyzed using

descriptive statistics and frequency distribution to address research question number

one regarding attitudes and concerns about inclusion prior to the professional

development experience. The response frequencies, means, and standard deviations

were obtained for all subcategory survey items categorized under the four factors. The

posttest data were analyzed using the paired t-test to answer research question number

two regarding any change in teacher attitudes and concerns following the professional

development experience. The data were used to compare the pre-and posttest

responses at a significance level of .05. Content analysis was used to categorize and code responses to the open-ended questions included on the pretest. Results based on the research questions are presented detailing each of the case study schools.

Pretest Findings

The first research question asked, "What attitudes and concerns about inclusion do general education classroom teachers identify as needing to be addressed through professional development?" To answer this question, data were collected through test items addressing four categories: academic integration, physical integration, behavioral integration and social integration. Teachers were asked to respond to 16 closed-ended items (four items for each primary category). In addition, the pretest included two open-ended questions to determine teachers' professional needs before training. These questions asked teachers to identify challenges they encountered in implementing inclusion and knowledge and skills they felt they needed to be more effective in inclusive teaching.

Participants were asked to respond using a Likert response scale rating from 1-6, with 6 representing "Strongly Agree," 5 representing "Agree," 4 representing "Agree Somewhat, 3 representing "Disagree Somewhat," 2 representing Disagree, and 1 representing Strongly Disagree. Tables 6, 7 and 8 present pretest results for schools A, B, and C, respectively, prior to the inclusion workshops. Utilizing the ATIES, participants responded to multiple items categorized under the following four factors (Wilczenski, 1992).

Table 6

School A: ATIES Prior to Staff Development

Categories	% Strongly Agree	% Agree	% Agree Somewhat	% Disagree Somewhat	% Disagree	% Strongly Disagree
ACADEMIC						
Academics-One Year	23.1	46.2	19.2	7.7	0	3.8
Academics-Two Years	0	7.7	39.5	26.9	11.5	15.4
Self-help Skills	19.2	42.3	15.4	7.7	15.4	0
Functional	11.5	34.6	23.1	11.5	15.4	3.8
PHYSICAL						
Lack of Speech	26.9	23.1	23.1	11.5	15.4	0
Vision Impairments	23.1	19.2	30.8	11.5	15.4	0
Hearing Impairment	11.5	19.2	30.8	19.2	11.5	7.7
Mobility	19.2	30.8	26.9	7.7	11.5	3.8
BEHAVIORAL						
Physical Aggression	0	3.8	23.1	46.2	23.1	3.8
Verbal Aggression	7.7	19.2	38.5	15.4	19.2	0
Behavioral Disruption	0	11.5	53.8	19.2	7.7	7.7
Noncompliance	0	34.6	26.9	26.9	11.5	0
SOCIAL						
Shyness	57.7	34.5	3.8	3.8	0	0
Speech Disorders	34.6	34.6	19.2	3.8	7.7	0
Language Impairments	34.6	46.2	3.8	7.7	7.7	0
Absenteeism	19.2	57.7	11.5	3.8	7.7	0

Note: (N=26)

Table 7

The Mean and Standard Deviations for School A Teachers on the

ATIES Prior to Professional Development

Categories	Mean	Standard Deviation
ACADEMIC		
Academics-One Year	4.73	1.15
Academics-Two Years	3.11	1.21
Self-Help Skills	4.42	1.33
Functional	4.03	1.39
ACADEMIC COMPOSITE	4.07	1.27
PHYSICAL		
Lack of Speech	4.34	1.41
Vision Impairments	4.23	1.36
Hearing Impairment	3.76	1.42
Mobility	4.26	1.40
PHYSICAL COMPOSITE	4.14	1.39
BEHAVIORAL		
Physical Aggression	3.00	0.89
Verbal Aggression	3.80	1.20
Behavioral Disruption	3.53	1.06
Noncompliance	3.84	1.04
BEHAVIORAL COMPOSITE	3.54	1.79
SOCIAL		
Shyness	5.46	0.76
Speech Disorders	4.34	1.41
Language Impairments	4.92	1.19
Absenteeism	4.76	1.06
SOCIAL COMPOSITE	4.12	1.09

Note: Maximum scores = 6.0 for each subcategory. (N=26)

Table 8

Pretest Percentages of School B Respondents on the ATIES Prior to Staff Development

Categories	% Strongly Agree	% Agree	% Agree Somewhat	% Disagree Somewhat	% Disagree	% Strongly Disagree
ACADEMIC						
Academics-One Year	50.0	45.5	4.5	0	0	0
Academics-Two Years	13.6	22.7	22.7	22.7	18.2	0
Self-Help Skills	22.7	18.2	36.4	13.6	9.1	0
Functional	18.2	27.3	27.3	13.0	13.6	9.1
PHYSICAL						
Lack of Speech	13.6	22.7	27.3	13.6	13.6	9.1
Vision Impairments	13.6	27.3	22.7	9.1	18.2	9.1
Hearing Impairments	9.1	22.7	18.2	27.3	13.6	9.1
Mobility	22.7	31.8	36.4	4.5	4.5	0
BEHAVIORAL						
Physical Aggression	0	0	18.2	45.5	18.2	18.2
Verbal Aggression	0	31.8	22.7	27.3	9.1	9.1
Behavioral Disruption	0	4.5	22.7	3.8	22.7	18.2
Noncompliance	4.5	36.4	36.4	13.6	4.5	4.5
SOCIAL						
Shyness	63.3	31.8	4.5	0	0	0
Speech Disorders	27.3	36.4	18.2	9.1	0	0
Language Impairments	40.9	40.9	13.6	0	4.5	0
Absenteeism	45.5	40.9	9.1	4.5	0	0

Note: (N = 22)

- Factor I: Academic is concerned with the integration of students requiring academic modifications of the regular class curriculum (achievement one or two-years, self-help skills, functional academic training).

- Factor II: Physical is concerned with the integration of students whose physical disabilities required physical accommodations in regular classes (lack of speech, vision, hearing impairments, mobility problems).

- Factor III: Behavioral addressed the need to accommodate for students whose behavior was disruptive in class (physical, verbal aggression, disruptive behavior, conflict with authority/noncompliance).

- Factor IV: Social dealt with integrating of students whose social participation in regular class was deficient (shyness, language disorders, speech impairments, absenteeism).

The professional development needs of School A, B, and C are cast in terms of agreement and disagreement percentages in each of the factors among the study participants. The strongly agree, agree and somewhat agree responses were considered as agreement responses; and disagree somewhat, disagree, and strongly disagree responses were considered as disagreement responses in determining the teachers' overall levels of agreement or disagreement. Agreement indicated a positive perception of students with disabilities in the general classroom while disagreement responses indicated a negative perception of students with disabilities in the general classroom. Factors are clustered under the four categories in the order in which they are discussed in Tables 6, 7, and 8.

As noted in Table 6, teachers at School A generally agreed that students in the social category (92.2%) should be in the general-education classroom. In addition, agreement (80%-90%) was present for the categories of academic-one year below grade level, speech disorders, language impairments and absenteeism. Levels of agreement for the categories of mobility, visual impairments, self-help and lack of speech were in the 70-79% range (73.1% to 76.9%). The categories of verbal

aggression, behavioral disruption, functional, hearing impairments and noncompliance had agreement levels ranging from 61% to 69.2%. Two areas garnered agreement from less than half of the general-education teachers in School A: 46.2% in the area of academic two years below grade level and 26.9% in the area of physical aggression.

Consistent with the agreement findings, 73.1% of the participants in School A disagreed that students who are physically aggressive toward their peers should be included in regular classes, and 53.8% of the participants also disagreed that students whose academic achievement is two or more years below the other students should be in regular classes.

In summary, data show that "physical aggression" for School A is a key challenge in inclusive classrooms according to regular classroom teachers, followed by academic achievement-two years below grade level. Less than half, but near or above one-third of teachers, had concerns about students in general classrooms with verbal aggression, disruptive behavior, functional academic training needs, hearing impairments, and noncompliance. Table 7 includes a summary of means and standard deviations on each category and subcategories pertaining to general-education teachers' concerns about inclusion prior to professional development experiences.

The composite mean scores and standard deviations shown in Table 7 for School A showed that teachers generally agreed (Choices 4-5) with the placements for students with physical and social needs than students with academic and behavior problems. It is interesting to note that students were not accepted (Choices 1-3) by

teachers in all of the behavioral categories followed by students whose achievement is two years below other students in the grade.

As noted in Table 8, teachers at School B generally agreed that students in the social category specifically in the area of shyness (100%) should be in the general classroom. In addition, high levels of agreement were present for each of the categories in the areas of language impairments, absenteeism and mobility (90.9% to 95.5%). In the area of language disorders, 80.0% of the teachers agreed that students who have difficulty expressing their thoughts verbally should be in regular class. In the areas of self-help, functional academic, and noncompliance, the level of agreement ranged from 72.7% to 73.3%. Between half and two-thirds of general-education teachers at School B indicated agreement with academic-two years, verbal aggression, visual impairments, hearing impairments and lack of speech. Two areas garnered agreement from less than one-third of School B teachers: students who could not control their disruptive activities (27.3%) and physical aggression (18.2%).

Disagreement responses, indicating concerns about inclusion in the general classroom, occurred among approximately one-third to half of the teachers in the areas of hearing impairments (50.0%), academic-two years behind grade level (40.9%), verbal aggression (45.5%), visual impairments (36.4%) and lack of speech (36.4%). More than three-fourths of the teachers expressed concern about the area of physical aggression (81.9%).

An analysis of the data for School B indicates that the key challenges are in the category of behavioral factors, specifically in disruptive behavior, verbal and physical

aggression. Academic concerns were in the area of academic-two years. The mean and standard deviations of these test items are discussed in the next session pertaining to general-education teachers' concerns about inclusion prior to professional development experiences.

The composite mean scores and standard deviations shown in Table 9 for School B showed that teachers generally agreed (Choices 4-5) with the placements for students with social and academic needs than students with physical and behavior problems. It is interesting to note that students were not accepted (Choices 1-3) by teachers in all of the behavioral categories followed by students whose achievement is two years below other students in the grade. Data further show that there were some major concerns with all areas of the behavioral category, specifically in the areas of disruptive and physical behavior.

As reflected in Table 10, teachers at School C generally agreed that students in the social category, specifically in the area of shyness (100%) and academics-one year (94.7%), should be included in the general classroom. The percentages of agreement for mobility, speech disorders and absenteeism also garnered strong support among School C teachers. Over half of teachers at School C supported general class placement for physical areas of lack of speech, vision, and hearing impairments, and mobility. The chief area of concern for School C teachers lay in the behavioral category. Over half of the teachers disagreed that students who are verbally aggressive toward their peers should be in regular class. Similarly, the percentages of teachers who disagreed with placing disruptive or physically aggressive students in

regular classes were 63.2% and 68.4%, respectively. However, noncompliance was

not an area of significant concern.

Table 9

The Mean and Standard Deviation for School B Teachers on the ATIES

Prior to Professional Development

Categories	Mean	Standard Deviation
ACADEMIC		
Academics-One Year	5.45	0.59
Academics-Two Years	3.90	1.34
Self-help Skills	4.31	1.24
Functional	4.22	1.30
ACADEMIC COMPOSITE	4.47	1.11
PHYSICAL		
Lack of Speech	3.81	1.53
Vision Impairments	3.81	1.59
Hearing Impairment	3.59	1.46
Mobility	4.63	1.04
PHYSICAL COMPOSITE	3.96	1.15
BEHAVIORAL		
Physical Aggression	2.63	1.00
Verbal Aggression	3.59	1.29
Behavioral Disruption	2.72	1.16
Noncompliance	4.09	1.15
BEHAVIORAL COMPOSITE	3.25	1.15
SOCIAL		
Shyness	5.59	0.59
Speech Disorders	4.54	1.47
Language Impairments	5.13	0.99
Absenteeism	5.27	0.82
SOCIAL COMPOSITE	5.13	0.54

Note: Maximum scores = 6.0 for each subcategory. (N = 22)

Table 10

Pretest Percentages of School C Respondents on the ATIES Prior to Staff Development

Categories	% Strongly Agree	% Agree	% Agree Somewhat	% Disagree Somewhat	% Disagree	% Strongly Disagree
ACADEMIC						
Academics-One Year	31.6	47.7	15.8	5.3	0	0
Academics-Two Years	10.5	26.3	26.3	15.8	21.1	0
Self-help Skills	10.5	26.3	26.3	21.1	10.5	5.3
Functional	15.8	26.3	26.3	21.1	10.5	0
PHYSICAL						
Lack of Speech	5.3	47.4	26.3	10.5	10.5	0
Vision Impairments	15.8	47.4	15.8	10.5	10.5	0
Hearing Impairments	5.3	47.4	21.1	10.5	10.5	5.3
Mobility	15.8	52.6	15.8	0	0	0
BEHAVIORAL						
Physical Aggression	0	10.5	21.1	36.8	15.8	15.8
Verbal Aggression	0	15.8	31.6	36.8	5.3	10.5
Behavioral Disruption	0	21.1	15.8	31.6	10.5	21.1
Noncompliance	5.3	3.6	31.6	15.8	5.3	10.5
SOCIAL						
Shyness	68.4	26.3	5.3	0	0	0
Speech Disorders	15.8	57.9	15.8	10.5	0	0
Language Impairments	31.6	36.8	10.5	5.3	15.8	0
Absenteeism	26.3	52.6	5.3	10.5	5.3	0

Note: N = 19

In regard to the academic category, 36.9% of the teachers felt that students whose academic achievement is two or more years below the other students in the grade should not be in regular classes. An analysis of the data for School C indicates that the key challenges are in the behavioral category. Academic concerns were in the area of academic-two years.

In summary, regardless of grade level or school, teachers in the district generally supported inclusion for students with disabilities in social and physical categories and those whose academic achievement was one year less than their grade-level peers. Challenges lay in the behavioral category (especially in the area of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

physical aggression) and in the academic area when students' performance is two or

more years below grade level. The mean and standard deviation of these findings are

presented in Table 11.

Table 11

The Mean and Standard Deviation for School C Teachers on the ATIES

Prior to Professional Development

Categories	Mean	Standard Deviation
ACADEMIC		
Academics-One Year	5.05	0.84
Academics-Two Years	3.89	1.32
Self-Help Skills	3.89	1.37
Functional	4.15	1.25
ACADEMIC COMPOSITE	4.25	1.19
PHYSICAL		
Lack of Speech	4.26	1.09
Vision Impairments	4.47	1.21
Hearing Impairment	4.10	1.32
Mobility	4.52	1.26
PHYSICAL COMPOSITE	4.33	1.22
BEHAVIORAL		
Physical Aggression	2.94	1.22
Verbal Aggression	3.36	1.16
Behavioral Disruption	3.05	1.43
Noncompliance	3.84	1.38
BEHAVIORAL COMPOSITE	3.29	1.29
SOCIAL		
Shyness	5.63	0.59
Speech Disorders	4.78	0.85
Language Impairments	4.63	1.42
Absenteeism	4.84	1.11
SOCIAL COMPOSITE	4.97	0.99

Note: Maximum scores = 6.0 for each subcategory. (N = 19)

The composite mean scores and standard deviations shown in Table 11 for

School C showed that teachers generally agreed (Choices 4-5) with the placements for

students with social, physical, and academic needs than students with behavior problems. It is interesting to note that students were not accepted (Choices 1-3) by teachers in all of the behavioral categories followed by students whose achievement is two years below other students in the grade. Data further show that there were some major concerns with all areas of the behavioral category, specifically in the areas of disruptive and physical behavior.

Open-Ended Responses Prior to Professional Training

To identify general-education teachers' professional development needs, two open-ended response questions on the pretest asked participants about challenges they had encountered in implementing inclusion and what knowledge and skills they felt were needed to be more effective in inclusive teaching. A coding process of the two open-ended questions was completed and a summary of patterns that emerged through this process was used to determine professional development training. The responses were analyzed using the content analysis process (Fraenkel & Wallen, 2000) to categorize and code responses to identify professional development needs prior to training. The following paragraphs report these findings detailing the common themes and patterns for each case study school.

Question 1

Research Question 1 asked, "What attitudes and concerns about inclusion do general-education classroom teachers identify?"

School A

Two dominant patterns in the areas of academic and behavioral categories related to inclusion were evident in response to the challenges teachers encountered in implementing inclusion. In the academic area, the challenges centered on (1) accommodating differences, (2) the need to provide individual attention, and (3) the need for support. Several participants responded with key phrases or words regarding accommodating differences:

- "Being able to accommodate students who are in different academic levels";

- "I have observed that students who were academically very behind in 1st grade needed small group work outside of the classroom and when special-education teachers had to pull out from several classrooms, scheduling become a problem"; and

- "The greatest challenge that I have encountered in implementing inclusion is grouping children for center activities," and "being able to accommodate students who are in different academic levels."

Key phrases or statements regarding the need to provide individual attention included:

- "At times, it seems that most of my attention is given to students with disabilities";

- "I find that some students need more individualized 1-1 support in certain

areas to be more successful in the classroom";

- "The tasks seem to be impossible to ask from a student that is reading 2

or more years below the included classroom"; and

- "It is a challenge to meet the needs of all students without help in the

classroom."

Participants' responses regarding the need for support include:

- "One primary challenge has been insufficient support from

administration and other staff members/paraprofessionals";

- "Class size need[s] to be small or help is needed in the classroom";

- "It appears the special-education teacher has to spread herself out too thin

and the classroom teacher was sometimes left without an assistant or teacher to help

her with her class which contained inclusive students"; and

- "If the classrooms had aides, I think more attention can be given to all

students."

These statements suggest that there is a need to provide professional

development concerning the integration of students requiring academic modifications

of the curriculum, support (personnel), and differentiated instruction strategies. The

above statements are consistent with Questions 1, 5, and 13 of the pretest concerning

the academic achievement of students two or more years behind. These data

reinforced the survey responses that indicated major academic issues, two or more

years behind (Factor I), as one of the key challenges that participants in the study experienced prior to professional development experience.

Patterns related to behavior emerged through the coding process. Several key phrases and words were coded such as:

- "It is difficult if a student's behavior interferes with the learning of other students;"

- "Behavior problems are too disruptive for class";

- "The ability to give equal attention to the gifted or well-behaved students when I was constantly redirecting the behavior issues of the noncompliant students is a challenge"; and

- "I found it very difficult when a child was ADD for example."

The above statements of the respondents indicated that behavioral issues were also experienced by participants prior to staff development training. The above statements are consistent with items 2, 8, and 12, and 15 of the pretest concerning students' behavior. These data reinforced the survey responses that indicated behavioral issues (Factor III) as one of the dominant challenges that participants in the study experienced prior to professional development experience.

In summary, the content analysis coding process revealed that academic and behavioral issues were two core factors of inclusion that participants in School A stated most as part of their experience when teaching students with disabilities. Participants' responses to the open-ended questions were consistent with the responses on the Likert scale survey section. A few participants responded with phrases

concerning the issue of time, support, training, materials and accommodation/ modification of the curriculum. Participants were concerned about issues related to students' academic and behavior rather than physical disabilities or social participation in the classroom.

