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Teachers' Attitudes toward Inclusive Classrooms

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COLLEGE OF EDUCATION

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Brenda Greene

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2017

Abstract

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Some teachers have negative attitudes toward teaching students with learning disabilities
in the regular classroom. The purpose of this quasi-experimental study was to determine
the attitudes of regular classroom teachers regarding several aspects of inclusive
education (IE), as well as how teacher education, training, and experience contributes to
the teachers' attitudes towards IE. The research was guided by Cooper and Fazio's (1984)
reformulation of the theory of cognitive dissonance. A sample population of 135
classroom teachers was used. The participants completed the Scale of Teachers' Attitudes
toward Inclusive Classrooms survey instrument and a demographic survey, which were
analyzed through a MANOVA and MANCOVA. The results indicated that teachers had
positive attitudes toward inclusionary teaching practices; however, the teachers also
conveyed negative attitudes toward the philosophical aspects of inclusionary teaching
practices, and these attitudes differed significantly per level of education and teacher
training. The results of this study were used to develop a teacher training curriculum to
improve co-teaching strategies, classroom management tips, emergency procedures, and
information about learning disabilities. This study will contribute toward positive social
change as these attitudes impact the teaching practices and student learning.

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I would like to thank my family who has helped me reach this point in my academic career. I especially want to thank my husband, Bob, for all his support, advice and understanding of the time needed to spend on my doctoral work.

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Section 1: The Problem

Introduction

The negative attitudes that teachers have toward teaching students with learning disabilities in the regular classroom has been documented in the professional research literature (DeBoer, Pijil, & Minnaert, 2011). The extent to these negative attitudes persist in a local school setting and the extent to these attitudes are associated with teacher education, teacher training, and teaching experience was the focus of this study. This section begins with the background on the research problem and the rationale for addressing this problem. The purpose of this study and the corresponding research questions are then presented. The terms and concepts pertinent to this project study are then defined, and the significance of this study is presented. This section concludes with a review of the research literature underpinning this study.

Background of the Problem

Inclusive Education in the Larger Context

The focus of this study was on the attitudes that regular classroom teachers have toward the prominent educative model, inclusive education (IE). IE is an educative model in which students with disabilities are placed in the regular classroom setting to learn the age-appropriate curriculum in the same classroom environment as their nondisabled peers (Individuals with Disabilities Education Act [IDEA], 2004). IE involves bringing support services to the student in the regular classroom setting, rather than having the student receive support services in an isolated environment removed from nondisabled peers (Kilanowski-Press, Foote, & Rinaldo, 2010). The core principle of IE is that all students with disabilities are to be educated to the fullest extent possible in the regular classroom,

and the students are removed only when support services cannot be provided in the regular classroom setting.

In the IE model, the responsibilities and teaching practices of the regular classroom teacher are extended. The regular classroom teacher is responsible for teaching the core curriculum to one or more students with disabilities in accordance with an individual education plans (IEP) for each student (IDEA, 2004). IE often involves a team teaching approach in which the regular classroom teacher works collaboratively with the special education facilitator to develop instructional plans and assessment strategies specific to the learning needs of each student (IDEA, 2004). As a collaborative team teaching approach, the regular classroom teacher is often expected to participate in planning placement team (PPT) meetings and conferences. These additional responsibilities and expectations often extend beyond the area of teaching interest and expertise of many regular classroom teachers and add to the existing demands of their regular classroom teaching. As a result of these increased demands, many regular classroom teachers have negative attitudes toward IE (Andrews & Frankel, 2010; McCray & McHatton, 2011).

Local Problem

Negative teacher attitudes toward IE are exemplified in the local school district of interest to this study. This local school district is in its 5th year of implementing a full IE model. This local school district implemented IE in 2009. During this 5-year period, this segment of the student population increased from 10% to 14%, representing approximately 525 students. There were 462 special education students placed in the regular classroom setting. Within the typical classroom of 25 students, there may be as

many as five additional students with moderate to severe cognitive disabilities in each regular classroom.