School B

Several patterns at School B surrounding support, resources (time/materials) and training (academic/differentiated instruction) were evident in response to the challenges teachers encountered in implementing inclusion. Study participants responded with key phrases or words concerning support such as:

- "support, planning time";

- "lack of personnel";

- "not given the help I need with an extra person, planning individual

lesson, etc."; and

- "no support from aides, teachers, speech, etc."

Resource (time/materials) issues also were mentioned:

- "constantly reinventing wheels and not enough time to do it";

- "lack of specific curriculum for retarded, other severe needs";

- "lack of at-level materials that correspond to regular education

curriculum and coordinating schedules"; and

- "the kids with certain issues don't get a lot of time spent on their needs."

Teachers also voiced challenges in the area of training (Academic/Differentiated Instruction):

- "not enough professional development; not enough training";

- "effectively teaching the students"; and

- "assistance needs, differentiation training, special-education training."

Other patterns that emerged were issues of time in terms of training:

- "not enough help"; and

- "need time for planning."

Differentiated instruction was a dominant theme. Participants used the following comments:

- "I have had students with several types of challenges including: visual impairment, physical disabilities, emotional disabilities and speech impairments[;] it is sometimes difficult to always find ways to include these students in all activities";

- "differentiated learning for every lesson"; and

- "trying to meet all students' needs."

These statements used by the majority of the participants suggest that there is a need to provide professional development concerning the integration of students requiring academic modifications of the curriculum. The above statements are consistent with Items 1, 5, and 13 of the pretest concerning the academic achievement of students two or more years behind. These data reinforced the survey responses that indicated major academic issues (Factor I) as one of the key challenges that participants in the study experienced prior to professional development experience.

In summary, the content analysis coding process revealed that issues related to academic factors and training were dominant factors of inclusion that participants stated most as part of their experience when teaching students with disabilities. Participants' responses to the open-ended questions were consistent with the responses on the Likert scale survey section. Participants were concerned about issues related to students' academics relevant to resources in terms of time/materials and training in the area of differentiated instruction.

School C

Dominant patterns related to teachers' awareness (of different disabilities, of coteaching options), the effects of disruptive behavior, and the need to learn strategies for making academic adaptations and accommodations were evident in responses to the open-ended question concerning the challenges teachers encountered in implementing inclusion.

Concerning the awareness of students with various disabilities and coteaching options, several participants responded with key phrases or words such as:

- "need to adapt materials to accommodate physical disabilities";

- "teachers are not coteaching as much as they should and instead use them as aides";

- "also some teachers are not aware of strategies to implement in the classrooms with special-education learners or how to utilize these with other learners"; and

- "adjusting the work for the students who are not capable and knowing how to recognize the different disabilities."

A second pattern related to student behavior emerged through content analysis process:

- "children with behavior disorders are also a challenge because teachers may assume that the child's intellect is lower because of their negative behavior";

- "extremely aggressive behavior, both physical and behavioral, completely destroy a cohesive classroom climate"; and

- "I have had students who continuously interrupt the class and it takes time away from other students"; and

- "making modifications for slower learners."

These statements used by the participants imply that there is a need to provide professional development addressing the need to accommodate for students whose behavior was disruptive in class. The above statements are consistent with Questions 2, 8, and 12 of the pretest concerning the behavior of students in the classroom. These data reinforced the survey responses that indicated major behavioral issues (Factor III) as one of the key challenges that School C participants in the study experienced prior to professional development experience.

In summary, the content analysis coding process revealed that academic and behavioral issues were two core factors of inclusion that participants identified most as challenges in their experience when teaching students with disabilities. Participants' responses to the open-ended questions were consistent with the responses on the

Likert scale survey section. Participants were more challenged by issues concerning students' academic and behavior rather than physical disabilities or social participation in the classroom.

Question 2

The second content analysis coded the open-ended response according to what knowledge and skills teachers felt they needed to be more effective in inclusive teaching before training.

School A

In the area of academics, teachers desired to learn about ways to meet individual needs within the large class setting.

- "ways to address the specific needs of a certain child's (IEP goals) in an effective way in the large group setting";

- "understand that all children are different and need different levels of attention, and all children learn differently";

- "I would like to learn more techniques to help teach the IEP students (which really would benefit all the class with the wide range of abilities)"; and

- "I need more special-education classes and more information on differentiated instruction [so] I can help the teachers."

The second pattern that emerged when coding for participants' training needs involved learning how to identify student needs in order to plan differentiated instruction.

- "I would need more knowledge of the specific disabilities of the individual students."

- "a better understanding of all the possible disabilities in my classroom and best practices for planning and management in an inclusion classroom."

Teachers recognized that they could benefit from collaborative approaches.

- "strategies for coteaching";

- "training with an experienced coteacher;; and

- "more training for teacher is needed as well as mentoring."

Specifically, participants expressed the need to be trained in the area of behavioral management: "knowledge of the special needs of children with emotional/behavioral problems and/or ADHD would be helpful." The statement is consistent with responses to survey Items 2, 8, 12, and 15.

Other comments expressed the need for support. One participant stated that there is a need for "more workshops and consistent support, reflection, and evaluation to ensure that I am on the right track."

In short, the essential areas indicated by School A teachers for professional development prior to training included (1) differentiated instruction, (2) classroom/behavioral management strategies, (3) coteaching and co-planning

strategies, and (4) the need to learn the characteristics and needs of students with disabilities.

School B

Two dominant patterns related to training were evident in response to what knowledge and skills School B participants need to perform inclusive teaching. Some participants responded with general comments: "more training," "special-education training." Knowledge and skills in making academic modifications were one focal concern:

- "more professional development in the areas of coteaching; modifications, accommodations, etc."; and

- "accommodation/modifications of lessons."

Those academic strategies require knowing about students' academic needs and goals:

- "be made aware of goals [a] month before school begins so extensive planning is possible"; and

- "I need to know who has an IEP or any other disability [in order] to teach my classes."

A second focal concern lay in managing the inclusive classroom, particularly in the behavioral category.

- "more management skills in terms of keeping children on task when working with others";

- "specific behavior management plans";

- "techniques/methods for behavioral issues (ADHD, ODD, etc.)."

Teachers expressed the need for support in developing and implementing management strategies.

- "Support personnel and support staff";

- "help from adequate and trained support staff; planning time to meet with support staff."

In summary, the essential areas identified by School B teachers for professional development prior to training included (1) academic modifications based on IEP goals and objectives, and (2) classroom/behavioral management strategies.

School C

Several responses focused on skills that School C participants stated they needed to teach special needs students effectively, particularly voicing the need for training in the area of academic modifications of the regular class curriculum.

- "more training on different curriculum that may be needed for different students and working with other teachers to develop alternative teaching strategies";

- "more knowledge of how to team teach with special ed teacher";

- "more strategies to meet the needs of the students in reading, math and writing";

- "I need to know how to better meet the needs of inclusion students with academic strategies (learning centers, multiple intelligences, etc.)";

- "the knowledge and skills I feel would be most helpful are strategies in managing my lessons that would cover most of all the needs of my special needs students (visual, auditory, tactile)"; and

- "first define it; then we will be more aware of what its modification is for the inclusive classroom."

Another pattern that emerged in School C responses focused on the behavior category.

- "creating behavior management plans to use within the classroom for kids with ADHD and /or emotional disorders";

- "managing behavioral and social disabilities";

- "making a positive/productive connection with these students who need special attention for behavior and social disabilities";

- "more practical ways to positively deal with extreme behaviors"; and

- "strategies and techniques for behavior and slow learners."

Other key issues noted by participants referred to resources such as

- "more materials/planning time;"

- "I think we need more training in teaching LD students;" and

- "more resources would also be helpful."

In closing, the essential areas addressed through training included (1) curriculum modification, (2) classroom/behavioral management strategies, (3) coteaching and coplanning strategies, and (4) understanding the areas of exceptionality

in learning as defined in the Individuals with Disabilities Act (IDEA) and working

with students with social issues, respectively.

Summary of Attitudes Toward Inclusion
Prior to Professional Development

Overall results from quantitative and qualitative pretest data illustrate that

teachers from Schools A, B, and C agreed that professional development training

should address (1) behavioral needs to accommodate students whose behavior is

disruptive in class (physical, verbal aggression, disruptive behavior, conflict with

authority/noncompliance); and (2) academic needs concerned with the integration of

students requiring academic modifications of the regular class curriculum

(achievement one- or two-years, self-help skills, and functional academic training).

The findings reported in this section described general-education teachers' attitudes

toward inclusion and the need for professional training. These findings are related to

research question one. The following section describes the professional development

experience that occurred to address the pretest findings followed by a review of the

quantitative data based on research question two.

Professional Development Experience that
Addressed Pretest Findings

Based on the findings of the pretest, a flyer (Appendix I) was prepared and

taken to Schools A, B, and C announcing an inclusion seminar series entitled "How to

Reach and Teach All Learners in the Inclusive Environment." Principals were asked

to distribute and post flyers by the sign-in sheets and teacher lounge. Two workshop

leaders who are professors and consultants from the University of Illinois at Chicago and Chicago State University facilitated the three workshops that took place in September, October, and November, 2006 in the district during scheduled school improvement days, Saturdays, and institute days. In addition to training, Project Choice consultants were hired to provide support strategies throughout the school year. The team was scheduled to work with regular classroom teachers during the regular school hours based on the needs assessment. The professional development trainers and district consultants provided hands-on scientifically research-based strategies, resources to meet participants' individual professional needs and a variety of cooperative teaching approaches designed to help them plan, integrate, and practice proven strategies (e.g., differentiated instruction, learning styles, classroom management/organization) designed to assist in meeting the needs of all students with specific disabilities (learning/cognitive disabilities, emotional/behavioral disabilities, physical disabilities and health impairments) in the classroom. The seminars were open to all general-education teachers. All workshops were aligned with the Illinois Professional Teaching Standards, National Professional Development Teaching Standards, Early Childhood and the new Illinois Kindergarten Standards. Participants were issued Continued Professional Development Units (CPDUs) for their attendance at each of the workshops. The five-day workshops addressed teachers' professional development needs and experiences as determined by the pre-test findings. Professional development offerings related to teachers' professional needs are outlined in Table 12 followed by a narrative of professional development experiences.

Table 12

Summary of Pretest Results and Professional Development Experiences

Workshop Offerings/Dates	Teachers' Professional Needs	Professional Development Experiences
Workshop 1 **"You are LRE"** September 22, 2006	Academic interventions to accommodate students requiring academic modification of the regular class program	Workshop addressed teachers' concerns in the areas of mandated practices, curriculum modifications, accommodations and differentiated instruction through collaborative/cooperative teaching strategies such as coteaching and shared problem-solving strategies.
Workshop 2 September 23, 2006 **" Students and LRE"**	Academic interventions to accommodate students requiring academic modification of the regular class program; need for collaboration and communication among staff members	Participants were provided experiences through cooperative teaching strategies such as coteaching, shared problem solving and decision-making procedures. This workshop experience addressed teachers' concerns in the areas of curriculum modifications, differentiated instruction and learning styles.
Workshop 3 October 20, 2006 **"Accommodations and Modifications"**	Behavior interventions to accommodate students whose behavior is disruptive in class	Experiences were provided through peer coteaching, shared problem solving and consultative strategies on topics focusing on the perceptions and realities of inclusion, pros and cons of inclusion, behavioral management and effective teaching and intervention strategies.
Workshop 4: October 21, 2006 **"Accommodations and Modifications, Dealing with Behaviors"**	Behavior interventions to accommodate students whose behavior is disruptive in class	Addressed participants' needs and concerns in the areas of curriculum modification, accommodations, behavior management, immediate and long-term interventions. The collaborative/consultation model was utilized to promote shared decision making among the professional school support staff and general-education teachers focusing on effective accommodations and modifications, case management, differentiated instruction and group techniques for cooperative learning.
Workshop 5 November 7, 2007 **"Cultural Diversity in the Classroom: Reaching Diverse Learners"**	Academic interventions to accommodate students requiring academic modification of the regular class program; need for collaboration and communication among staff members	The purpose of this professional development activity was to promote awareness relevant to the recent NCLB and LRE legislative requirements relating to the early intervention and disability identification of children in the educational environment and the logistics of the RtI procedures focusing on teachers' roles and responsibilities in the educational environment.

Pretest data illustrate that teachers from Schools A, B, and C agreed that professional development training should address (1) behavioral needs to accommodate students whose behavior is disruptive in class (physical, verbal aggression, disruptive behavior, conflict with authority/noncompliance); and (2) academic needs concerned with the integration of students requiring academic modifications of the regular class curriculum (achievement one- or two-years, self-help skills, and functional academic training).

Workshop 1: On September 22 and 23, 2006, the presenters facilitated a two-day workshop that addressed general-education teachers' professional development needs related to student academic needs specifically in the areas of curriculum modification and accommodations. The purpose of the awareness workshop on September 22, 2006, was to assist participants in creating a sense of success for all students in the educational environment. Activities were shared to help participants to understand the NCLB and IDEA, the special education process, and the issues of inclusion of students with disabilities. Professional development experiences were provided through cooperative teaching strategies such as coteaching, working on teams, and problem solving to learn prior to implementation. To help participants develop the necessary skills in an inclusive setting, they were exposed to a body of information to foster attitudes toward inclusion delivered through lectures, discussions, audio visuals/technology and participatory activities such as the simulation of the special-education process, and a wedding ceremony--metaphor for inclusion. This workshop experience addressed teachers' concerns in the areas of

mandated practices, curriculum modification, accommodations and differentiated instruction.

Workshop 2: The purpose of this training on September 23, 2006, was to help participants understand the stigma of disability and how to manage it. Activities included a review of the learning styles, how to evaluate classroom practices and an exploration of possible learning interrupters of students (interrupting descriptors for most students with disabilities--SwDs--are a combination of any of the following: memory, attention, language, socialization, thinking and organization). Participants were provided experiences through cooperative teaching strategies such as coteaching, shared problem solving and decision-making strategies prior to implementation. Other strategies included games, art projects and how to set up a room to meet the needs of diverse learners. Information was shared through various presentation modes such as audio visuals (PowerPoint, film clippings), discussions, and lectures. Topics included a discussion of the stigma and disability, disability categories and recommended teaching strategies, specific disabilities, collaboration strategies and differentiated instruction, and effective classroom management. This workshop experience addressed teachers' concerns in the areas of curriculum modifications, differentiated instruction, and learning styles.

Workshop 3: The professional development training on October 20, 2006 addressed participants' needs and concerns in the areas of curriculum modification, accommodations, and elements of an effective classroom management, especially as appropriate for students with behavioral issues (strategies for instruction, homework

policy, grading policy, behavior policy, physical setup of room, planning for parent communication, and contingencies for other school-affecting instruction). The primary purpose was to explore strategies to close the achievement gap between SwDs and "regular" students. Participants were engaged in problem-based activities to help them understand accommodations and modifications that can be used for working with SwDs focusing on identification, diagnosis, assessment and evaluation. Through cooperative group work and participatory activities, participants had the opportunity to acquire information through games, group juggles, quality circle, story starters, chat and discussions, and film clip. Experiences were provided through peer coaching and shared problem solving and consultative strategies on topics focusing on the perceptions and realities of inclusion, pros and cons, teaching tips, behavioral management (classroom disruption, anger, low expectation, and social isolation) and habits of highly effective teachers. The session ended with a reflective activity: What does good teaching of SwDs look like with specific disabilities?

Workshop 4: The professional development training on October 21, 2006 addressed participants' needs and concerns in the areas of curriculum modification, accommodations, behavior management, and immediate and long-term interventions to help professionals to create a social atmospheres of cooperation in contexts in which children and adults learn together, plan together, and build quality relationships. The primary purpose was to foster effective communication, complex thinking, collaboration and cooperation in the educational environment. Through cooperative group work and participatory activities, participants had the opportunity to acquire

information through case studies, discussions, group discussions and film clips. Experiences were provided through collaborative teaching/team activities such as coteaching and shared problem-solving strategies focusing on effective accommodations and modifications, case management, differentiated instruction and group techniques for cooperative learning. Participants were introduced to the four basic models that offer fundamental concepts and approaches to mediate behaviors. They are: (1) Behavioral, (2) Psychodynamic, (3) Environmental, and (4) Constructivist. Five essential questions of each were discussed to promote complex thinking (see Appendix I).

Workshop 5: In addition to the four workshops discussed above, additional workshop sessions were offered during the District Institute on November 7, 2006. The purpose of this professional development activity was to promote awareness relevant to the recent NCLB and LRE legislative requirements relating to the early intervention and disability identification of children in the educational environment. Part I of this session, "Cultural Diversity in the Classroom: Reaching Diverse Learners," engaged the participants in several activities designed to meet the needs of diverse learners in the educational environment. In Part II, an introduction to the RtI Model was presented. Consistent with the IDEIA and NCLB, the keynote speaker shared valuable information about the RtI design and implementation across general, remedial and special education, the core RtI principles followed by essential components of RtI (Multi-tier Models of Service Delivery). In Session III follow-up PM work sessions, participants had the opportunity to analyze classroom assessment

data, and then plan instruction for diverse learners. Information was shared through various presentation modes such audio visuals (PowerPoint, film clips), discussions, and lectures.

In summary, the information discussed in these sessions was related to research question one findings concerning teachers' attitudes identified through the pretest in the areas of academic modification and behavioral concerns. As a result, professional development experiences were offered in September, October, and November 2006 followed by follow-up support activities such as classroom observations, collaborative teaching strategies and feedback on classroom performance conducted by Project Choices consultants during the regular school day. Participants wrapped up each training session by completing an evaluation reflecting on what they had learned followed by a distribution of CPDUs for workshop attendance.

The information discussed in this session is related to question one concerning professional experience that addressed teachers' attitudes identified through the pretest in the areas of academic modification, physical disabilities, behavioral problems, and social participation. The following section reviews data based on Research Questions 1, 2, and 3.

Quantitative and Qualitative Findings

Research Question 1 asked, "What attitudes and concerns about inclusion do general education classroom teachers identify?" and Question 2 asked, "To what extent does professional development training influence general-education teachers' attitudes about inclusion?" This section presents the results of the data analysis based on this research question. The paired samples t-test was used to determine the significance of any change in teachers' attitudes after training. Effect size (Cohen's d) was used to summarize the overall effect of professional development experience.

Examination of the pretest means for School A, B, and C indicates that the key challenges perceived by general-education teachers were in the behavioral category, particularly in the areas of disruptive behavior, physical aggression and verbal aggression. In addition to behavioral issues, academic concerns were found to be in the area of academic-two years below grade level.

For clarity, subcategories under each of the four major categories (academic, physical, behavioral and social) will be discussed. Specifically, the mean difference between pre/posttest means will be considered using a significance level of alpha = 0.05. Results are presented for School A in Table 13.

Table 13

School A: Paired *t*-test for Attitude Toward Inclusive Education Scale Items

Categories	Mean Difference	Standard Deviation	*Cohen's d*	*t*	*p*
ACADEMIC					
Academics-One Year	0.06	1.27	0.04	0.20	0.84
Academics-Two Years	0.06	1.62	0.37	0.16	0.87
Self-help Skills	0.00	1.88	0.00	0.00	1.00
Functional	0.06	1.48	0.04	0.17	0.86
ACADEMIC COMPOSITE	0.04	1.56	0.11	0.13	0.89
PHYSICAL					
Lack of Speech	0.13	2.09	0.06	0.25	0.50
Vision Impairments	0.26	1.48	0.17	0.70	0.49
Hearing Impairments	0.00	1.73	0.00	0.00	1.00
Mobility	0.26	1.75	0.14	0.59	0.56
PHYSICAL COMPOSITE	0.16	1.76	0.09	0.39	0.63
BEHAVIORAL					
Physical Aggression	0.40	1.05	0.38	1.47	0.16
Verbal Aggression	0.40	1.72	0.23	0.89	0.38
Behavioral Disruption	0.60	1.76	0.34	1.32	0.20
Noncompliance	0.40	1.29	0.24	1.19	0.25
BEHAVIORALCOMPOSITE	0.45	1.45	0.30	1.21	0.25
SOCIAL					
Shyness	0.26	0.96	0.27	1.07	0.30
Speech Disorders	0.06	1.43	0.04	-0.18	0.86
Language Impairments	0.00	1.46	0.00	0.00	1.00
Absenteeism	0.06	1.98	0.03	0.13	0.89
SOCIAL COMPOSITE	0.09	1.45	0.08	0.25	0.64
OVERALL COMPOSITE	0.21	1.58	0.12	0.47	0.60

df =14

School A

The Academic category is concerned with the integration of students requiring

academic modifications of the regular class curriculum. Academic dimensions include

items related to students one year behind grade level, two years behind grade level,

those lacking self-help skills, and those requiring a functional curriculum. In the

pretest, School A teachers had strong concerns in the area of academic-two years

behind (M = 3.11, SD = 1.21) and some concern about accommodating students

needing a functional curriculum (M=4.03, SD=1.39) (see Table 14). The difference in

composite mean scores for the composite Academic category (M = 0.04, SD = 1.56)

was nonsignificant (t (14) = 0.13, p = 0.89, two-tailed), as was the difference in means

for each Academic subcategory (see Table 14). Effect sizes for the areas of academics-

two years behind (d = .37) indicated a small to moderate change after training.

Table 14

Pretest Means and Standard Deviations for School A, B, and C

Categories	SCHOOL A		SCHOOL B		SCHOOL C	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
ACADEMIC						
Academics-One Year	4.73	1.15	5.45	0.59	5.05	0.84
Academics-Two Years	3.11	1.21	3.90	1.34	3.89	1.32
Self-Help Skills	4.42	1.33	4.31	1.24	3.89	1.37
Functional	4.03	1.39	4.22	1.30	4.15	1.25
ACADEMIC COMPOSITE	4.07	1.27	4.47	1.11	4.25	1.19
PHYSICAL						
Lack of Speech	4.34	1.41	3.81	1.53	4.26	1.09
Vision Impairments	4.23	1.36	3.81	1.59	4.47	1.21
Hearing Impairment	3.76	1.42	3.59	1.46	4.10	1.32
Mobility	4.26	1.40	4.63	1.04	4.52	1.26
PHYSICAL COMPOSITE	4.14	1.39	3.96	1.15	4.33	1.22
BEHAVIORAL						
Physical Aggression	3.00	0.89	2.63	1.00	2.94	1.22
Verbal Aggression	3.80	1.20	3.59	1.29	3.36	1.16
Behavioral Disruption	3.53	1.06	2.72	1.16	3.05	1.43
Noncompliance	3.84	1.04	4.09	1.15	3.84	1.38
BEHAVIORAL COMPOSITE	3.54	1.79	3.25	1.15	3.29	1.29
SOCIAL						
Shyness	5.46	0.76	5.59	0.59	5.63	0.59
Speech Disorders	4.34	1.41	4.54	1.47	4.78	0.85
Language Impairments	4.92	1.19	5.13	0.99	4.63	1.42
Absenteeism	4.76	1.06	5.27	0.82	4.84	1.11
SOCIAL COMPOSITE	4.12	1.09	5.13	0.54	4.97	0.99

The Physical category is concerned with the integration of students whose physical disabilities required physical accommodations (lack of speech, visual and hearing impairments and mobility problems) in the regular classroom. These areas were identified as a concern by less than half of School A teachers in the pretest (see Table 13). The difference in mean composite scores (M = 0.16, SD = 1.76) was non-significant (t (14) = 0.39, p = 0.63, two-tailed).

The Behavioral category addressed the need to accommodate students whose behavior was disruptive in class, including physical or verbal aggression and noncompliance. Pretest results for School A had indicated a strong concern with the area of physical aggression (M = 3.00, SD = 0.89) with some concern also in the areas of verbal aggression (M = 3.80, SD = 1.20), disruptive behavior (M = 3.53, SD = 1.06), and noncompliance (M = 3.84, SD = 1.04). The difference in composite mean score for the composite Behavioral category (M = 0.45, SD = 1.45) was nonsignificant (t (14) = 1.21, p = 0.25, two-tailed). Effect sizes for the subcategories of physical aggression (d = .38), verbal aggression (d = .23), behavioral (d = .34), and non-compliance (d = .24) indicated a small to moderate change after training as in the overall behavioral category (d = 0.30).

The Social category dealt with integration of students whose social participation in regular class was deficient. None of these areas were a major concern for School A teachers on the pretest (see Table 14). The difference in composite mean scores for the composite Social category (M = 0.09, SD = 1.45) was non-significant (t (14) = 0.25, p = 0.64, two-tailed), as was the difference in means for each

Social subcategory (see Table 14). Effect size for the subcategory of shyness (d = 27) indicated a small to moderate change after training.

In summary, using professional development training at School A did not appear to influence how teachers felt about inclusion, but effect sizes showed small to moderate effects concerning students with academics, behavioral and social concerns in the areas of academics-two years behind, physical and verbal aggression, disruptive behavior, noncompliance, and shyness.

School B

Examination of the pre-and post-test means for School B (see Table 14) indicated that academics-two years behind (M = 3.90, SD = 1.34) concerns were high on the pretest, and they remained so on the posttest. The difference in overall composite mean scores for the composite Academic category (M = 0.20, SD = 1.66) was nonsignificant (t (18) = 0.57, p = 1.90, two-tailed), as was the difference in means for each Academic subcategory (see Table 15). Effect sizes for the areas of academics-one year (d = .21) and two years behind (d = .20) indicated a small to moderate change after training.

Table 15

School B: Paired *t*-test for Attitude Toward Inclusive Education Scale Items

Categories	Mean Difference	Standard Deviation	*d*	*t*	*p*
ACADEMIC					
Academics-One Year	0.26	1.19	0.21	0.96	0.35
Academics-Two Years	0.42	2.06	0.20	0.89	0.38
Self-help Skills	0.00	1.79	0.00	0.00	1.00
Functional	0.15	1.60	0.09	0.43	0.67
ACADEMIC COMPOSITE	0.20	1.66	0.12	0.57	1.90
PHYSICAL					
Lack of Speech	0.00	1.82	0.00	0.00	1.00
Vision Impairments	0.31	1.97	0.16	0.70	0.49
Hearing Impairments	0.00	1.94	0.00	0.00	1.00
Mobility	0.57	1.67	0.34	1.50	0.15
PHYSICAL COMPOSITE	0.22	1.85	0.12	0.55	0.66
BEHAVIORAL					
Physical Aggression	-0.47	1.64	0.29	-1.25	0.22
Verbal Aggression	0.21	1.58	0.13	-0.58	0.57
Behavioral Disruption	-0.47	1.64	0.29	-1.25	0.22
Noncompliance	-0.00	1.33	0.00	0.00	1.00
BEHAVIORAL COMPOSITE	-0.18	1.54	0.13	0.77	0.50
SOCIAL					
Shyness	0.05	0.84	0.05	0.27	0.79
Speech Disorders	0.68	1.70	0.40	-1.76	0.09
Language Impairments	0.21	1.08	0.19	0.85	0.40
Absenteeism	0.26	0.99	0.26	1.16	0.26
SOCIAL COMPOSITE	0.30	1.15	0.25	0.13	0.39
OVERALL COMPOSITE	0.14	1.55	0.16	0.50	0.86

Note: df = 18

For the Physical category, pretest data indicated little concern about mobility

(M = 4.26, SD = 1.40), concern by a little over one-third of teachers about vision

impairments (M = 4.23, SD = 1.36) and an almost 50-50 split regarding verbal

(M = 4.34, SD = 1.4) and hearing impairments (M = 3.76, SD = 1.42). Analysis of

difference in the mean composite score (M = 0.22, SD = 1.85) in the Physical category

indicated no significant difference (t(18) = 0.55, p= 0.66). Effect size for the area of

mobility (d = .34) indicated a small to moderate change after training.

Based on the pre-test mean values, the Behavioral category (M = 3.25, D = 1.15) appeared to be a primary concern among School B teachers, specifically in the

subcategories of physical aggression (M = 2.63, SD = 1.00) and disruptive behavior

(M = 2.72, SD = 1.16) (see Table 14). Examination of the change in mean scores

showed no significant change in scores for physical aggression, behavioral disruption,

verbal aggression, and noncompliance (see Table 14). The difference in composite

mean scores for the Behavioral category (M = -0.18, SD = 1.54) was non-significant

(t (18) = 0.77, p = 0.50, two-tailed), as was the difference in means for each

Behavioral subcategory (see Table 14). Effect sizes for the areas of physical

aggression (d = .29) and behavioral disruption (d = .27) indicated a small to moderate

change after training.

For School B, the pretest means for the Social category indicated concerns

with the area of shyness and few indicated concerns about absenteeism or language

disorders (see Table 15). Less than 20% registered concerns about language

impairments. Examination of the difference in pre/post overall composite scores (M =

0.30, SD = 1.15) indicated no significant change in responses (t (18), = 0.13, p = 0.39,

two-tailed). Effect sizes for the areas of speech disorders (d = .40) and (d = .26), and

absenteeism (d = .40) indicated a small to moderate change after training.

In summary, it appears that using professional development training with

School B had little influence on how teachers felt about the integration of students in

any of the categories of concern. Small to moderate effects were apparent in the areas

of academics-one and two years behind, mobility, physical aggression, behavioral

disruption, speech disorders, and absenteeism.

School C

On the Academic category pretest, School C teachers had strong concerns in

the area of academic-two years behind (M = 3.11, SD = 1.21) and some concern about

accommodating students needing a functional curriculum (M=4.03, SD=1.39) (see

Table 16). The difference in composite mean scores for the composite Academic

category (M = 0.42, SD = 1.65) was non-significant (t (15) = 0.43, p = 0.78, two-

tailed), as was the difference in means for each Academic subcategory (see Table 16).

Effect sizes for the areas of academics-two years behind (d = .22), self-help (d = .65),

and the overall composite score (d = .25) indicated a small to moderate change after

training.

For the Physical category, pretest results indicated that the majority (74% to

89.5%) of School C teachers agreed that it was appropriate to include students with

physical disabilities in the general classroom in all areas (lack of speech, vision and

hearing impairments and mobility) (see Table 16). The difference in composite mean

scores for the composite Physical category (M = 0.54, SD = 1.67) was non-significant

(t (15) = 0.26, p = 0.22, two-tailed). Effect sizes for the areas of vision impairments

(d = .54) and hearing impairments (d = 54) indicated a small to moderate change after

training.

Table 16

School C: Paired *t*-test for Attitude Toward Inclusive Education Scale Items

Categories	Mean difference	Standard Deviation	*d*	*t*	*p*
ACADEMIC					
Academics – One Year	0.00	1.15	0.00	0.00	1.00
Academics-Two Years	0.50	2.25	0.22	0.89	0.38
Self-help Skills	1.12	1.73	0.65	0.14	0.88
Functional	0.06	1.48	0.04	0.67	0.86
ACADEMIC COMPOSITE	0.42	1.65	0.25	0.43	0.78
PHYSICAL					
Lack of Speech	0.00	1.62	0.00	1.70	0.11
Vision Impairments	1.12	2.09	0.54	2.15	0.04
Hearing Impairments	0.93	1.73	0.54	2.17	0.04
Mobility	-0.12	1.25	0.09	-0.39	0.69
PHYSICAL COMPOSITE	0.54	1.67	0.28	0.26	0.22
BEHAVIORAL					
Physical aggression	0.25	1.91	0.13	0.52	0.60
Verbal Aggression	0.00	2.25	0.00	0.00	1.00
Behavioral Disruption	0.00	2.16	0.00	0.35	0.73
Noncompliance	0.25	1.94	0.13	0.51	0.61
BEHAVIORAL COMPOSITE	0.12	2.06	0.05	0.35	0.73
SOCIAL					
Shyness	-0.06	0.06	0.10	-0.37	0.71
Speech Disorders	0.06	1.12	0.05	0.22	0.82
Language Impairments	0.00	1.59	0.00	0.00	1.00
Absenteeism	0.56	1.45	0.39	1.54	0.14
SOCIAL COMPOSITE	0.04	1.05	0.03	1.74	0.68
OVERALL COMPOSITE	0.34	1.75	0.19	0.70	0.60

Note: df = 15

An examination of pretest means indicated that the Behavioral category generated the greatest concern among School C teachers (see Table 16). When change in the mean values was considered, no significant change occurred in any of the subcategories (Physical Aggression, Verbal Aggression, Behavioral Disruption, Noncompliance). The difference in overall mean composite score (M=0.12, SD = 2.06) indicated no significant difference between the pre/post test (t(15) = 0.35, p = 0.73, two-tailed).

For the Social category, pretest results indicated that School C teachers agreed

that it was appropriate to include students with social disabilities in the general

classroom in all areas (Shyness, Speech Disorders, Language Impairments,

Absenteeism) (see Table 16). For the Social category, the difference in overall mean

composite score (M = 0.04, SD = 1.05) showed no significant change (t (15) = 1.74, p

= 0.68, two-tailed), with a small effect size in the subcategory of language

impairments (d = 39) (see Table 16).

In summary, it appears that using professional development at School C had no

significant effect on how teachers felt about the integration of students with special

needs in the regular classroom, but an analysis of the effect size indicated that the

magnitude of effects was small to moderate concerning students with academic and

physical disabilities, specifically in the areas of academics-two years, self-help skills,

vision, hearing impairments and absenteeism.

Summary of Attitudes Toward Inclusion
after Professional Development

In the results presented above, analyses utilizing the paired t-test and effect

sizes were used to answer the question: to what extent does professional development

training influence general-education teachers' attitudes about inclusion? The

difference between the pre/post-test was shown to be non-significant. Thus, the data

fail to fully support the notion that professional development influenced general-

education teachers' attitudes about inclusion at each case school. However, effect

sizes revealed that professional development training had a small to moderate effect in

the Academic category specifically in the areas of academics-two years behind. Two out of three schools had a small to moderate effect in the physical aggression dimension of the Behavioral category. All three schools had a small to moderate effect size in the Social category, specifically in the areas of shyness and absenteeism.

There are several possible explanations for the general-education teachers' attitudinal change about inclusion based on these findings. Participating in inclusion training was limited in terms of time for many of the general-education teachers. Consistent with Vaughn's findings (1999), teachers who were not currently participating in inclusive programs had strong, negative feelings about inclusion and had lack of knowledge in special education. Teachers who had not worked with children with disabilities in their classrooms were frequently ambivalent, negative or uncertain (Martinez, 2004) prior to professional development training. Therefore, after training, their confidence did not increase concerning behavioral and academic issues. Teachers needed to be educated in regard to the population of students being included into the classroom (Kirk, 1996).

In conclusion, the overall quantitative data imply that teachers need additional training and support relating to the integration of academic modifications of the regular class curriculum and behavioral management strategies to address and accommodate students whose behavior is disruptive in class. To get a deeper understanding of the effects of professional development, experiences regarding inclusion after training were explored through interviews that addressed general-

education teachers' concerns. Qualitative data from those interviews are discussed in the following section.

Qualitative Open-Ended Response Findings

Research Question 3 asked, "How did teachers' practices in inclusion change after training that addressed their concerns?" The responses to five semistructured open-ended interview questions were coded to determine teachers' attitudes, challenges, feeling and beliefs, training, and additional concerns or issues they had regarding the inclusion of students with disabilities. Emphasis was placed on best practices teachers might have used after professional development training. The themes and patterns were analyzed by two external raters to acquire a deeper understanding of inclusion from the perspective of 10 general-education teachers by accurately reporting their responses. Interview responses are reported in the following paragraphs in the light of the five open-ended questions followed by a closing summary of the qualitative data.

Interview Question 1 asked, "Describe the types of students you teach in your classroom. What challenges do these students pose?"

Patterns related to academic achievement were evident in the responses to the question regarding challenges students pose as perceived by regular-classroom teachers. Responses included the following:

- "The students in my class have challenges in the field of reading, and many of them have comprehension problems; also I have just tested all my students and found that a lot of them are without a phonetic base" (Grade 4 Teacher).

- "He has been in my classroom for more than a month and a half and nothing has taken place" (Grade 5 Teacher).

- "There are two kids who can't even read and the other ones are just low functioning" (Grade 4 Teacher).

- "I have no experience in working with these students so what happens is they're in here and whatever they capture, they capture, and they do the work or they don't do the work so then if they do it, you know, it's most likely all F's" (Grade 5 Teacher).

These statements implied that the major challenge that participants clearly expressed is in the area of academic achievement. A few participants made positive comments:

- "Most of the students are typically developing. I can say that I recognize a few students that may have some special needs--or mostly social and emotionally or behavior or not anything" (Grade 1 Teacher).

- "For the most part, I think students I have are mostly typically developing students or so far the group I have right now" (Grade 1 Teacher).

- "I don't think students pose a challenge" (Grade 1 Teacher).

An in-depth discussion with the general-education classroom teachers concerning the types of students they teach and the challenges they pose revealed that

key issues surrounded academic achievement. Two teachers also voiced challenges in the Behavioral category:

- "I have two children with behavioral problems. They need someone to constantly guide them and focus them. So those are my biggest challenges right now" (Grade 1 Teacher).

- "Most students are regular students. I have one student who is ADD" (Grade 2 Teacher).

Interview Question 2 asked, "In what ways have your feelings and beliefs regarding inclusion of students with disabilities changed?" When asked about their feelings and beliefs regarding inclusion, several responses were general, vague, and noncommittal.

- "I think that it is very beneficial to the children that are identified with needs--I think it's good for them to be in a regular classroom" (Grade 1 Teacher).

- "I think that the difference is now that we realize that every child can learn and every child can be successful in the regular classroom with the appropriate amount of support" (Kindergarten Teacher).

- "Well, I agree with inclusion. I think that inclusion is a great thing" (Grade 1 Teacher).

Interview Question 3 asked, "Tell me what challenges you faced in teaching students with disabilities?" When asked about challenges they face when teaching students with disabilities, some teachers talked about meeting diverse academic needs. "This year especially, I am teaching something and I realize that students A, B, and C

are not getting it. Now I have to double plan and I don't necessarily look at it in a negative way, because I think that it will make me a better teacher" (Grade 5 Teacher). However, most interviewees spoke about needing resources and strategies for multi-level needs planning.

- "I don't think all the resources are here because I have at least 10 kids who are not on grade level and once they are given a 4th grade reading book, they sink or swim, they are going to take a test on this all year long" (Grade 5 Teacher).

- "Different activities that would help a student more--just because I have a limited experience in working with these students" (Grade 5 Teacher).