The district goal specified in the 2015 District Improvement Plan was to increase student achievement for all via ensuring that all students have access to a high quality curriculum across the district. As a part of this improvement plan, students with disabilities were tested at the age-appropriate grade level with their same age peer group, and the regular classroom teacher was accountable for the demonstrated levels of achievement. As teachers are being held accountable for student achievement as demonstrated via state and district level testing, the teachers are becoming increasingly discontent with the inclusion of disabled students in the regular classroom setting.

At a staff meeting, the teachers questioned the expectation of having their students reading at or above a third grade proficiency level, when much of their time was spent working with the two to five learning disabled students in their classroom (Northeast Elementary School, 2014). The regular classroom teachers continued to express concerns and discontentment with the implications that IE has for their regular classroom teaching roles and responsibilities. These teachers expressed concerns with the additional responsibility of teaching the regular classroom curriculum to students with learning disabilities. These concerns and discontentment were manifested in negative attitudes that were conveyed outside and inside of the classroom (personal observations, 2014-2015).

Rationale

Support for Inclusive Education

IE is rooted in the belief that students with disabilities benefit most when given the opportunity to learn alongside of their nondisabled peers in the age-appropriate classroom (Graziano & Navarre, 2012). According to the Maryland Coalition for IE (2012), these benefits include increased access to the core curriculum, increased time on task, improved communication skills, increased literacy skills, more academic gains, and improved friendships. The IE classroom also contributes to the social development of students without disabilities. Cassady (2011) explained that the student population in the IE classroom reflects the population in the outside world. As students without disabilities learn alongside of students with disabilities in the IE classroom, these students develop awareness and understanding of this segment of the population as it exists in the outside world. The IE classroom allows nondisabled students to develop the social skills and dispositions needed to interact with this segment of the population as a responsible and productive member of society (Heyne, Wilkins, & Anderson, 2012).

The federal government continues to support the education of students with disabilities in the regular classroom setting via federal legislation. The IDEA (2004) stated that students with disabilities are to be educated in the least restrictive environment to meet their needs. The IDEA legislation has been credited for improving access to public education for students with disabilities, establishing infrastructure for educating children with disabilities, earlier identification of disabilities in children, and greater inclusion of these children in classrooms with their nondisabled peers (Aron & Loprest, 2012). Recent amendments to the No Child Left Behind Act (IDEA, 2004) have added

momentum to the IE model as this legislation has shifted from mainstreaming and inclusion to emphasizing the need for meaningful participation of students with disabilities in the regular class. NCLB and IDEA have played a role in the evolution of classrooms and teaching, with one of the most important innovations being the requirement that students with disabilities have access to the general education curriculum.

Attitudes Toward Inclusive Education

Teachers' attitude toward inclusive education must be studied to identify deficiencies within the education system, which may create negative perceptions. DeBoer et al. (2011) suggested that the successful implementation of inclusive is dependent on the teacher's willingness to accept the inclusion model. The negative attitudes toward IE extend beyond by the teachers in the current local school district, and they are reflective of attitudes conveyed by regular classroom teachers in school districts throughout the United States (Berry, 2010). In a meta-analysis of the research addressing attitudes toward IE practices, de Boer, Pijl Sip, and Minnaert (2011) revealed that most teachers hold neutral or negative attitudes towards the inclusion of students with special needs in the regular classroom setting. Accordingly, although IE continues to receive support from the federal government and is supported in the professional literature, many regular classroom teachers continue to have negative attitudes toward IE (Andrews & Frankel, 2010; McCray & McHatton, 2011).

The negative attitudes that teachers have toward IE can have a detrimental impact on student learning and may impede the success of the IE model (Cassady, 2011). Teacher attitudes contribute to teaching effectiveness and subsequent student learning

(Cassady, 2011). Gal, Schreur, and Engel-Yeger (2010) concluded that teacher attitude is one of the most important aspects of teaching and that negative attitudes negatively affect the teaching practice in the classroom. The importance of teacher attitudes was highlighted by Hattie (2009). Hattie highlighted the importance of teacher attitudes as an important factor contributing toward student learning via the influence that teacher attitudes have on teaching practices and the classroom environment. Taylor and Ringlaben (2012) highlighted the detrimental impact of negative attitudes toward IE as these attitudes extend throughout the school culture, and these attitudes result in teaching practices that impede student learning.