- "[I need] supplies, more resources; where they can be located" (Grade 5 Teacher).

The above statements indicated that teachers need more training on best practices, and more resources such as multi-level materials.

Interview Question 4 asked, "How did professional training help you better prepare to work with students with disabilities in your classroom?" In response to question four regarding the value of professional development training, participants commented about their individual experience. Some talked about the benefits of the professional development experience:

- "The training really helped me in addition to the coursework in special education. It was real beneficial. There is a lot of feedback" (Grade 1 Teacher).

- "The training helped me with all students, especially the lower students as far as when I am teaching science to those special-ed students" (Grade 5 Teacher).

Several talked about the value of collaboration:

- "I highly recommend coteaching, especially with the variety of disabilities" (Kindergarten).

- "To do coteaching within your own grade level was excellent. I need to sit down and plan with regular classroom teachers too" (Grade 1Teacher).

Others voice the need for more training:

- "The way I feel about it, we probably need to be trained; more training, consistent training" (Grade 1 Teacher).

- "I feel that we have so many different supplies/materials we are well prepared, but the only thing I struggle with is identifying exactly how to help the students" (Kindergarten Teacher).

Participants' responses to this question confirm the findings linked to (1) collaboration for inclusive teaching, and (2) the need for ongoing professional development in inclusive practices.

Interview Question 5 asked, "What additional concerns or issues do you have regarding the inclusion of students with disabilities?" Participants reported several concerns or issues regarding the inclusion of students with disabilities. It appears that participants desired to maintain students in their classroom on a full-time basis. Several comments viewed pull-outs as disruptive to the classroom environment.

- "Many teachers working in the classroom is more helpful than pull-outs" (Grade 1 Teacher).

- "Well, I guess I can say one of the things I am struggling with, is there a time when it would be more beneficial for this child to be pulled out of the classroom because of the fact that I have some students who are so distracted" (Kindergarten Teacher).

- "If the child is working behind in a regular setting, it would hurt to have him pulled out to get that extra help; intensive instruction to catch this child up, it is that we want the child in the classroom the entire time" (Grade 4 Teacher).

Others desired more support--in terms of more personnel and assistive technology.

- "I think that we need more teachers--we need more technology. There are items out there that can help specific students" (Grade 4 Teacher).

Several again voiced the need for more training.

- "I know that there is more training going on in the field of what we term as special challenges" (Grade 5 Teacher).

- "I think we *need* more training in the field of bilingual education" (Grade 4 Teacher).

Participants' responses to this question confirm the findings linked to (1) support personnel and collaboration and (2) the need for additional training to address the concerns of general-education teachers in the inclusive environment.

Summary

The purpose of this chapter was to present the findings for the three research questions in this dissertation study. The data analysis process for the 16 closed-ended

Likert Scale responses on the pretest was completed, a coding process of the two open-ended questions was completed, and a summary of patterns that emerged through this process were used to determine professional development inclusion training.

Overall, the findings did not support the idea that staff development experience would influence the attitudes of the general-education teachers in the study. The results indicated that professional development had a moderate effect on teachers' attitudes and that there is a need to provide ongoing professional development strategies to address the needs of general-education teachers, particularly pertaining to the integration of students with significant academic disabilities and behavioral needs. Chapter 5 presents a discussion, conclusions, implications, and recommendations for professional development training and directions for future research.

CHAPTER 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This chapter includes an overview of the dissertation study, a discussion of conclusions based on the results of the data analysis and findings, the implications of research findings, and recommendations and directions for future research.

Overview of the Study

The purpose of this mixed-methods case study was to (1) identify the attitudes and concerns of general-education teachers responsible for the education of students with disabilities, and (2) examine the extent to which professional development training influences general-education teachers' attitudes and practices regarding inclusion. This study utilized both quantitative and qualitative data collection. Sixty-seven teachers completed the pretest. Fifty participants took part in the pretest, inclusion training, and posttest. Prior to professional development experience, quantitative data were collected through 16 close-ended survey items and qualitative data were collected through two open-ended questions to determine professional needs for training. After the professional development experience, participants took the ATIES posttest to determine change in attitudes after training (Wilczenski, 1992). In

addition, qualitative data were collected using five open-ended semistructured

interview questions that addressed the research questions investigated in this study.

For quantitative analysis, the SPSS was used to perform the statistical

procedures. For data analysis, descriptive statistics (pretest), Cohen's d method and a

paired t-test (pre/posttest) were used. Descriptive statistics were used to answer

Question 1: What attitudes and concerns about inclusion do general-education

classroom teachers identify as needing to be addressed through professional

development? The t-test statistical technique was used to answer Question 2: To what

extent does professional development training influence general-education teachers'

attitudes and concerns about inclusion? To answer Question 3, How did teachers'

practices in inclusion change after training that addressed their concerns?

semistructured interview transcripts were coded to illuminate further how teachers'

attitudes toward inclusion and practices changed after training that addressed their

concerns. The discussion of the findings and conclusions is presented below.

Discussion and Conclusions

The following section provides a discussion and offers conclusions for each of

the research questions concerning the change in teachers' attitudes and concerns

regarding inclusion following professional development experience. For the purpose

of this section, discussions will include a summary and conclusion of the findings for

Schools A, B, and C.

Teachers' Attitudes Toward Inclusion Prior to
Professional Development Experience

According to Hargrove (2000), in order for mainstream assessment activities in

the inclusion classroom to be effective, there needs to be a change in teachers'

perception and motivation. To facilitate change, Ely (1999) suggests that the change

agent should assess the current environment and existing circumstances to determine

whether inclusion has a good chance of yielding anticipated benefits. Zaltman and

Duncan (1977) advocate taking the time to identify the root causes of resistance to

prevent the misunderstanding of the client value system embedded in the

implementation plan. To assess teachers' attitudes and concerns toward inclusion

prior to professional development training, participants were asked to complete the

pretest to determine their attitudes and respond to two open-ended questions to

determine their professional development needs to address four categories: academic

integration, physical integration, behavioral integration and social integration. The

evidence of this study indicated that for all three schools studied, key challenges in

inclusive classrooms according to regular classroom teachers were severe behavioral

concerns followed by academic achievement-two years below grade level. The overall

findings discussed in Chapter 4 indicate that professional development training had a

moderate effect in the Academic category, specifically in the areas of academics-two

years behind. One out of three schools had a moderate effect in the areas of the

Behavioral category. All three schools had a moderate effect size in the Social

category, specifically in the areas of shyness and absenteeism. These findings are

consistent with the works of Wilczenski (1992), who found that both experienced and

preservice teachers favor students with social deficits and physical accommodations rather than making academic and behavioral accommodations. Interestingly, evidence was found that teachers and undergraduate students did not differ significantly in their perceptions of students requiring physical, academic, behavioral and social accommodations in regular classes, or in their willingness to make those accommodations.

Based on findings in Chapter 4, the researcher can conclude that identifying professional development needs to address teachers' concerns will yield positive results. Although each school has similar attitudes and concerns, there are unique school-based characteristics relevant to their professional development needs prior to professional development training. Because adults manage different aspects of their lives, they are capable of directing, or at least assisting in planning, their own learning (Knowles, 1984). To address resistance to inclusion (Zaltman & Duncan, 1977), teachers need to be involved in the planning and evaluation of their learning to embrace inclusion. According to Zaltman and Duncan (1977), one of the major causes of resistance to educational change is the development of changes without prior assessment of the potential users to establish appropriate communication and demonstrations. In terms of professional development needs, there must be a purpose for learning (Knowles, 1984) and why they need to learn about inclusion and in particular the students that will be served.

In summary, the results do, however, coincide with the works of Ely (1999), Zaltman and Duncan (1977), and Knowles (1984). Educators expressed negative

concerns about working with students with disabilities. As solution strategies, they all agree that the sources of the general-education teachers' concerns must be identified in order to plan purposeful and differentiated professional development activities (Knowles, 1984) clearly. Participants must be involved in planning and evaluating all aspects of the inclusion programs.

The results of this study indicated that there is a need to provide ongoing professional development strategies to address the needs of general-education teachers pertaining to the integration of students requiring academic modifications, personnel support and differentiated instructional strategies. Academically, the challenges should focus on (1) accommodating differences, (2) the need to provide individual attention, and (3) the need for support. This school of thought concurs with Ely's second condition, knowledge and skills, which states that people must have sufficient knowledge to do a job. They must be ready to learn and develop attitudes toward life and of acceptance (Knowles, 1984). Quantitative and qualitative data illustrate that regardless of grade level or school, teachers in the case schools really supported inclusion for students with disabilities in social and physical categories and those whose academic achievement was one year less than their grade-level peers. A narrative description of the teachers' challenges, and professional development needs discussed in the next section, can provide an important qualitative lens through which the quantitative data can be better understood.

Summary of Open-Ended Responses Prior
to Professional Development

It was acknowledged that social change involves an alternation in the status

quo (Zaltman & Duncan, 1977). To diffuse resistance, teachers were asked to respond

to two open-ended questions included in the pretest in order to give the respondents

the opportunity to raise issues not covered by the ATIES in terms of major challenges

and concerns about inclusion. The data were content-analyzed, categorized and coded

(Fraenkel & Wallen, 2000) to identify general-education teachers' professional

development needs and concerns prior to training. Through the content analysis

process, it was found that two themes were congruent with the findings of the pretest

and current literature. In a study conducted by Martinez (2004), it was noted that

general-education teachers consistently expressed their concerns regarding their lack

of skills to manage students with emotional and behavioral disorders. These data also

reinforced the survey responses that indicated major academic issues as one of the key

challenges that participants experienced prior to professional development experience.

In many aspects, it was not surprising to note in this study that the content analysis

coding process revealed that academic and behavioral issues were two core factors of

inclusion that participants stated most as part of their experience when teaching

students with disabilities. If teachers gain more knowledge about including these

students in their classroom and how their learning needs can be addressed, they may

have less negative attitudes about inclusion (Shoho et al., 1997). Training could

possibly help to eliminate negative attitudes that teachers may have toward inclusion

of students with disabilities. As such, teachers themselves must be reeducated

(Zaltman & Duncan, 1977) and encouraged to participate in the inclusionary process including shared decision making and communication. People feel better when they feel supported rather than judged or threatened (Knowles, 1984). It was interesting to note that participants were more open to issues concerning students' academics relevant to resources in terms of time/materials and training in the area of differentiated instruction rather than physical disabilities, behavioral concerns or social participation in the classroom. This problem-solving approach allows adult learners to problem solve and receive immediate application of knowledge (Knowles, 1984).

Other issues of concerns in terms of professional development needs were related to teachers' awareness (of different disabilities, of coteaching options), the effects of disruptive behavior, and the need to learn strategies for making academic adaptations and accommodations. These data reinforced the survey responses that indicated major behavioral issues as one of the key challenges that participants experienced prior to professional development experience. Again, participants were more open to expressing their concerns about students' academic and behavior rather than physical disabilities or social participation in the classroom.

In short, the overall qualitative findings imply that teachers need additional training and support relating to the integration of academic modifications of the regular class curriculum, support (personnel), differentiated/instructional strategies, and behavioral management strategies in an effort to accommodate students whose behavior was disruptive in class. These data reinforced the survey responses that

indicated academic and behavioral issues (Factor III) as one of the dominant

challenges that participants in the study experienced prior to professional development

experience. Statements used by the majority of the participants suggest that there is a

need to provide professional development concerning the integration of students two

or more years behind requiring academic modifications in the regular classroom.

Overall, participants' responses to the open-ended questions were consistent with the

responses in the pretest regarding their individual needs. The next section will

summarize information pertaining to knowledge and skills general-education teachers

needed to be more effective in inclusive teaching prior to professional development

experience.

Knowledge and Skills Teachers Needed to Be More
Effective in Inclusive Teaching Before Professional
Development Experience

The important findings concerning question two on the pretest asked what

knowledge and skills teachers felt they needed to be more effective in inclusive

teaching before training. In the area of academics, teachers desired to learn about

ways to meet individual needs within the large class setting and how to identify

student needs in order to plan differentiated instruction. Participants also recognized

that they could benefit from collaborative approaches. There were some concerns that

training should focus on issues in two areas of special education: academic

modification and accommodation of lessons and coteaching. Teachers expressed a

need to know about students' academic needs and goals (IEP and disabilities). Other

concerns were how to manage the inclusive classroom, particularly in the behavioral category, in addition to support in developing and implementing management strategies. Other key issues were in the area of resources such as the need for more materials and planning time. It was reported that they needed more training in teaching students with disabilities.

In summary, the content analysis coding process revealed that academic and behavioral issues were two core factors of inclusion that participants stated most as part of their experience when teaching students with disabilities. Through the triangulation process, it was found that School A, B, and C participants' responses to the open-ended questions were consistent with the responses on the Likert scale survey section. In response to challenges encountered in implementing inclusion before training, it was found that participants were more challenged with issues concerning students' academics and behavior rather than physical disabilities or social participation in the classroom. An overall analysis revealed that teachers needed to be more effective and trained in: (1) differentiated instruction, (2) classroom/behavioral management strategies, (3) coteaching and co-planning strategies, (4) the need to learn the characteristics and needs of students with disabilities, and (5) academic modifications based on IEP goals and objectives and understanding the areas of exceptionality in learning as defined in the IDEA and working with students with social issues as well.

Summary of Attitudes Toward Inclusion
Prior Professional Development

Overall results from quantitative and qualitative pretest data illustrate that

teachers from Schools A, B, and C agreed that professional development training

should address (1) behavioral needs to accommodate students whose behavior is

disruptive in class (physical or verbal aggression, disruptive behavior), and (2)

academic needs concerned with the integration of students requiring academic

modifications of the regular-class curriculum. These findings are consistent with

previous research (Martinez, 2004; Smith & Smith, 2001) that suggests that general

education and preservice teachers feel inadequately prepared to teach children who

have disabilities, particularly those with severe disabilities (Lipsky & Gartner, 1996).

Like the teachers in Lipsky and Gartner's study, the teachers in this present study

seemed to perceive students with severe disabilities as more difficult to include in the

classroom and they were not confident in their abilities to effectively teach a

curriculum or integrate such students with their peers.

The findings reported in this section described general-education teachers'

attitudes toward inclusion and the need for professional training. These findings are

related to research question one. The following discussion reports findings regarding

teachers' attitudes and concerns about inclusion after professional development

experience.

Teachers' Attitudes and Concern about Inclusion after
Professional Development Experience

Overall findings show that professional development training had no effect on teachers' attitudes toward the inclusion of students with disabilities. Analysis using the *t*-test and effect size method indicated that professional development had a moderate effect on behavioral concerns in the behavioral category. These findings could be attributed to the fact that teachers may not have had enough time to be trained adequately. This notion reflects Ely's (1999) sixth environmental condition, which states that time is required to acquire knowledge and skills. Teachers must have the time to communicate, practice, plan and cooperate. Knowles (1984) asserts that every adult group, of whatever nature, must have the opportunity to be in a place where they can have the experience of learning to live cooperatively, and develop an attitude of acceptance, love, and respect toward others and toward life. General-education teachers are encouraged to use cooperative learning strategies, peer-mediated instruction, and behavior managements.

In addition to behavioral issues, findings point to the fact that teachers needed more training on curriculum modification and accommodations, teaching practices, behavioral/classroom management, coteaching strategies, and resources such as time and personnel. According to Ely's (1999) third environmental condition, he states that the necessary resources should be available to make implementation work. Without them, implementation is not possible. Data revealed that from the pretest to the posttest teachers still had strong concerns in the area of academic-two years behind and one school had some concern about accommodating students needing a functional

curriculum. To be precise, the Academic category is concerned with the integration of students requiring academic modifications of the regular-class curriculum. These results support the idea of collaboration and communication because there is a need to adapt and modify instruction for students with disabilities using differentiated instructional strategies in conjunction with students' learning styles. This is indicative of a need for training in academic modification and differentiation. No significant effect was found between pretest and posttest results for any of the dimensions of the academic category. This could be due to the fact that teachers had limited opportunities to participate in various types of training to adequately prepare them to meet the needs of diverse learners in the general classroom setting.

The Effects of Professional Development Experience on Teachers' Attitudes, Beliefs and Practices

Ten general-education classroom teachers responded to five semistructured interview questions to determine their attitudes, challenges, feeling and beliefs, training, and additional concerns or issues they experienced regarding the inclusion of students with disabilities. In their responses, emphasis was placed on best practices they might have used after professional development training. These statements implied that the major challenges that participants clearly expressed are in the area of academic achievement. Discussions indicated that teachers need more training on curriculum modification and accommodations, teaching strategies, and behavioral management. Patterns related to academic achievement were evident in the responses to the question regarding challenges students pose perceived by regular-classroom

teachers. Two respondents reported that students in their class have challenges in the field of reading and many of them have comprehension problems and are very low functioning. One respondent expressed that she has no concerns in working with these students.

An in-depth discussion with the general-education classroom teachers concerning the types of students they teach and the challenges they pose also revealed that key issues surrounded behavioral issues. Two teachers voiced challenges in this area. They believed that students need someone to constantly guide them and focus them.

When asked about their feelings and beliefs regarding inclusion, several responses were general, vague, and noncommittal. Teachers felt that it was very beneficial to the children that are identified with needs and it's good for them to be in a regular classroom. They agreed with inclusion and think that the difference is that we realize that every child can learn and every child can be successful in the regular classroom with the appropriate amount of support. This general endorsement of inclusion is consistent with Smith and Smith's (2001) findings, in which the majority of general-education teachers agreed with the general goal and value of inclusion, but held ambivalent or uncertain attitudes toward including children with disabilities in their classrooms.

When asked about their feelings and beliefs regarding inclusion, teachers indicated support for coteaching and the concept of curriculum-based assessment.

When asked about challenges they face when teaching students with disabilities, some teachers talked about meeting diverse academic needs. Consistent with Scruggs and Mastropieri's (1996) study, most interviewees spoke about needing resources and strategies for multi-level needs planning. They reported that they needed different activities that would help a student more--just because they have a limited experience in working with these students. Discussions indicated that teachers need more training on best practices, and more resources such as time and personnel.

In response to question four regarding the value of professional development training, participants commented about their individual experience. Some talked about the benefits of the professional development experience. In retrospect, one teacher felt that in addition to the coursework in special education, training really helped her. Another fifth-grade teacher expressed that training helped with all students, especially the lower-achieving students. In addition, several talked about the value of collaboration and highly recommend coteaching, especially with the variety of disabilities.

Others voiced the need for more training. A first-grade teacher felt the need for more consistent training while a kindergarten teacher felt that she struggles with identifying exactly how to help the students with disabilities.

Participants' responses to this question confirm the findings linked to (1) collaboration for inclusive teaching, and (2) the need for ongoing professional development in inclusive practices.

Participants reported several concerns or issues regarding the inclusion of students with disabilities. It appears that participants desired to maintain students in their classroom on a full-time basis. Several comments alluded to the teachers' opinion that pull-outs are disruptive to the classroom environment. Teachers believed that many teachers working in the classroom is more helpful than pull-outs. Time for pull-outs was a concern that teachers expressed.

In other discussions, others desired more support in terms of more personnel and assistive technology. They believed that more teachers are needed as well as technology. This concern, according to Zaltman and Duncan (1977), is a source of resistance to change in the workplace due to the absence of necessary technical human skills to implement the change adequately. The barriers arise when the schools lack the institutional knowledge to understand, accept, or apply any innovation. It is proposed that the change agent target specific interventions that will provide at least a baseline of technological standing of the individual.

Conclusions

The data analysis process for the 16 closed-ended Likert Scale responses on the pretest, and a coding process of the two open-ended questions was discussed and a summary of patterns that emerged through this process was used to determine professional development inclusion training. In brief, the findings on the initial pretest revealed concerns in the behavioral category (especially in the area of physical aggression) and in the academic area when students' performance is two or more years

below grade level when placed in regular classes. Participants did not express significant concerns about students with physical disabilities or issues of social participation in the classroom. Overall, the post-test findings did not support the idea that staff development experience would influence the attitudes of the general-education teachers in the study. The absence of significant change may be related to two factors: the lack of sufficient time needed to train teachers to implement inclusion strategies and the lack of time needed to cooperate or collaborate with other teachers and specialists pertaining to the students with disabilities. Although there was not a significant change concerning academic achievement, behavioral, and social integration of students with disabilities, a moderate effect occurred in the area of vision and hearing impairments as reported in one school.

A discussion of the five post-professional development interview findings reflects the findings from the pre/post tests. It was not surprising that the major challenges that participants clearly expressed were in the areas of academic achievement, behavioral category, support and resources. Specifically, discussions indicated that teachers need more training on curriculum modifications and accommodations, teaching best practices, behavioral/classroom management, coteaching approaches, and more resources such as time and personnel.

Participants' responses to the interview questions confirm the findings linked to (1) collaboration for inclusive teaching, and (2) the need for ongoing professional development in inclusive practices, and support personnel to address the concerns of general-education teachers in the inclusive environment. It is evident that there are

many challenges professional educators encounter when implementing inclusive programs today. For years, researchers and administrators have acknowledged the challenges and concerns teachers have, and still these problems such as lack of training and inadequate support continue to plague our teachers. This study provided a mixed-methods approach to expand the findings of past research that teachers feel challenged, hopeful, and desirous of what can be accomplished. They felt frustration, burdened, fear, lack of support, and inadequate about their ability to teach children with different kinds of problems (Martinez, 2004). The findings of this study support the need to provide ongoing professional development opportunities for general-education teachers who work with students with disabilities in the LRE. In addition, due to legal and professional mandates regarding the education of students with disabilities, it is imperative to design a universal inclusion model inclusive of mandated and best practices to address teachers' issues, professional training, and legal requirements as noted under the historical and theoretical perspectives discussed in Chapter 2.

Overall, in this study, it was noted that professional development training had no effect in terms of teachers' attitudes, beliefs and practices toward inclusion. This could be attributed to the time needed to be trained, support and the necessary resources for implementation. This notion is consistent with Ely's third and sixth environmental conditions, which state that time is required to acquire knowledge and skills and there should be participation, shared decision making and communication among all the parties involved in the process (Ely, 1999). Quantitative and qualitative

findings clearly indicated that teachers need support and professional development training concerning the integration of students requiring academic modifications (two years behind) and accommodations for students whose behavior (physical, verbal aggression, and disruptive behavior) is disruptive in class. This insight mirrors Ely's seventh condition, which states that there must be commitment by those who are involved for continuing support for implementation of the innovation (Ely, 1999).

Throughout the entire study, evidence points to the fact that general-education teachers' concerns surrounded organizational and leadership issues in the educational environment pertaining to inclusion. For clarity, the next section summarizes evidence of the presence of Ely's (1999) eight environmental conditions in this study followed by a summary of the barriers or identified areas of resistance identified by Zaltman and Duncan (1977).

Ely's Environmental Conditions

1. Dissatisfaction with the status quo: "Something is not right. . . . Things could be better."

> Evidence: This condition was met in the study. A needs assessment was conducted to determine professional development needs prior to implementation. The participants' perspectives and interests were used to plan topics for training. Findings indicated that teachers were primarily concerned with organizational issues such as time for collaboration, communication and

special scheduling to address the needs of students in need of academic and behavior interventions.

2.   Knowledge and skills exist: People must have sufficient knowledge to do a job.

Evidence: This condition was met in that short-term professional development training was presented by outside consultants to promote changes in teachers' attitudes and instructional practices. Sessions were planned to include the awareness or knowledge base activities and follow-up coaching to ensure the transfer of knowledge and the use of new strategies consistently in the classroom setting.

3.   Resources are available: Things must be available to make implementation work. Without them, implementation is not possible.

Evidence: Material resources were provided, but it was noted that there was a lack of adequate support before, during and after the study. Therefore, this condition was not met because there was a lack of flexibility that would allow for team preparation and planning due to time constraints and schedule conflicts. In addition, there was limited support from administrators to support coteaching teams by providing planning time on a regular basis. Team times often became meeting times.

4.   Time is available: Time is necessary to practice knowledge and skills.

Evidence: Although limited time was provided to conduct the study, the time to adapt, integrate, plan and reflect on what was happening was not met in this study. Time was not granted to share learning strategies, experiences and reflections.

5.   Rewards and incentives exist for participants: Some form of rewards or incentives must exist for participants.

Evidence: This condition was met in this study. Participants did not receive monetary incentives, but were provided acknowledgement (for the wealth of experiences that they bring to the classroom) and continuing professional development credits (CPDUs) after each session toward certification renewal requirements.

6.   Participation is expected and encouraged: Shared decision-making, communication among all parties involved in the process.

Evidence: This condition was not met because the teachers were not given the opportunity to be directly involved in the development and improvement process which provides teachers with the awareness of the perspectives of others, group leadership skills, and appreciation of individual differences and problem solvers. Key personnel were not included in the planning and training process.

7.   Commitment by those who are involved: Visible evidence and endorsement of continued support of implementation

Evidence: This condition was not met due to limited support in terms of human resources and time.

8.   Leadership is evident: Leaders' expectations and commitment; Leaders

must be present and clearly visible to all participants from the beginning.

Evidence: This condition was obviously not met in this study due to the lack of

administrators' support, expectations and commitment top-down from the

beginning of the innovation.

Zaltman and Duncan's Organizational Barriers

The researcher in this study acknowledges that adults have many

responsibilities that they must balance against the demands of learning specifically in

the workplace. Because of these responsibilities, teachers and administrators alike had

barriers that affected participation in learning. Some of these barriers included lack of

time, confidence, or interest, lack of information about opportunities to learn, and

scheduling problems. Other barriers present in this study were threat to power and

influence of various parts of the organization, organizational structure, behavior of top

administrators, climate for change in the organization, and technological barriers

(Zaltman & Duncan, 1977). These barrier areas will be briefly discussed as identified

through the research findings on the pre/post tests.

1.   Threat to power and influence of various parts of the organization:

Findings showed that this barrier was present in the pretest and remained so in

the posttest and through personal comments made during interviews. One

administrator, in particular, agreed to assess the learning environment and staff

professional needs, but was somewhat reluctant to change for the betterment of the organization.

2.   Organizational Structure:

Findings showed that this barrier was present in the pretest and remained so in the posttest/interviews. Staff turnover was a contributing factor as well as lack of trust among special education support staff and general-education teachers. In addition, teachers described disruption to the classroom organization. Several comments viewed pull-outs as disruptive to the classroom environment. This is a distraction to other students in the classroom.

3.   Behavior of top administrators:

Findings showed that this barrier was present on the pretest and remained in the posttest and through personal comments and interviews. Insufficient support from administration was cited as a top behavior in the pre/post-test open responses and interviews.

4.   Climate for change in an organization:

Findings showed that this barrier was present in the pretest and remained in the posttest and through personal comments in interviews. Staff members stated that they believe that all students with disabilities should have access to the general-education curriculum and should be included, but expressed concerns or lack of consistency in the areas of training and support.

5.   Technological Barriers:

Findings showed that this barrier was present in the pretest and remained in the posttest and through personal comments and interviews. It was a constant struggle throughout the year and during this study that teachers had major concerns regarding the use of technology for instructional reasons. Many felt that they were not trained accurately due to the constant change of the student management system. Time was not provided to allow them time to learn the system changes. As a result, the teachers' union got involved, which contributed to the organizational obstacles on a day-to-day basis. Some participants agreed that they need more technology because there are items out there that can help specific training. Several voiced the need for specific training in the area of technology.

To summarize, an analysis of the content revealed that only three out of the eight environment conditions of change (Ely, 1999) were met and all five of the organizational barriers were present as noted in the pre/post test and or interviews. It is intended that districts, schools and staff developers may build upon lessons learned from literature and within the findings of this study.

Lessons Learned and Solution Strategies for Improvement

The lessons learned during the course of this study can positively impact the way districts and schools will serve or deliver services to all students, including students with various kinds of disabilities in the general-education settings. Educational leaders are the intended recipients of these precepts based on the research

findings of this study as they move to address the achievement levels of all students in the inclusive environment.

Lessons learned through inclusive education literature:

1. Inclusion is a process.

2. The key to inclusion is staff development and collaboration.

3. All students can learn in the general-education environment given appropriate support.

4. Special education is a support service to general education.

5. Each school needs to develop a unique plan for inclusion.

6. Inclusion is not going away; educators must continue to learn to ensure that all children's needs are met in the inclusive environment.

Lessons learned in the context of this study:

Before, during, and after the present study, general-education teachers

- feel that they do not have the necessary training and expertise to implement inclusion effectively.

- feel that they are not receiving enough support from others to implement inclusion effectively; and

- feel that there is a limited amount of time for collaboration and communication among staff members to adequately plan and implement strategies that will ultimately address the needs of students with academic-two years behind and behavior needs.

For inclusion to be effective there is a need to set priorities from the top down for administration to address the organizational issues at hand. The following solution strategies are based on scientific research and solid data, and aligned with the district/ building plan goals and changes. The following organizational strategies are recommended for instituting an LRE plan:

- Consolidation plan: Create and implement a multi-year district and building improvement plan, including professional development, incorporating change strategies for higher achievement for all students. All planning efforts will be consolidated focusing on academic and behavior long-term goals (Aligned with Ely's conditions [1999]: 1, 2, 5, & 8; Zaltman & Duncan's [1977] barrier areas: 2, 3, 4,).

- Ongoing and sustained staff development: Plan differentiated staff development training, including administrators, aligned with the priorities for change to address individual needs based on solid data regarding organizational performance, building/leadership capacity, competence, commitment, and effectiveness to overcome organizational barriers to reaching the organizational aims. Activities need to be aligned with the district and school improvement plans. Training and follow-ups need to be relevant and scheduled throughout the school year on a regular basis, including after hours and summer months, to train staff on what is expected of them in terms of adaptation, curriculum modification, instructional accommodations and benchmark assessment strategies (aligned with Ely's (1977) conditions 1, 2, 5,6, & 7: Zaltman & Duncan's (1977) barrier areas: 1, 2, 3, & 4).

- Align available resources to priority changes/goals and program needs to change results focusing on curriculum, instructional, and assessment (Aligned with Ely's [1977] conditions 3, 2, 4, 5, 6, and 8; Zaltman & Duncan's [1977] barrier areas: 2, 3, 4, and 5).

- Provide ongoing long-term external technical expertise and internal support using a coaching model to ensure that administrators and teachers are provided with professional development, resources, consultation, and on-site/in-class instructional strategies within the organization. There needs to be follow-up and consistency (Aligned with Ely's [1977] conditions 2, 3, 4, 5, 6, and 8; Zaltman & Duncan's [1977] barrier areas: 1, 2, 3, 4, and 5).

- Create an evaluation plan (formative and summative components) to monitor the effectiveness of the LRE activities, professional development needs and change in staff behavior and teaching practices. Activities need to be aligned with the consolidated plans: district/school and professional plans.

- The next section further discusses the implications of this study for professional development.

The conceptual framework noted in Chapter 1 and the change analysis section in Chapter 2 can serve as a solution strategy to adequately prepare general-education teachers to meet the diverse needs of students with disabilities in the inclusive environment. Because NCLB has sweeping ramifications for teacher learning and professional development, this can be done through the adoption of an appropriate and eclectic conceptual framework that is designed to support environmental conditions

that promote change (Ely, 1999) and the involvement of adults because they manage different aspects of their lives, capable of directing, or at least assisting in planning their own learning (Knowles, 1984). Knowles emphasizes that adult learners need to know why they need to learn about something.

Professional development should be designed to improve student learning through teacher training. The purpose of this study was to identify the attitudes and concerns of general-education teachers responsible for the education of students with disabilities, and to examine the extent to which professional development training influences general-education teachers' attitudes toward inclusion.

The first implication of this study is that if teachers' attitudes are to change, then learning must occur. In determining whether the general-education teachers are ready to implement inclusionary practices, it is believed that school systems are attempting to move towards full inclusion, but are neglecting to assess the immediate environment. Such factors have negatively influenced teachers' attitudes towards inclusion. To facilitate change, school leaders should assess change to determine whether change is likely to succeed under the existing circumstances. After assessing the immediate conditions, the prospective change agent may find that inclusion has a good chance of yielding anticipated benefits, or that it will require extensive change in current conditions (Ely, 1999).

The study indicated that major challenges participants clearly expressed were in the academic and behavioral categories, and they shared concerns about support and resources. Teachers voiced that they needed more training on curriculum modification

and accommodations, teaching best practices, behavioral/classroom management, coteaching approaches, and more resources such as time and personnel. This confirmed the findings linked to (1) collaboration for inclusive teaching, and (2) the need for ongoing professional development in inclusive practices, and support personnel to address their concerns in the inclusive environment. If inclusion is to succeed, school districts and professional development providers should plan and implement ongoing professional development training programs designed to not only to help teachers adapt instruction for students with disabilities, but also help them identify and implement best practices.

The final implication for staff development, as a result of this study, concerns teachers' issues regarding time to collaborate during and after school, specifically in the area of planning and scheduling. These concerns emerged as a major factor through the initial survey and semistructured interviews. In retrospect, participants also recognized that they could benefit from collaborative approaches. School systems should create time within the school day, after school hours or during professional development training to allow time for collaboration and communication.

In summary, this section examined the implications of the findings of this study in reference to professional development as related to inclusion. The following recommendations are based on the findings and conclusions of this study:

1.   In an effort to change teachers' attitudes towards inclusion, districts and professional development providers should first identify any resistance to inclusion and begin to establish methods, solution strategies, and meaningful and purposeful

professional development opportunities that can address concerns in the area of training needs, appropriate support and resources.

2. School districts and professional development providers should provide for adequate collaborative planning time for collaboration and communication among staff members during and after the school day.

3. To ensure teachers are well-prepared to successfully implement inclusive programs, school districts must provide comprehensive professional development opportunities which will allow the teachers to acquire knowledge for their jobs and the legal aspects of the LRE and strategies for teaching students with diverse learning characteristics, modifying and adapting instructional methods, working collaboratively on teams, classroom management and conflict resolution. This focused training will prevent ill-conceived, last-minute add-ons to an implementation plan designed for this purpose.

4. An Administrator's Inclusion Academy should be designed to train administrators focusing on the various delivery models, specifically inclusion, special education laws, strategies for assisting, supporting, evaluating, motivating, and scheduling teachers so that coteachers have time to plan and share information regarding students with disabilities.

Recommendations for Future Research

The need for professional development is essential for general-education teachers as well as prospective teachers in pre-service programs. Future research

should be conducted to expand this study's findings. For that reason, the recommendations for further research are discussed in this section.

Results of this dissertation study did not confirm that professional development training influences general-education teachers' attitudes after training that addressed their concerns. No significant changes took place between the pretest, training, and posttest that justify the idea that training influences general-education teachers' attitudes toward inclusion. It is suggested that further research in this area be undertaken and subsequent testing be done on a longitudinal basis with follow-up training to provide actual experiences within inclusive classrooms. It might be beneficial if teachers were coached in implementing effective inclusion strategies. It should be noted that both in-service and pre-service teacher programs can benefit from the findings presented in this study, as the research is relevant to today's LRE as the legal requirements governing special education and the mandated trends move toward full inclusion.

This research study was conducted over a three-month period within three elementary schools within a K through eight school district. Because the study took place the first three months of school year (September through December 2006), a follow-up research study would be beneficial to further analyze the impact of staff development training. Teachers must have the opportunities to participate in various types of training to adequately prepare them to meet the needs of diverse students with disabilities. According to Ely (1999), teachers who will ultimately implement

inclusion must possess sufficient knowledge and skills to do the job. Training should be structured and purposeful (Knowles, 1984).

A second recommendation for further research would be to plan a follow-up study within the study schools with teachers, support staff and administrators starting in the summer months and after a full school year of training to provide ample time to implement best practices in the classroom and professional learning community. The support staff and administrators should work cooperatively to identify common staff development needs and implement collaborative staff training models. A future study might evaluate the effectiveness of the professional development program activities and how they impact or influence the use of best practices in the inclusive classroom environment.

A final recommendation for future research is to develop and train teachers and support staff to implement a universal inclusion design for learning which will benefit all learners to include the awareness and stipulations of the legal and mandated requirements as related to the LRE, teacher certification, characteristics and needs of students with diverse needs, Curriculum Based Measurement (CBM), and RtI problem-solving strategies. Other topics should include best practices such as differentiated instruction (Tomlinson, 1999), Howard Gardner's Multiple Intelligences (MI) (Armstrong, 2001) and Universal Design for Learning (Muller & Tschantz, 2003)

Based on findings of this study, five recommendations are offered for further research in the area of special education relating to inclusion in conjunction with pre-

service and in-service teacher programs. These suggested recommendations can respectfully provide future directions for professional development. A summary of these recommendations is as follows:

1. Consider conducting a long-term follow-up study in the elementary schools within this study to determine the long-term effects of staff development experience relating to inclusion as applied to the implementation of best practices and collaborative support in the inclusive environment.

2. Consider preparing and training teachers, support staff and administrators during the summer months to provide adequate and collaborative planning time in preparation for the start of the school year and thereafter. This creates support for professional development and the learning community.

3. Consider developing and implementing a universal inclusion design to benefit all learners incorporating topics on the stipulations of the legal and mandated requirements in addition to best practices.

4. Consider the development of a program evaluation to monitor the effectiveness of both professional development program and the curriculum standards-based design.

5. School districts should include comprehensive professional development plans as part of the District/School Improvement Plan monitored by the state board of education required under federal law (NCLB) and state school code.

Concluding Remarks

The acknowledgement of teachers' attitudes toward the placement of students with disabilities in the general classroom is critical. Therefore, it is necessary to examine their attitudes and beliefs about inclusion which may influence educational practices and improvement. Necessary steps need to be taken to ensure teachers have the required meaningful opportunities, training and support needed to implement inclusive programs successfully. Inclusion is facilitated when teachers know their roles and responsibilities (Vaughn, 1996). Consistent with the study of Smith and Smith (2001), it was learned that teachers' issues and concerns are vital to the success of inclusion. The information in this study provided both quantitative and qualitative data that clearly defined the importance of making changes in classroom instructional practices and the significance of providing general-education teachers with training, adequate support and resources specifically designed to meet the needs of all students, including special needs, in the inclusive environment. In general, general-education teachers could use resources, support, and training on strategies for working with students with disabilities in the least restrictive environment.