Study Purpose

Although researchers have continued to address negative attitudes toward IE and scholars have examined various factors associated with negative attitudes toward IE teaching practices, negative attitudes continue to persist among classroom teachers (Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012). Given the detrimental impact that negative attitudes can have on student learning and ultimately the IE model (McMaster, 2013), additional research was warranted to gain a better understanding of the attitudes that teachers have toward IE. It was not known what attitudes teachers had towards inclusive education in the district under study. The purpose of this project study was to identify the aspects of inclusionary teaching practices that lead to negative attitudes and to investigate the extent in which teacher education and training background and teaching experience are associated with these attitudes.

Definitions

Co-teaching: This refers to a method of teaching wherein two educators take responsibility for planning, teaching, and monitoring the success of all learners in a class (Glazzard, 2011).

Individuals With Disabilities Education Improvement Act of 2004 (IDEA): There are several changes from the 1997 reauthorization of the IDEA. The biggest changes called for more accountability at the state and local levels, as more data on outcomes are required. Another notable change involved school districts providing adequate instruction and intervention for students to help keep them out of special education (IDEA, 2004).

Inclusion: Inclusion in education is an approach to educating students with special educational needs, where students with special needs spend most or all of their time with nondisabled students. Inclusion is about the child's right to participate and the school's responsibility to accept the child, and a premium is placed upon participation by students with disabilities and upon respect for their social, civil, and educational rights (Forlin, 2012).

Least restrictive environment: This refers to an environment in which a student has a disability and should have the opportunity to be educated with nondisabled peers, to the greatest extent appropriate (Marks, Kurth, & Pirtle, 2013).

Self-efficacy: This refers to a student's belief in his or her capabilities to achieve a goal or an outcome. Students with a strong sense of self-efficacy are more likely to challenge themselves with difficult tasks and be intrinsically motivated (Tschannen & Johnson, 2011).

Significance of the Study

The attitudes that regular classroom teachers have toward IE practices impact teaching practices and ultimately student learning. The attitudes of teachers are manifested in effective and less effective teaching practices that impact student learning (Taylor & Ringlaben, 2012). Hence, this study was significant as I addressed this problem. The investigation of the attitudes that classroom teachers had toward particular aspects of IE and the examination of these attitudes with respect to the educational background, teacher training, and teaching experience provided insights to address this problem via providing teacher training and experience to foster positive attitudes toward the identified aspects of IE. The findings from this study can be used to inform policy decisions involving teacher training requirements that prepare regular classroom teachers to teach in the IE classroom setting and to guide in-service teacher training opportunities. The results of this investigation were used to develop a professional development curriculum to be offered to the teachers in the local school setting in which this study was conducted.

Research Questions

Regular classroom teachers continue to have negative attitudes toward IE practices (DeBoer et al., 2011). These attitudes manifest in undesirable and ineffective teaching practices and have a negative impact on student learning (Berry, 2010). This problem is exemplified within the local school district of interest to this project study. I aimed to address this problem as it persisted within this local school district. The purpose of this study was to examine the attitudes that the regular classroom teachers in this local school district had toward particular aspects of IE and to examine the extent in which

these attitudes are related to the educational background, teacher training, and teaching experience of these regular classroom teachers. I addressed the following research questions and corresponding research hypotheses:

Research Question 1: What are the attitudes of regular classroom teachers in a local school setting toward inclusive education (including (a) advantages and disadvantages of IE, (b) professional aspects, (c) philosophical aspects, and (d) logistical concerns)?

Research Question 2: To what extent and in what manner do education, teacher training, and teaching experience contribute to the variation in attitudes toward IE among regular classroom teachers in a local school setting?

$H_0 2$: The educational background, teacher training, and teaching experience do not make a statistically significantly contribution to variation in teacher overall attitudes toward IE within the local school setting of interest.