The school systems of today should make a concerted effort to view the general-education classroom as the least restrictive environment for all students, regardless of their diverse needs and various disabilities. Professional development to support inclusion should be based on each adult learner's individual needs, and professional opportunities should be designed to prepare them for working with students with disabilities. Addressing the areas of concerns identified in this present

study would benefit and address the needs of general-education teachers to implement

such programs. Failure to do this will only result in placing students with disabilities

in a classroom environment where teachers are unable to help them to achieve state

standards and expected outcomes. Ultimately the schools as a whole will fail.

REFERENCES

American Montessori Society. (2003). *Inclusion.* Retrieved July 8, 2005, from http://amshq.org/ams/inclusion-pphtml

Armstrong, T. (2001). *Multiple intelligences in the classroom* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Association for Experiential Education. (1999). *What is experiential education?* Retrieved July 8, 2005, from http://www.aee2.org/customer/pages.php? pageid=47

Avramidis, E., Bayliss, P. B. & Burden B. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology, 20*(2), 191-211.

Baker, J. M., & Zigmond, N. (1995). The meaning and practice of inclusion for students with learning disabilities: Themes and implications from the five cases. *Journal of Special Education, 29*(2), 163-180.

Bauwens, J., & Hourcade, J. J. (1995). *Cooperative teaching: Rebuilding the schoolhouse for all students.* Austin, TX: Pro-Ed.

Buell, M., Hallum, R., Gamel-McCormick, S., & Sheer, S. (1999). A survey of general and special education teachers' perceptions and inservice needs concerning inclusion. *International Journal of Disability, Development and Education, 46*(2), 143-156.

Bender , W. N. , Vail, C.O., & Scott, K. (1995). Teachers' attitudes to increased mainstreaming: Implementing effective instruction for students with learning disabilities. *Journal of Learning Disabilities, 28,* 87-94, 120.

Berryman, J. D. (1989). Attitudes of the public toward educational mainstreaming. *Remedial and Special Education, 10*(4), 44-49.

Brown, D. L. (1997). Full inclusion: Issues and challenges. *Journal of Instructional Psychology, 24*(1), 24-28.

Bull, K., Overton, R., & Montgomery, D. (2000). *Strategies for instructional effectiveness applicable to training regular teachers for inclusion.* Princeton: ERIC Clearinghouse (ED 439885).

Burstein, N., Sears, S., Cabello, B., Spagna, M. & Wilcoxen. (2004). Moving toward inclusive practices. *Remedial and Special Education, 25*(2), 104-16.

Campbell, N. J., Dodson, J. E., & Bost, J. M. (1985). Educator perceptions of behavior problems of mainstreamed students. *Exceptional Children, 51,* 298-303.

Cawley, M. (2000). Creating and maintaining schools for all students. *High School Magazine, 7*(7), 38-42.

Chow, P., Blais, L., & Hemingway, J. (1999). An outsider looking in: Total inclusion and the concept of equifinality. *Education, 199*(3), 459-464.

Cohen, L. M. (1999). *Section III: Philosophical perspectives in education, Part 3.* Retrieved July 13, 2005, from http://oregonstate.edu/instruct/ed416/PP3.html

Colarusso, R. P., & O'Rourke, C. M. (1999). *Special education for all teachers* (2nd ed.). Dubuque, IA: Kendall/Hunt.

College Student Journal. (2003). Attitudes of pre-service teachers towards persons with learning disabilities. *37*(4), 515-522.

Cook, L., & Friend, M. (1993). *Educational leadership for teacher collaboration. Program leadership for serving students with disabilities.* Blacksburg, VA: Virginia Polytechnic Institute and State University.

Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches.* Thousand Oaks, CA: Sage.

Daane, C. J. Beirne-Smith, M. & Latham. (2000). Administrators' and teachers' perceptions of collaborative efforts of inclusion in the elementary grades. *Education, 121*(2), 331-338.

DuPaul, G. J., McGoey, K. E., & Yugar, J. M. (1997). Mainstreaming students with behavior disorders: The use of classroom peers as facilitators of generalization. *School Psychiatry Review, 26*(4), 634-650.

Education Resources. (1996). Special education and inclusion. *Education Resources.* Retrieved on October 9, 2005, from http://www.weac.org/resource/june 1996/Speced.htm

Edvisors Network. (2002). *Education issues: Education reform.* Retrieved July 8, 2005, from http://www.edvisors.com/Education_Issues/Education _Reform/index.html

Ellsworth, J. B. (2000). *Surviving change: A survey of educational change models.* Syracuse, NY: ERIC Clearinghouse on Information & Technology.

Ely, D. (1999). Conditions that facilitate the implementation of educational technology innovations. *Educational Technology, 39,* 23-27.

Fuchs, D. & Fuchs, L. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly, (41)*1, 93-99.

Fraenkel, J.R., & Wallen, N.E. (2000). *How to design and evaluate research in education.* Boston: McGraw Hill.

Gall, M. D., Gall, J. P., & Borg, W.R. (2003). *Educational research: An introduction* (7th ed.). Boston: Pearson Education.

Gartner, D. K., & Gartner, A. (1997). *Inclusion and school reform: Transforming America's classrooms.* Baltimore, MD: Paul H. Brookes.

Gay, L. R., & Airasian, P. (2003). *Educational research: Competencies for analysis and applications* (7th ed.). Columbus, OH: Merrill Prentice Hall.

Graham, S., & Harris, K. (1999). *Teachers working together enhancing the performance of students with special needs.* Cambridge, MA: Brookline Books.

Hargrove, L. J. (2000). Assessment and inclusion: A teacher's perspective. *Preventing School Failure, 45*(1), 18-21.

Hart, H. L. (1997). Teachers' perceptions of their preparation to work with special education students. (Doctoral dissertation, University of Mississippi, 1997). *Dissertation Abstracts International,* 9823902.

Hemmeter, M. L. (2000). Classroom-based intervention: Evaluating the past and looking toward the future. *Topics in Early Childhood Special Education, 20,* 56-61.

Hewit, J. S., & Whittier, K.S., (1997). *Teaching methods for today's schools: Collaboration and inclusion.* Boston: Allyn & Bacon.

Holmes, J. A. (1999, November 17-19). *The least restrictive environment: Is inclusion best for all special needs students?* Paper presented at the Annual Meeting of the Mid-South Educational Research Association. Point Clear, AL.

IDEA Law and Resources. (1997). *Law and regulations: IDEA '97 law and regs.* Retrieved October 9, 2005, from http://www.cec.sped.org/law rest/doc/law/index.php

Illinois State Board of Education [ISBE]. (2004). *2004 annual state report on special education performance*. Springfield, IL: Author.

The Individual with Disabilities Education Act Amendments of 1997, Pub L. No. 105-17, & 20 Stat 1400 (1997).

Karge, B. D., McClure, M., & Patton, P. (1995). The success of collaboration resource programs for students with disabilities in grade 6 through 8. *Remedial and Special Education, 16*(2), 79-89.

Kearsley, G. (2003). *Social development theory: A. Bandura.* Retrieved July 13, 2005, from http://tip.psychology.org/bandura.html

Kerzner-Lipsky, D., & Gartner, A. (1997), *Inclusion and school reform.* Baltimore, MD: Paul H. Brookes.

King-Sears, M. E. (1996). Determining complements and compromises for inclusion. *Intervention in School and Clinic, 31,* 231-237.

Kirk, R. (1996). Children help children help themselves: An inclusion model that works. *Reading Improvement, 33,* 208-209.

Klinger, J., Vaughn, S., Hughes, M., Schumm, J., & Erlbaum, B. (1998). Outcomes for students with and without disabilities in inclusive classrooms. *Learning Disabilities Research and Practice, 13,* 153-161.

Klingner, J. K., & Vaughn, S. (2002). The changing roles and responsibilities of an LD specialist. *Learning Disability Quarterly, 25*(1), 19.

Knowles, M. S. (1984). *Andragogy in action. Applying modern principles of adult education.* San Francisco: Jossey-Bass.

Lipsky, D. K., & Gartner, A. (1997). *Inclusion and school reform: Transforming America's classrooms.* Baltimore, MD: Paul H. Brookes.

Lombardi, T. P. (1994). *Responsible inclusion of students with disabilities.* Bloomington, IN: Phi Delta Kappa Educational Foundation.

Martinez, R. S. (2004). General-education teachers' attitudes toward inclusion: Implications for school psychologists. *NASP Communique, 33*(2), 1-6.

McLeskey, J., & Waldron, N. L. (2002). Professional development and inclusive schools: Reflections on effective practice. *Teacher Educator, 37*(3), 159-172.

Mendez, M. E. (2003). *Beliefs and attitudes of pre-service secondary history teachers toward inclusion and collaboration.* Unpublished doctoral dissertation, Illinois State University, Normal, IL.

Mertens, D. M. (2002). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2nd ed.). Thousand Oaks, CA: Sage.

Messina, J. J., & Messina, C. M. (2003). *Federal laws governing education for exceptional students.* Retrieved June 15, 2005, from http://www.coping.org/involvepar/laws.htm#Background

Monahan, R. G. (1996). Rural teachers' attitudes toward inclusion. *Eric Ed* 394775.

Morsenki, C. V., & Correa, V. I. (1991). *Interactive teaming consultant and call in special program.* New York: Macmillan.

National Association of Protection and Advocacy Systems, Inc. (2004). *Children with disabilities under No Child Left Behind: Myths and realities: Wright's law.* Retrieved June 15, 2005, from http://www.wrightslaw.com/nclb/info/myths.realities.napas.htm

National Association of State Directors of Special Education, 2005. *Response to Intervention: Policy Considerations and Implementation.* Alexandria, VA: Author.

National Association of Test Directors. (2005). *Curriculum based assessment/curriculum based measurement.* Retrieved June 22, 2005, from http//www.natd.org/cbm.htm

National Center on Education Restructuring and Inclusion (1995). National study on inclusion: Overview and summary report. *NCERI Bulletin, 2*(2), 1-10.

Nolan, J. E., (2004, November 25). *The US Individuals with Disabilities Act (IDEA): Tracing inclusion and exclusion of the disabled from Ford to Bush II.* Paper presented at the Society of History of Education (U.K.) conference in Dublin, Ireland.

Opdal, L.R., & Wormnes, S. (2001). Teachers' opinions about inclusion: A pilot study in a Palestinian context. *International Board of Disability, Development and Education, 48*(2), 143-162.

Orkwis, R. (1999). Curriculum access and universal design for learning. ERIC Clearinghouse on Disabilities and Gifted Education. *ERIC/OSEP Digest #E586.*

O'Shea, D. J. (1999). Making uninvited inclusion work. *Preventing School Failure, 43*(4), 179-180.

Penn State College of Education. (2002). Howard Gardner's multiple intelligence theory. Retrieved July 10, 2005, from http://www.ed.psu.edu/ insys/ESD/gardner/MItheory.html

Price, M., McFadden, A. & Marsh, G.E. (2000). Collaborative teaching: *Special education for inclusive classrooms.* Kansas City, MO: Parrot.

Renaissance Group. (2003). *Legal requirements: Children that learn together, learn to live together.* Retrieved July 7, 2005, from http://specialed.about.com/gi/ dynamic/offsite.htm?site=http%3A%2F%2F

Robinson, B. (1995). Teaching teachers to change: The place of change theory in the technology education of teachers. *Journal of Technology and Teacher Education, 3*(2/3), 107-117.

Salisbury, C. L., & McGregor, M. (2000). The administrative climate and context of inclusive elementary schools. *Council for Exceptional Children, 68*(2), 259-274.

Schumn, J.S. & Vaugh, S. (1992). Planning for mainstreamed special education students: Perceptions of general classroom teachers. *Exceptionality, 3,* 81-98.

Scruggs, T. E., & Mastropieri, M. (1996). Teacher perceptions of mainstreaming/inclusion 1958-1995 (research synthesis). *Exceptional Children, 63,* 59-74.

Sebastian, J. P., & Mathot-Buckner, C. (1999). *Including students with severe disabilities in rural middle and high school.* (ERIC Document No. ED 417911)

Shoho, Katims & Wilks, D. (1997). Perceptions of alienation among students with learning disabilities in inclusive and resource settings. *The High School Journal, 81*(1), 26-36.

Smith, H. (2004). *Illinois interactive report card.* DeKalb, IL: Northern Illinois University.

Smith, M. K., & Smith, K. E. (2001). I believe in inclusion, but: Regular education early childhood teachers' perceptions of successful inclusion. *Journal of Research in Childhood Education, 14,* 161-180.

Snyder, L., Garriott, P., & Aylor, M.W. (2001). Inclusion confusion: Putting the pieces together. *Teacher Education and Special Education, 24*(3), 198-207.

Snyder, R. F. (1999). Inclusion: A qualitative study of inservice general-education teachers' attitudes and concerns. *Education, 120*(1), 173-180.

Stanovich, P., & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *Elementary School Journal, 98*(3), 221-238.

Stub, D. & Peck, L. (1994/1995). What are the outcomes for nondisabled students? *Educational Leadership, 52*(4), 36-39.

Tanner, L. C., Linscott, D., & Galis, S. (1996). Inclusive education in the United States: Beliefs and practices among middle school principals and teachers. *Educational Policy Analysis, 4*(19), 1-33.

Tashakkori, A. & Teddlie, C. (1998). *Mixed methodology.* Thousand Oaks, CA: Sage.

Tomlinson, C A. (1999). *The differentiated classroom: Responding to the needs of all learners.* Alexandria, VA: Association for Supervision and Curriculum Development.

U.S. Department of Education (1997). *Individuals with Disabilities in Education Act.* Retrieved July 7, 2005, from http://www.ed.gov/offices/OESE/esea/

U.S. Department of Education (2003). *No Child Left Behind.* Retrieved July 8, 2005, from http://www.ed.gov/offices/OESE/esea/

Vash, C. L. (2001). Disability attitudes for all latitudes. *Journal of Rehabilitation, 67*(1), 38-42.

Vaughn, S. (1999). Kindergarten teachers' perceptions of instructing students with disabilities. *Remedial & Special Education, 20,* 184-192.

Vaughn, S., & Klinjer, J. K. (1998). Students' perceptions of inclusion and resource room settings. *Journal of Special Education.* Retrieved June 9, 2005, from www.elibrary.com

Villa, R., Thousand, J., Meyers, H., & Nevin, A. (1996). Teachers' views of inclusion. *Learning Disabilities Research and Practice, 11,* 96-106.

Villa, R. A. & Thousand, J. S. (2003). Making inclusive education work. *Educational Leadership, 61*(2), 3.

Weiner, H. M. (2003). Effective inclusion: Professional development in the context of the classroom. *Teaching Exceptional Children, 35*(6), 12-18.

Wilczenski, F. (1992). Measuring attitudes toward inclusive education. *Psychology in the School, 29,* 306-312.

Willis, S., & Mann, L. (2000). *Differentiating instruction: Finding manageable ways to meet individual needs.* Alexandria, VA: Association for Supervision and Curriculum Development.

Wilson, H. W. (2003). Attitudes of preservice teachers toward persons with disabilities. *College Student Journal, 37*(4), 515-522.

Yell, M. (1998). *The law and special education.* Upper Saddle River, NJ: Prentice Hall.

Zaltman, G., & Duncan, R. (1977). *Strategies for planned change.* New York: John Wiley.

APPENDICES

APPENDIX A

DEMOGRAPHIC PROFILE OF THE TARGETED COMMUNITY

AND STUDENT CHARACTERISTICS

Table 17

Community Profile

Demographic characteristics	Community %			
	1	2	3	4
Education				
Less than Grade 9	10.5	11.2	4.6	5.2
Grade 9-12, no degree	19.9	19.3	7.6	12.3
High school diploma or GED	28.4	26.0	27.6	26.3
Bachelor's degree	5.7	5.5	16.1	12.2
Family status				
Never married	38.8	37.6	23.1	33.4
Female head of household	33.0	29.4	5.0	13.3
Grandparents raising children	55.5	53.8	40.7	31.7
NonEnglish speaking	15.6	5.6	9.4	8.0
Unemployment rate	8.7	5.2	3.8	4.9
Ethnicity				
White	10.0	2.9	45.0	14.0
Black	79.0	94.0	51.0	82.0
Asian	0.4	0.0	0.9	0.6
Hispanic	12.8	4.0	3.8	3.0

Table 18

School Profile

School Information	School A PreK- 1st	School B $2^{nd} - 3^{rd}$	School C $4^{th} - 5^{th}$
Economically Disadvantaged	52	77.4	73.5
School student population (#)	372	337	325
Limited English proficient (LEP) (%)	12.6	16.9	9.8
Students with disabilities (%)	2	43	30
Attendance (%)	93.6	94.9	95.4
Mobility (%)	41.7	44	12.3
Chronic Truants (%)	na	2.9	Na
Class size	20.9	26.4	Na
White, nonHispanic (%)	4.6	1.2	1.2
Black, nonHispanic (%)	62.6	79.5	81.5
Hispanic (%)	32.3	19	16.6
Native American or Alaskan Native (%)	0	0	0.3
Asian/Pacific Islander (%)	0	0.3	0
Multi-racial/Ethnic	0.5	0	0

APPENDIX B

ADEQUATE YEARLY PROGRESS REPORT

Table 19

Adequate Yearly Progress District Report

Is this District making Adequate Yearly Progress (AYP)?	No	Has this district been identified for District Improvement according to the AYP specifications of the federal No Child Left Behind Act?	Yes
Is this District making AYP in Reading?	No	2005-06 Federal Improvement Status	District Improvement
Is this District making AYP in Mathematics?	No	2005-06 State Improvement Status	Academic Early Warning

Student Groups	Percent Tested on State Tests				Percent Meeting/Exceeding Standards*						Other Indicators			
	Reading		Mathematics		Reading			Mathematics			Attendance Rate		Graduation Rate	
	%	Met AYP	%	Met AYP	%	Safe** Harbor Target	Met AYP	%	Safe** Harbor Target	Met AYP	%	Met AYP	%	Met AYP
State AYP Minimum Target	95.0		95.0		47.5			47.5			89.0		67.0	
All	99.4	Yes	99.4	Yes	52.1		Yes	51.8		Yes				
White														
Black	99.3	Yes	99.3	Yes	48.4		Yes	49.0		Yes				
Hispanic	100.0	Yes	100.0	Yes	64.8		Yes	60.4		Yes				
Asian/Pacific Islander														

(continued on following page)

Table 19 (continued)

Native American														
Multiracial /Ethnic														
LEP	100.0	Yes	100.0	Yes										
Students with Disabilities	100.0	Yes	100.0	Yes	21.1	35.2	No	29.6	44.8	No				
Economically Disadvantaged	99.5	Yes	99.5	Yes	48.8		Yes	49.9		Yes				

APPENDIX C

ATIES

ATTITUDES TOWARD INCLUSIVE EDUCATION SCALE

This scale concerns "inclusive education" as one method of meeting the legal requirements for placing students with disabilities in the "least restrictive" educational environment. Inclusive education means that all students with disabilities are mainstreamed and become the responsibility of the regular class teacher who is supported by specialists.

INSTRUCTIONS

On the blank line, please place the numerical value indicating your reaction to every item according to how much you agree or disagree with it. Do not omit a response to any item.

Strongly Agree 6	Agree 5	Agree Somewhat 4	Disagree Somewhat 3	Disagree 2	Strongly Disagree 1

___1. Students whose academic achievements is 2 or more years below the other students in the grade should be in regular classes.

___2. Students who are physical aggressive toward their peers should be in regular classes.

___3. Students who cannot move without help from others should be in regular classes.

___4. Students who are shy and withdrawn should be in regular classes.

___5. Students who academic achievement is 1 year below the other students in the grade should be in regular classes.

___6. Students whose speech is difficult to understand should be in regular classes.

___7. Students who cannot read standard print and need to use Braille should be in regular classes.

___8. Students who are verbally aggressive toward their peers should be in regular classes.

___9. Students who have difficulty expressing their thoughts verbally should be in regular classes.

___10. Students who need training in self-help skills and activities of daily living should be in regular classes.

___11. Students who use sign language or communication boards should be in regular classes.

___12. Students who cannot control their behavior and disrupt activities should be in regular classes.

___13. Students who need an individualized functional academic program in everyday reading and math skills should be in regular classes.

___14. Students who cannot hear conversational speech should be in regular classes.

___15. Students who do not follow school rules for conduct should be in regular classes.

___16. Students who are frequently absent from school should be in regular classes.

Pretest Open-ended Questions

b. What challenges have you encountered in implementing inclusion?

c. What knowledge and skills do you feel you need to be more effective in inclusive teaching?

Demographic Information

In order to provide the required statistical information for the research study, I would appreciate if you would please complete the following items:

1. Male_____ Female_____

2. Total years of teaching experience_____

3. Total years experience teaching students with disabilities_____

4. Total number of students _____

5. Total number of students with disabilities assigned to your classroom:

Physical	Academics	Behavioral	Social

6. Your current professional job assignment: Please indicate which grade level you are currently teaching.

Grade Level(s) _____

APPENDIX D

PERMISSION TO USE INSTRUMENTS

UNIVERSITY of
MASSACHUSETTS
BOSTON
100 Morrissey Blvd.
Boston, MA 02125-3393

UMASS.

Department of Counseling & School Psychology
617.287.7602
Fax: 617.287.7667

March 20, 2006

Annie P. Hurt

Dear Ms. Hurt,

You have my permission to use and reprint the Attitudes Toward Inclusive Education
Scale (ATIES) for your dissertation.

Best wishes in your graduate studies.

Sincerely,

Felicia L. Wilczenski, Ed.D.
Associate Professor

APPENDIX E

INTERVIEW QUESTIONS

THE IMPACT OF PROFESSIONAL DEVELOPMENT ON GENERAL-
EDUCATION TEACHERS' ATTITUDES TOWARDS THE INCLUSION OF
STUDENTS WITH DISASBILITIES IN THE INCLUSIVE ENVIRONMENT

INTERVIEW QUESTIONS

Full inclusion is the full-time placement of children with mild, moderate, or severe disabilities in regular classrooms. All support services must be taken to the child in that setting rather than moving the child to the services.

1. Describe the types of students you teach in your classroom. What challenges do these students pose?

2. In what ways have your feelings and beliefs regarding inclusion of students with disabilities changed?

3. Tell me, what challenges you faced in teaching students with disabilities?

4. How did professional training help you better prepare to work with students with disabilities in your classroom?

5. What additional concerns or issues do you have regarding the inclusion of students with disabilities?

APPENDIX F

LETTER TO SUPERINTENDENT AND PRINCIPALS

August 2006

[name], Superintendent
[address]
[city, state, ZIP]

Dear Dr. [name],

As a doctoral candidate at Northern Illinois University in DeKalb, Illinois, I am conducting educational research focused on general-education teachers' attitudes toward inclusion.

Teachers at School A, B, and C Schools will be asked to voluntarily complete and return to me a sixteen-item scale, "*Attitudes Toward Inclusive Education Scale.*" It could take from five to ten minutes to complete the survey. Upon request, results of this study will be available to the district and participants.

In addition, teachers will be asked to participate in personal interviews. Three open-ended questions addressing the teachers' issues and concerns regarding inclusion will be used. All identifying information will remain confidential. Each individual personal interview could range in length from twenty minutes to an hour.

If possible, I would like to schedule an on-site visit to each school to complete the above activities during the week of August 28th. If these dates are not conducive to each school's schedule, alternate dates will be requested.

Thank you for your assistance with this research project. If you have any questions, please telephone me at [phone number]. If necessary, you may also email me at [e-mail address].

Respectfully,

Annie P. Hurt

APPENDIX G

COVER LETTER TO PARTICIPANTS

Recruitment/ Introductory Materials

Welcome back to a new and exciting school year!!!

My name is Annie P. Hurt. I am the District Curriculum and Assessment Coordinator, and doctoral candidate in Curriculum Leadership in the department of Teaching and Learning at Northern Illinois University. You have been invited to participate in a study entitled "General-education teachers' Attitudes Toward the Inclusion of Students with Disabilities in the Inclusive Environment." This study will consist of approximately 51 kindergarten to fifth-grade general-education teachers. As part of this study, you are asked to complete an Attitudes Toward Inclusive Education Scale (ATIES) as a pre/post test followed by a one-on-one interview that includes five open-ended questions. The survey will take 10 to 15 minutes to complete. Each personal interview will consist of 10 to 12 general-education teachers and takes approximately 45 to 60 minutes to complete.

The purpose of this study is to identify the attitudes of general-education teachers responsible for the education of students with disabilities and to determine professional development training to enhance teachers' attitudes about the benefits of inclusion. You will be given the opportunity to participate in professional development training specifically designed to meet your needs due to the IDEA Law and general-education teachers' certification requirements regarding special education. Continuing Professional Development Units (CPDUs) will be issued as an incentive in addition to a possible stipend for workshop attendance afterschool or weekend. Formal training will take place followed by several follow-ups on site to support best practices. The study will focus on the development of instructional strategies that will support you in meeting the needs of students with special needs. Upon completion of the study, I intend to share my findings with all participants, school and district personnel.

Consent Form

You have been invited to participate in a study entitled "General-education teachers' Attitudes Toward the Inclusion of Students with Disabilities in the Inclusive Environment." The researcher for this study is Annie P. Hurt, District 151 Coordinator of Curriculum and Assessment and a doctoral candidate at Northern Illinois University.

The purpose of this study is to identify the attitudes of general-education teachers responsible for the education of students with disabilities and to determine professional development training to enhance teachers' attitudes about the benefits of inclusion. You will be given the opportunity to participate in professional development training specifically designed to meet your needs due to the IDEA Law and general-education teachers' certification requirements regarding special education.

If you choose to participate, you will be asked to share your perceptions and experiences related to working with students with disabilities. The information will be gathered through a survey and interview. The participants in this study will consist of approximately 51 kindergarten through fifth grade general-education teachers from [Name] (PreK-1), [Name] (2-3), and [Name] (4-5) Schools. You will also be asked to participate in a one-on-one interview. The survey and interview will be conducted at each of the schools in the fall of 2006. The 16 item survey including two open-ended questions will take 10 to 15 minutes to complete. The interview consisting of five open-ended questions will take about 45 to 60 minutes each to complete. Each interview will be tape recorded.

There are no foreseeable risks or discomforts associated with your participation in this study. Benefits of this study include providing you with specific training focusing on the development of instructional strategies and teaching practices that are designed to support you in meeting the needs of students with disabilities in your classroom. Continuing Professional Development Units (CPDUs) will be issued as an incentive in addition to a possible stipend for workshop attendance afterschool or weekend.

All information gathered during this study will be kept confidential by using pseudonyms for the district, the schools, and the participants involved. Participation in this study is completely voluntary. You are free to withdraw from the study at any time during this process, including after agreeing to participate. Refusing to participate in this study will result in no penalty or loss of benefits.

Any further questions about this study should be addressed to the researcher or the dissertation advisor for this study.

Annie P. Hurt, Researcher   Dr. Joyce Lieberman, Advisor/Committee Chair
[address].   Gabel Hall, Northern Illinois University
[city, state, ZIP]   DeKalb, IL 60115
[phone number]   815/753-5611

If you would like further information regarding your rights as a participant, you may contact the Office of Research Compliance at Northern Illinois University at 815/753-8588.

I agree to participate in this research study and acknowledge that I have received a copy of this consent form. Please sign below.

Signature of participant   **Date**

I agree to participate in the interview as part of this study. I understand that the interview will be tape recorded and will be kept private until the time that they are destroyed after transcription.

Signature of participant   **Date**

APPENDIX H

FOLLOW-UP LETTER TO NONRESPONDING PARTICIPANTS

September 2006

Dear Prospective Participant:

This is a follow-up letter to invite you to participate in a study entitled "General-Education Teachers' Attitudes Toward the Inclusion of Students with Disabilities In the Inclusive Environment." The purpose of this study is to identify the attitudes of general-education teachers responsible for the education of students with disabilities and to determine professional development training to enhance teachers' attitudes about the benefits of inclusion. You will be given the opportunity to participate in professional development training specifically designed to meet your needs due to the IDEA Law and general-education teachers' certification requirements regarding special education.

If you choose to participate, you will be asked to share your perceptions and experiences related to working with students with disabilities. The information will be gathered through a survey and interview. The 16 item survey including two open-ended questions will take 10 to 15 minutes to complete. The interview consisting of five open-ended questions will take about 45 to 60 minutes each to complete. Each interview will be tape recorded.

There are no foreseeable risks or discomforts associated with your participation in this study. Benefits of this study include providing you with specific training focusing on the development of instructional strategies and teaching practices that are designed to support you in meeting the needs of students with disabilities in your classroom. Continuing Professional Development Units (CPDUs) will be issued as an incentive for workshop attendance afterschool or weekend.

All information gathered during this study will be kept confidential by using pseudonyms for the district, the schools, and the participants involved. Participation in this study is completely voluntary. You are free to withdraw from the study at any time during this process, including after agreeing to participate. Refusing to participate in this study will result in no penalty or loss of benefits.

Any further questions about this study should be addressed to the researcher, Annie P. Hurt, at [phone number], for this study. If you would like further information regarding your rights as a participant, you may contact the Office of Research Compliance at Northern Illinois University at 815-753-8588.

I agree to participate in the research study and acknowledge that I have received a copy of this consent form. Please sign below.

_____

Signature of participant   Date

I agree to participate in the interview as part of this study. I understand that the interview will be tape recorded and will be kept private until the time that they are destroyed after transcription.

_____

Signature of participant   Date

APPENDIX I

PROFESSIONAL DEVELOPMENT WORKSHOP AGENDAS

[subject school] SCHOOL DISTRICT [number]
[address]
[city, state, ZIP]
Presents

A 4 in 1 Free Seminars

on

" *How to Reach and Teach All Learners in the Inclusive Environment*"

September 22, 23 and October 20, 21, 2006

✓ Friday, September 22, 2006 – District School Improvement Day – 12:30 –
3:15pm (2 CPDUs) [school and location]
✓ Saturday, September 23, 2006 – 8:30am – 2:00pm (5 CPDUs)
✓ Friday, October 20, 2006 – District School Improvement Day – 12:30-3:15pm
✓ Saturday, October 21, 2006 -8:30am – 2:00pm (5 CPDUs)

Seminar Leader: Dr. [Name], Least Restrictive Environment (LRE) Consultant

Seminar overview: The workshop leader will provide hands-on scientifically
research-based strategies, resources to meet your individual professional needs and a
variety of cooperative teaching approaches designed to help you plan, integrate, and
practice proven strategies
(e.g., differentiated instruction, learning styles, classroom management/organization)
designed to assist you in meeting the needs of all students including students with
specific disabilities (learning/cognitive disabilities, emotional/behavior disorders,
physical disabilities and health impairments and mental impairments) in your
classroom. The seminar is open to all district staff. All workshops are aligned with
Illinois Professional Teaching Standards and National Standards of Professional
Development. Workshop activities (Pre K – 8th) are aligned with the Illinois Learning
Standards, Early Childhood and the new Illinois Kindergarten Standards.

Partial listing of how to topics and scientifically-based best practices to support
inclusion education:

o **Academic & Instructional Modification**: The integration of students requiring
academic modification of the regular curriculum
o **Behavioral Accommodations**: Accommodations for students whose behavior is
disruptive in class

o **Social Integration**: The integration of students whose social participation in general education is deficient

o **Physical Accommodations**: The integration of students whose physical disabilities require physical accommodations in the regular classroom

Special Accommodations
Breakfast continental & Delicious Lunch
CPDUs will be issued after each work session toward recertification requirements.
District location to be announced.....
Don't miss out on this golden opportunity!
Please sign up today at your school or email [e-mail address]

"How to Reach and Teach All Learners in the Inclusive Environment"

AGENDA

Friday, September 22, 2006

YOU ARE LRE

Objectives: to understand the NCLB and IDEA; to understand the Special Education Process; to explore the issues of Inclusion of SwDs in Special Education; to create a sense of success for all children; to understand the ideas of modifications and accommodations for SwDs

1. Introductions
2. Film: NCLB and IDEA (Please write two questions about this film and submit them – names are not necessary)
3. Simulation – Special Education Process
4. Overview – Powerpoint show
5. Wedding Ceremony – Metaphor for Inclusion
6. What does good teaching look like?
    Film: Mrs. Tolliver
7. Modifications and Accommodations and other Handouts
8. Film: "Graduating Peter"
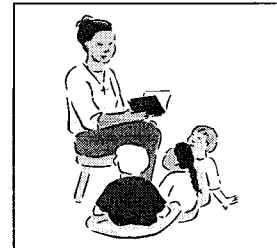9. Brief Discussion
10. Wrap UP

How to Reach and Teach All Learners in the Inclusive Environment

September 23, 2006
AGENDA

Students and LRE

Saturday, September 23, 2006
Objectives: to understand the stigma of disability and how to manage it;
continue to evaluate classroom practice; review broad learning styles;
explore possible learning interrupters of students with disabilities.
AM session
1. Film: "When Billie Broke His Head" - Discussion - Stigma and Disability
2. What does good teaching look like for SwDs?
3. Overview - Powerpoint show of broad disability categories and
recommended teaching strategies
4. Film Clips of Students with specific disabilities.

LUNCH

You and Your Students, including those with disabilities

PM Session
1. Games
2. Film: Differentiated Instruction; Part I
3. Discussion: setting up your room; art project
4. Collaboration Strategies
5. Film: Wavelength
6. Wrap UP

Agenda, October 20, 2006 – Accommodations and Modifications

Goals: to foster complex thinking; to process information; to collaborate and cooperate; to effectively communicate and to form professional habits of the mind.

Objectives: understanding accommodations and modifications that can be used for working with SwDs, Identification, Diagnosis, Assessment and Evaluation of SwDs; exploring strategies to close the achievement gap between SwDs and 'Regular" Students.

<u>Activities</u>
1. Perceptions and Realities – Birth Order Game; Group Juggle again; Quality Circle; Start a Story/Category; Teachnology Website
2. Film Clip: "The Gods Must be Crazy"; Discussion
3. Pros and Cons of Inclusion: "The Jerry Stinger Show" – group work
4. Brief review of Teaching Tips – see attachment
5. Film Clip: "Brain Sex"; Charts and Graphs with Tolliver;
6. What does good teaching of SwDs look like? Group Work (name your group)
7. Chat and Discuss: What will I see in my classroom as I work with students that may have some disabilities?

> Interrupting descriptors for most SwDs are a combination of any of the following: memory, attention, language, socialization, thinking and organization.
> How do some students express their frustration: learned helplessness; anger; low expectations; social isolation; class disruptions; low graduation rate; etc.

8. Film Clip: "Autism is a World"
9. Group work: Accommodations are changes in **HOW** a student accesses information and demonstrates learning. Accommodations do not substantially change the instructional level, content or performance criteria. THE CHANGES ARE MADE IN ORDER TO PROVIDE A STUDENT WITH AN EQUAL ACCESS TO LEARNING AND EQUAL OPPORTUNITIY TO SHOW WHAT HE OR SHE KNOWS AND CAN DO. Accommodations can include changes in the following areas: presentation and/or response format and procedures; instructional strategies; time/strategies; environment; equipment and architecture. (Organize your charts using at least 5 of these instructional method and delivery options: discussion and questioning; independent worksheets; assessments; centers; projects; reports; reading; writing; drawing; groups; note-taking; computer; material presentation and homework.

10. Group work: Modifications are changes in **WHAT** a student is expected to learn. The changes are made to provide a student opportunities to participate meaningfully and productively along with other students in classroom and school learning experiences. Modifications can include changes in the following: instructional level; content and performance criteria.

10. Fun Wrap Up: " 7 Habits of Highly Ineffective Teachers"

Teaching Tip #1
Managing Your Classroom
" Nothing is more despicable than respect based on fear." Camus
" If a man does not know to what port he is steering, no wind is favorable to him." Seneca

Classroom Management refers not only to behavior or student discipline, but also to the elements that compose your instructional organization. Some of the other elements include: strategies for instruction; homework policy, grading policy, behavior policy, physical setup of room; plan for parent communication and contingencies for other school affecting your instruction.

Teachers who are effective classroom managers keep 4 principles in mind at all times:
    1. Send a positive message for learning.
    2. Understand that your students are all different.
    3. Do not bring your personal life, attitudes, feelings, and biases into the classroom – be tolerant – present information objectively
    4. Maximize the quality of your instruction

Effective Classroom Management – you must know the following:
    Your students' developmental level
    The political composition of the school
    The principal's and vice-principal's leadership style
    The physical environment of your school
    Your colleagues' teaching and management style
    Your beliefs about behavior management

Designing Your Management Plan: Six Steps
Step I: Creating the classroom environment – arranging the seating; welcoming
Step II: Organizing your instruction (have resources, backup, homework, grading ideas)
Step III: Setting up the Tempo of Instruction: Routine; creating teaching intervals (opening presentation, explanation; dependent practice, recapitulation, independent practice [homework] and transition or application); respond to class signals; diversify instructional modes; make materials relevant to students' experiences
Step IV: Designing the Behavior Plan (developed mutually, brief and simply worded, reflect consequences, and posed for easy reference) - do a class contract - we all agree; when we disagree; violations will...)
Step V: Knowing Yourself – expectations? Your personal definition of reasonable behavior; What is your definition of respect?
Step VI: Knowing Your Students (immediate halt to the teasing or badgering; equity, get background of student, see veteran teachers, communicate with parents, be fair and consistent, and encourage participating
http://maxweber.hunter.cuny.edu/pub/eres/EDSPC715_MCINTYRE/AssertiveDiscipline.html

http://www.fredjones.com?Positive_Discipline/Discipline_Intro.html
http://www.nea.org/tips/manage/index.html

"Education is not filling the pail, it's lighting the fire." W.B. Yeats

Teaching TIP #2
Influences on Your Teaching: your background in the subject; your understanding of learners' developmental states; your preparation for each day of teaching; and your teaching strategy, or how you organize and deliver your teaching plan

An Effective Teacher is excited, fair, positive, prepared, sincere, has high expectations and challenges students.

Factors influencing student success: cultural background, language, learning disabilities, age, gender, ability level, socioeconomic status, peer relationships, religion, parenting style and temperament.