$H_1 2$: The educational background, teacher training, and teaching experience do make a statistically significantly contribution to variation in teacher attitudes toward IE within the local school setting of interest.

Research Question 3: To what extent and in what manner do the educational background, teacher training, and teaching experience contribute toward the variation in several aspects of IE (a) perceived advantages and disadvantages of IE, (b) professional aspects of IE, (c) philosophical aspects, and (d) logistical concerns)? Does this variation differ with respect to (a) gender, (b) age, and (c) ethnicity?

$H_0 3$: The educational background, training, and experience do not make a statistically significant contribution to the variation in teacher attitudes toward these

aspects of IE. This relationship does not statistically significantly vary with respect (a) gender, (b) age, and (c) ethnicity.

$H_1$3: The educational background, training, and experience do make a statistically significant contribution to the variation in teacher attitudes toward these aspects of IE. This relationship does statistically significantly vary with respect (a) gender, (b) age, and (c) ethnicity.

Review of the Literature

Theoretical Foundation

This project study was guided by Cooper and Fazio's (1984) attribution reformulation of the theory of cognitive dissonance. Festinger (1957) first put forth the theory of cognitive dissonance. This theory is based on the premise that humans seek consistency in their beliefs, understandings, and actions. Cooper and Fazio (1984) expanded on this theory via their attribution reformulation of the cognitive dissonance theory. Van Overwalle and Jordens (2002) maintained that attitudes are formed through learning, and attitudes can change when exposed to new paradigms. By applying this theory to this study, I hypothesized that the independent variable, teacher attitude, would influence the dependent variables, academic training and years of teaching experience. According to the theory of cognitive dissonance, experiences, or lack thereof, forms attitudes or perceptions. These attitudes and perceptions, in turn, form the basis of cognitive schemas; when a cognitive schema does not match up with a person's experience, this creates cognitive dissonance, which prompts a need to learn (author, year). Individuals use the information learned to adjust their cognitive schemas to suit

their experiences (Cooper & Fazio, 1984). In this study, I investigated the attitudes of teachers to examine the teachers' attitudes towards inclusion.

Review of the Broader Problem

A review of the current research literature addressing topics and subtopics relevant to this project study was conducted. The literature review was of the literature published in academic journals within the last 5 years. The following key words were used to search this body of current research: *inclusive education, teacher attitudes, teacher attitudes and student learning, teacher attitudes toward inclusive education,* and *teacher attitudes toward inclusive education and student learning*. The resultant studies retrieved addressed the following aspects of IE: (a) IE trends, (b) dimensions of IE: prevalent aspects, (c) impact of teacher attitudes toward IE on teaching practices and student learning, and (d) factors influencing teaching attitudes toward IE. These studies encapsulated the research addressing the dimensions of IE and the predictor variables hypothesized to contribute toward each dimension.

In this section, I will present an analytic review of the research in each of these areas in this corresponding order. I will outline the need for this study via establishing the extent and manner in which negative attitudes toward IE is a problem, identifying the extent and manner in which researchers have examined this problem and noting the extent and manner in which this problem yet persists. The implications that this study will have for the corresponding study project will then be presented. This section will then conclude with a succinct summary of the foundational components established in Section 1.

Inclusion Trends

Since the passage of the IDEA (2004), all school districts were required to develop and provide a free, appropriate public education for all children. Because of IDEA, the inclusion model is practiced in districts across the United States. School districts have been changing their approach to educating students in the inclusive classroom by using strategies to improve climate, adding support personnel and refining instruction delivery in the classroom. McMaster (2013) explained that successful inclusion is a culmination of the entire school embracing the inclusion model. Also crucial is a culture of the school that expresses compassionate and understanding in which differences in students are perceived as a resource. The staff should be committed to making sure that student needs are identified and intervention and support services target student needs.

The instructional strategies used in the special education classroom was the focus of Beacham and Rouse's (2012) study. Beacham and Rouse monitored special education students to evaluate instructional strategies and interactions throughout the day. Beacham highlighted the role of teacher assistants as the primary resource used to assist special needs students in the classroom. These findings further supported recommendations for additional adults to assist with meeting the needs of these students in the inclusive classroom.

To increase the effectiveness of inclusion, instructors may use the co-teaching model to meet the needs of all students and to provide sport and collaborative opportunities for regular education teachers (Graziano & Navarre, 2012). With co-teachers in the classroom, the classroom teacher and special education teacher share the

teaching responsibility in the classroom. This model provides an opportunity for the special education teacher to collaborate with the classroom teacher about student learning.

Dimensions of Inclusive Education: Aspects

Researchers have examined various aspects of the dimensions of IE that are of interest to this study. When teachers express belief in their students' ability to succeed and teachers provide students with challenging tasks and necessary supports, student achievement improves (Schilling & Schilling, 1999). Hwang and Evans (2011) found that younger and less experienced teachers had a more positive attitude toward IE than older and more experienced teachers. Hwang and Evans revealed a negative correlation between teacher attitude and their respective years of teaching experience, such that more experienced gained more negative attitudes.

In contrast, Woodcock (2013) concluded that teacher attitudes often do not change over the teacher's career; therefore, preparing teachers for IE is imperative. Woodcock also compared the attitudes of trainee teachers and experienced teachers towards students with learning disabilities. Woodcock concluded, "There were no differences in attitudes according to experience with students with specific learning disabilities" (p. 12). Forlin and Chambers (2011) found that when teachers participated in training designed to improve their confidence with regard to IE, their attitudes also improved significantly. Successful IE requires teachers with positive attitudes, and training is a critical component of forming these attitudes (Forlin & Chambers, 2011). Teacher training fosters positive attitudes toward IE practices. Many teachers are willing

to receive training to improve their knowledge and skills, and to better collaborate with others, in order to help children with special needs (Rakap & Kaczmarek, 2010).

Impact of Teacher's Attitudes

Teachers' attitudes play a role in student learning. In IE, teachers' attitudes can affect the implementation and delivery of instruction. Salem (2013) stressed that the positive attitude towards inclusion of disabled students is one of the requirements of the success of IE. Not only is the positive attitude of the teacher important, but the positive trend of the society towards inclusion of disabled people is necessary to achieve the desired success and the aim of IE. Salem stressed that the teacher is the most influential person in the process of education. When the attitudes and perceptions of the teacher need changing, the process needs to begin early in the process at the foundation of skill development.

The success or failure of inclusion programs depends on teaching strategies and attitudes. Karp (2011) cited a school performance study at a Chicago high school with a large number of special education students in which students identified this school as a failing school. Karp further noted that study teachers commented that students were not motivated to learn or that their disability made students incapable of learning. These perceptions had an influence on the success of the school. IEPs were incorrect, and 150 had to be rewritten because they matched services available to students as opposed to getting the appropriate interventions to meet the needs of the student. The school model had special education students separated from their nondisabled peers for most of the day, violating the least restrictive environment criteria as outlined in the NCLB act.

Teachers' attitudes may determine the overall success of an inclusion model. Gal et al. (2012) identified that negative attitudes toward inclusion have the potential to lead to a decrease in academic performance and an increase in the isolation of special education students. Gal et al. indicated that teachers with a negative attitude are among those most difficult barriers to change in the educational environment. Gal et al. outlined an example of how attitudes and beliefs that teachers have toward special education students can affect teaching and learning.

Factors that Impact Attitudes

Training, professional aspect. According to the U.S. Department of Education, National Center for Education Statistics (2013), the special education population is 2.43 million students, or 4.9% of all students nationwide. To educate these students, many districts have adopted an inclusion model. It is unclear if teacher preservice programs prepare teachers for teaching in an inclusion classroom. In a comparative study of the attitudes, concerns, and the frequency of interactions of elementary school teachers and teacher candidates towards inclusive education, Gökdere (2012) explored the differences in perceptions to inclusion for in-service teachers and teachers who are in a teacher preparation program. The preservice teachers had been exposed to coursework in special education and inclusion, whereas the in-service teachers did not have this type of training in their preservice training. Even with the training, preservice teachers had low levels of confidence and knowledge, much like the in-service teachers without training. The only difference proved to be that preservice teachers realized that their attitude and perceptions toward inclusion would affect their instruction of special education students and knowing that their attitude was important; preservice teachers also indicated that they were more

anxious around special education students. The in-service teachers indicated that they had low knowledge and confidence in teaching special education students.