Ways to Balance Factors Influencing Student Learning
1. Instruction should be sensitive to the students' diverse needs
2. Make great efforts to relate the material to students' lives in any way possible
3. Consistency is the key to cohesive classroom instruction
4. Rely on the support services available for you

Direct instruction components:
1. Introduction and review
2. Presentation and demonstration
3. Questioning
4. Dependent practice
5. Independent practice
6. Final review and reinforcement
7. Application

Socratic Method
1. An establishing question
2. An expanding question
3. An organizing or clarifying question
4. A probing question
5. A relative question

Discovery and Inquiry Based Learning – student is encouraged to seek his or her own answers. The student then works with material discovered to form his or her own perspective relating to the material.

Project-Based and Problem-Based Learning : problem is given; problem is framed in real-world situation; what procedures or actions are necessary to solve the problem; what issues emerge; how do you look at both sides of the issue; depiction of problem and issues

Cooperative Learning (POSSIBLE MEMBERS - RECORDER, READER, MANAGER OF TIME, AMBASSADOR AND RESEARSER)

Capitalizing on experiential learning, student experiences and cooperation including the following formations: STAD (student teams achievement divisions – a system in which each team is placed on an achievement level on the basis of scores on tests or quizzes the students give themselves. Team members form study groups in any way they want and test and quiz one another on the material. They then sum the team score to compare with other teams' scores.); Jigsaw – each student on a team is responsible for a specific portion of the material to be learned – present what they have learned to other teams; Group investigation: teams must develop its own strategies for isolating meaning of the topic and develop sub topics, plot methods to find information on the topic and finally organize the information into a formal presentation; Carousel feedback: the results of the group investigation are evaluated by moving students from project to project and students ask students about the presentations

CONCEPT TEACHING

Concept teaching is a variation on thematic units, except it provides a broader application of topics. Using any concept that relates to your topic, such as, roads in social studies, or change in science or relationships in language.
1. Supports building relationships among categories and topics
2. Stimulates critical thinking
3. Distinguishes between critical attributes and noncritical attributes
4. Makes heavy use of concept mapping

WEB resources
http://wwwhumboldt.edu/~tha1/humter-eei.html
http:///www.adihome.org
http://www.adihome.org/phpshop/faq.php?username=
http://www.teach-nology.com/teachers/methods/models/direct
http://www.wilsonmar.com/1movies.htm#ReviewSites
http://ww.frsd.k12.nj.us/rfmslibrarylab/di/differenetiated_instruction.htm

Agenda, October 21, 2006 – Accommodations and Modifications, Dealing with Behaviors

Presented by Dr. [Name] and Dr. [Name] Presenters' Goals: to foster complex thinking, to process information, to collaborate and cooperate; to effectively communicate and to form professional habits of the mind.

Objectives: Exploring Cases in Behavior Management; understanding how to view SwDs through research trajectories; review of accommodations and modification techniques – group techniques and differentiated instruction.

Activities
1. "When Billie Broke His Head" – what accommodations and modifications do you see used for the people in this film?
2. Case Management – see attachments
3. Lunch Break
4. Film Clip – "Differentiated Instruction" - Let's try to do that in a classroom? See Attachment of UbD and DI
5. Discussion and group work
6. Film Clip – Group Techniques for Cooperative Learning
7. Wrap Up

Essential Questions (examples)

1. Arithmetic (numeration) : What is a number? Why do we have numbers? What if we didn't have numbers? Can everything be quantified?
2. Arts (visual and performing): Where do artists get their ideas? How does art reflect, as well as shape culture?
3. Culinary Arts: When is it OK to deviate from the recipe? What makes a safe kitchen?
4. Dance: How and what can we communicate through the 'language' of dance? In what ways can motion evoke emotion?
5. Economics: What determines value? Can macroeconomics inform microeconomics and vice versa?
6. Foreign Language
What distinguishes a fluent foreigner from a native speaker? What can we learn about our own language and culture form studying another?
7. Geography: What makes places unique and different? How does where we live influence how we live?
8. Government: Who should decide? How should we balance the rights of individuals with the common good?
9. Heath: What is healthful living? How can a diet and exercise regimen be healthy for one person and not another?
10. History: Whose story is it? What can we learn from the past?
11. Literature: What makes a great book? Can fiction reveal truth? Should a story teach you something?
12. Mathematics
When is the correct answer not the best solution?> What are the limits of mathematical representation and modeling?
13. Music
How are sounds and silence organized in various musical forms? If practice makes perfect, then what makes perfect practice?
14. Physical Education and athletics – Who is a winner? Is pain necessary for progress in athletics?
15. Reading and Language Arts – What makes a great story; How do you read in between the lines?
16. Science – To what extent are science and common sense related? How are form and function related to the natural world?
17. Technology: In what ways can technology enhance expression and communication: In what ways might technology hinder it? What are the pros and cons of technological progress?

18. Writing: What is a complete thought? Why do we punctuate? What if we didn't have punctuation marks?

[name] (citation Tomilson and McTighe, 2005; pp. 112-113)

In each of your groups you will be presented with one case study. You will analyze it according to the schema presented below and present a summary and your findings in class.

Behavior management is an array of interventions created to help teachers influence the behavior of children and teach them to behave in positive and safe ways. These interventions are designed not merely to alleviate teacher anxieties of losing control but to help these professionals and the children they love create social atmospheres of cooperation, contexts in which children and adults learn together, plan together, and build quality relationships. I offer you four basic models that have been devised over the years that offer fundamental concepts and approaches to mediate behaviors. They are:
1. Behavioral, 2. Psychodynamic, 3. Environmental, 4. Constructivist

Social systems theory teaches us that we never deal with just a child or a child's behavior. We always deal with a child, a context, a person embedded within and intimately connected to the surrounding physical and social world. Behavior is viewed as an expression of the dynamic relationship between individual and the specific ecology, in which the individual is situated or embedded (Plas, 1986, Rhodes, 1967, 1970; Swap, 1978). Implications of Social Systems include but are not limited to the: individual; interpersonal relationships, relationships between systems, group interactions, and society.

Five Essential **Behavioral** Questions
1. What is the specific behavior that is problematic?
2. Under what specific conditions does this behavior occur?
3. What are the antecedent and consequent conditions or events that tend to occur in conjunction with this behavior? (What happens before and after the behavior that might be supporting or reinforcing this?)
4. What is available that would be viewed as rewarding by the child or adolescent?
5. Who can systematically and consistently provide the rewards and how can this be arranged?

The Behaviorist model is concerned with the scientific modification of observable behaviors. All behavior is conditioned by external stimuli. The primary three applications of this model are behavior modification, functional analysis and pre-mod analysis (Kaplan, 1995). Pre-mod looks beyond the observable behaviors that are caused or promoted by environmental stimuli and looks closely at the emotional state and general personality. (Bandura, 1969; Sugai and Tindal, 1993)

Five Essential **Psychodynamic** Questions
1. What difficult feeling is the child or adolescent experiencing (anger, sadness, frustration) when she or he misbehaves?
2. Why is the child or adolescent feeling this? (What is going on at the moment or in the child or adolescent's life that stirs these feelings?)
3. Is there a way to arrange for the child or adolescent to move away from the situation and cool down at the time these difficult feelings are rising up?
4. Is there a way to arrange for an adult that the child or adolescent views as caring and trustworthy to provide support and talk privately with the individual about these difficult feeling when these feelings occur?
5. Is there a way to increase the number and quality of trusting, caring relationships with adults in this individual's life?

The Psychodynamic Model, unlike the Behavioral Model (which looks at that which exists outside the child), looks primarily at the inside of the child. This is more neo-Freudian. Counseling techniques involve dialogues that build trust between troubled or misbehaving children and caring adults. 13

techniques are being used: planned ignoring, signal interference, proximity control, interest boosting, tension reduction through humor, hurdle helping, program restructuring, support from routine, direct appeal, removal of seductive objects, antiseptic bouncing, and physical restraint.

Five Essential **Environmental** Questions

1. For each of the recent instances of misbehavior or conflict, describe the physical setting, time of day, activity, and participants. (Keeping observational field notes for a number of days can help with this.)
2. Do you notice any repeated patterns in regard to question 1?
3. Does the individual or group experiencing the behavior problems have any discomfort with the setting, time schedule, activity, or participants? (Ask!)
4. If you do notice patterns in how a certain setting, time of day, activity or participants provokes or promotes the problematic behavior, what changes can reasonably be made?
5. What is your own (teacher's) role as a powerful element of the social context in contributing to or improving upon this problem situation? (This can be a tough one.)

The environmental model (e.g., Hobbes, 1966, Rhodes & Paul, 1978) focuses on the development of specific aspects of a child's immediate environment (home, school, neighborhood) that provide structure, support, vitality, and regularity. To some extent, what a person does (behavior) is inseparable from context. If you can imagine waking up in a different bed in a different home – there would be no structure and no consistency and very difficult for most people. The environmental model emphasizes the way the contexts in which a person lives greatly influences that person's behavior. There is, however, no absolute formula for designing healthy contexts in which to live and learn. Big ideas here include: Time; Physical Space and Patterns of Human Interaction.

Five Essential **Constructivist** Questions

1. Describe the qualities of (dis) connectedness, (dis) unity, and (un) caring within the community or group where the behavior problems occur. (Community or group could mean classroom, family, or any small network of relationships).
2. How do you think the lack of (dis) connectedness, (dis) unity, and (un) caring within the community or group has encouraged or precipitated this behavior problem?
3. Does the individual (or individuals) in question feel respected and loved within the community or group?
If not, why not?
4. How is power distributed (equally? unequally?) and used (respectfully? disrespectfully?) within the community or group? How could power distribution and use influence behavior?
5. How can the sense of connectedness, unity and caring be improved in such a way as to provide better support for the person or persons experiencing behavior problems?

Derived from the works of scholars like Piaget (1954, 1970) and Bruner (1962, 1986, 1996), constructivism operates under the assumption that children are not passive receptacles of information but active constructors of personal and social meaning. Within their thoughts, feelings, words, and action, children continuously create what is meaningful, valuable, and important to them. In this sense, children are constantly constructing personal knowledge about themselves and the world. This knowledge concerns personal identity, relationships with important others, cultural norms and moral stances. From this perspective, we must keep in mind that even behavior we deem "inappropriate" is meaningful and important in some way to the child or children who do the behavior. Big ideas include: moral autonomy – sense of self as a responsible moral agent, a concerned evaluator of what's good and what is bad in each life situation; caring – is a quality of ethical, human connection in which each person is genuinely invested in well-being of the other (s); and community building – school is the place to build democratic communities of social cohesion that value many forms of human diversity.

The Evaluation Rubric for the Written Analyses of Cases is included at the end of this packet.

You have two concerns: **Immediate intervention** – ensuring physical safety; attending to emotional well-being and returning to order and peace and **Long term intervention** – Assessing the problem; formulating objectives of intervention; plan an effective intervention; implementing the intervention; and evaluating the results.

Case Protocol

I. Incident – describe succinctly the incident

II. Background information –describe the incident

III. Intermediate Intervention

IV. Long-Term Intervention

V. Psychodynamic Model – answer essential questions for your case

VI. Environmental Model – answer essential questions for your case

VII. Constructivist Model – answer essential questions for your case

VIII. Behavioral Model – answer essential questions for your case

IX. Summary – see long-term intervention

Blinded by Science

The Incident

As Charlie Jameson sat in science class that May morning, the last thing that he heard before passing out was a loud "thump." The "thump" that Charlie heard was Rashon Rickson's science textbook hitting him on the head.

Rashon had worked for the previous two weeks to develop a model of the Mars Pathfinder, along with a working model of the rover. The model, build to scale, included Martian-looking rocks, one with the name "Barnacle Bill." In a matter of minutes, Rashon's exacting work was scattered to pieces on the ground with Charlie towering over the mess like a giant who had just destroyed a miniature village. Unable to speak, Rashon just stared in amazement. His lower lip quivered with sadness. Meanwhile, Charlie looked on and let out a bellowing laugh. As his laugh echoed within Rashon's ears, Rashon's face slowly began to finish up his own project. Seething with anger, Rashon grabbed his science textbook, walked up behind Charlie's desk, and with all his weight slammed it on Charlie's head. As Charlie fell to the ground, Mr. Saxton, the science teacher, ran to grab him, but missed and instead landed on the pile of children who had gathered around. Mr. Saxton was visibly shaken by the incident. Ordering children back to their desks while simultaneously grabbing Rashon by the arm, Mr. Saxton's entire body was quaking.

"Jay, go to the office and tell Mr. Griffin to call an ambulance, and tell him to get down here. Now!" Mr. Saxton barked to the student closest to the door.

Background Information

It wasn't the first time that Charlie and Rashon had been involved in an altercation and possibly wouldn't be the last. Charlie was the class bully. Everyone – the students in the class, the teachers in the school, and the principal – kept an eye out for Charlie. Charlie's sheer size made him stand out in this fifth grade class. He would intimidate any child who stood in his way. Charlie was the boss of the students and often got his way through a threatening glance. Charlie was too familiar with the in-school-suspension (ISS) and did not fear being sent home for hitting or fighting. Charlie's dad, Henry "Rock" Jameson, had instilled in his son the desire to use whatever it took to be a "winner" in life. Charlie was often heard telling his victims, "Suckers like you make up the losers in the world."

According to most of the kids in the class, Rashon was a "geek." He was a good-looking fifth grader, but his glasses and sweater vests often made him look like the professor's son. Rashon's interest in science led him to spend long hours searching the Internet and prevented him from socializing with other students. In fact, he could make an exact replica of the Pathfinder because he was able to study pictures from the various Web sites that kept him apprised of the latest developments from the Mars landing. Rashon was the most intelligent child in class, often out-smarting Mr. Saxton. Rashon was also one of the most despised kids, because he flaunted his intelligence and money. Every time he won a trophy, he would proudly walk around the room placing it in the faces of his losing competitors. For Rashon, winning intellectual endeavors validated his worth. Extremely competitive, his parents were often more proud of his accolades than the actual projects. His dad, Zachary Rickson, a computer systems manager at a high-tech firm, paid little attention to Rashon except when he brought home a prize. His mother often had little time to spend with Rashon because her career required that she work many evenings and weekends. A millionaire real-estate agent, Tina Rickson was always after the next property, the next client, the next deal.

Why Rashon didn't fear Charlie was a mystery. Rashon was Charlie's antithesis in life and mixing the two often resulted in Rashon's ripped clothes and Charlie's satisfied glow. Oddly enough, in a number of ways Charlie and Rashon were a lot alike. Both had parents who valued competitiveness and cherished winning. Both boys learned that it was primarily after some incident (Charlie's fights and Rashon's trophies) that their parents would take the time to acknowledge and talk to them.

On the morning of the above incident, Rashon and his father were eating breakfast together. As on most mornings, his mom was already at the office. The father and son did not talk. Rashon ate cereal while reading a science book, and Zachary drank his cappuccino while tapping away on a laptop computer. Each was busy living in his own little world until Rashon had an accident. He was pouring milk on the second bowl of cereal when it spilled. The milk made a quick path to Zachary's laptop.

"What are you doing? Do you know the damage liquids can do to this computer?" Zachary shouted. Zachary had been up most of the night working on a computer program, and it might have been his fatigue that caused him to 'snap out" at Rashon. Rashon grabbed the towel and tried to soak up the milk while pleading for his father's forgiveness. Zachary continued to yell. Then something odd happened. Normally, by now Rashon would be in tears from his father's scolding, but on this day Rashon fought back the tears and yelled at his father.

"All you care about is your damn computer!" he shouted as he bolted out the door. Zachary called him back, realizing that there was some truth to his statement, but it was too late; he was gone.

In another part of town another father-son scenario was playing out in the Jameson household. At breakfast, Charlie and his father, Rock, got into an argument. Rock was angry with Charlie because Charlie stole cigarettes from his coat and smoked them in the basement. Rock actually hadn't caught Charlie smoking, but he found the cigarette butts behind the furnace. As he yelled at Charlie during breakfast, the boy's tears fell into his cereal. Despite the overwhelming evidence, Charlie denied the allegations. His denials only intensified Rock's anger until he finally slapped Charlie on the face.

Rock loved his son, but he often used the same tough disciplinary methods that his father had used on him. He used punishment to solve most of his family problems. As Charlie ran out of the door that morning, he told his father he hated him and that he wished he were dead. Rock felt bad and yelled for his son, but it was too late for apologies. Charlie had already pedaled his bike out of sight.

"Damn, another time that I screwed up," Rock mumbled under his breath.

Planning Backward

•Stage I: <u>Identify Desired Results</u> What should students know, understand and be able to do? What content is worthy of understanding? What "enduring understanding" are desired? What essential questions will be explored?

•Stage II: <u>Determine Acceptable Evidence</u> How will we know whether students have achieved the desired results? What will we accept as evidence of student understanding and proficiency?

•Stage III: <u>Plan Learning Experiences and Instruction</u> What enabling knowledge and skills will students need to perform effectively and achieve desired results? What activities, sequence, and resources are best suited to accomplish our goals?

SIX FACETS OF UNDERSTANDING

- Can explain via generalization or principles: provide justified and systematic accounts of phenomena, facts, and data; make insightful connections and provide illumining examples or illustrations
- Can interpret: tell meaningful stories; offer apt translations; provide a revealing historical or personal dimension to ideas and events; make it personal or accessible through images, anecdotes, analogies, and models
- Can apply: effectively use and adapt what we know in diverse and really contexts – we can 'do' the subject
- Have perspective: see and hear points of view through critical eyes and ears; see the big picture
- Display empathy: find value in what others might find odd, alien, or implausible; perceive sensitivity on the basis of prior direct experience

- Have self-knowledge: show metacognitive awareness; perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; be aware of what we do not understand; reflect on the meaning of learning experience.

TEACHER INSTITUTE DAY
Tuesday, November 7, 2006

8:00am - 3:00pm

"Cultural Diversity in the Classroom: Reaching Diverse Learners"

[name] College
AM Diversity Sessions

8:00 – 8:15   Rolls/Coffee
Agenda Overview

8:15 – 10:15   Session I: Celebrating Diversity in the Classroom!
10:15 – 10:30   Break

10:30 – 11:30   Session II: "Response To Intervention (RtI) in the Diverse Classroom"
11:30- 11:45   Wrap-Up AM Sessions/Reflections/Evaluations

Celebration Luncheon
12:00pm – 12:30pm
Roosevelt Education Center

Individual Schools
PM Work Sessions

12:30 – 2:45   Session III: "Data-Driven Assessments in the Diverse Classroom"

2:45 – 3:00   Wrap-Up PM Sessions/Reflections/Evaluations

Description: Today's sessions are specifically designed to meet the needs of participants and students in the diverse classroom. In "Celebrating Diversity in the Classroom", participants will be engaged in several activities designed to meet the needs of diverse learners in the classroom environment. Session II will be an introduction to the RtI Model. Consistent with the Individuals with Disabilities Education Improvement Act (IDEA, 2004) and the No Child Left Behind Act (NCLB), the speaker will share valuable information about the RtI design and implementation across general, remedial and special education, the core RtI principles followed by essential components of RtI (Multi-tier Models of Service Delivery). In Session III follow-up work sessions, participants will have the opportunity to analyze classroom assessment data, and plan instruction for diverse learners.

*** *Celebrate Diversity*: Living Together, Playing Together, Learning Together, Working Together***