In a qualitative study, teachers reported frustration and guilt because of time that they dedicate to special education students equates to less time spent on regular education students (Horne & Farrell, 2011). The time needed to attend additional meetings, complete paperwork, and collaborate with specialists was imbalanced when compared to the time dedicated to the other students in the class. According to de Boer et al. (2011), using literature from 1998 to 2008 with 26 studies about inclusion, teachers were undecided or negative in the belief about educating special education students in the regular classroom. Teachers highlighted that they did not believe they had the training needed to teach special education students and that diminished their confidence level (author, year). Teachers lacked training and experience in teaching special education students (Boer et al., 2011).

Sadioglu, Bilgin, Batu, and Oksal (2013) suggested that elementary teachers generally have a negative opinion of inclusive education. Sadioglu et al. revealed inadequacies in special education instruction from regular education teachers. Sadioglu et al. said these teachers need expert support because preservice and in-service training was insufficient, and they experienced problems in their classrooms. Hsien, Brown, and Bortoli (2011) found that the high level of education and training in special education resulted in a more positive attitude in teachers toward inclusion.

Inclusion studies may lead districts to investigate how much training new and existing staff has had in special education and how additional professional development can lead to a stronger instruction to students with and without special needs. Gavish and

Shimoni (2011) found that elementary school teachers in Israel believed that the system in place for educating special needs students in the classroom was disorganized and chaotic. Teachers indicated that they were not prepared and there was a lack of training to prepare them for inclusion.

The Welsh inclusion model is a model of inclusion that Pickard (2009) examined. Pickard outlined the effect inclusion has on all elementary school students and provided an example of a systematic process of training and implementing inclusion in an elementary school. The Welsh inclusion model divided implementation of inclusion into phases that include training, practice, and follow-up. Such a model, where implementation is precise and planned, could potentially affect perceptions teachers have on inclusion (Pickard, 2009).

Student behaviors, philosophical aspect. Cassady (2011) found that general education teachers held negative attitudes toward students with emotional and behavioral disabilities. Those students with behavior problems caused by their disability can cause a disruption in the classroom (Cipkin & Rizza, 2010; Forlin & Chambers, 2011; Harvey, Yssel, Bauserman, & Merbler, 2012; Sosu, Mtika, & Colucci-Gray, 2012). Teachers are hesitant and often have a fear having disruptive students in their classroom. Behavioral interruptions lead to loss of instructional time for all students, jeopardizing the safety in the classroom that may affect state testing results (Glazzard, 2011). In this article, Glazzard provided an example of teacher's perceptions towards special education students with behavior problems and how this negative effects teaching practices.

Implementation, logistical concerns. Inconsistency can be problematic to the success of inclusion. Horne and Timmons (2011) posited that the support of

administration and district administration must be present. Inclusion must be a part of the schools' norm and culture. Inclusion can be in the form of one-teach-one-assist, station teaching, and team teaching are examples of teaching in an inclusive classroom. There are variations to teaching in an inclusive classroom, which must embrace inclusion by adminstrators as well as teachers (Obiakor et al., 2012).

Implications

This study was an investigation of the negative attitudes that regular classroom teachers had toward IE practices within a local school district. The attitudes that teachers had toward particular aspects of IE and the extent and manner in which the educational background, teacher training, and teaching experience of these teachers contributed toward these attitudes were examined. The study findings had implications for addressing the attitudes that teachers had toward IE teaching practices via preservice and in-service education and training opportunities. These findings supported the need for in-service training opportunities to address the aspects of IE teaching practices that influence the attitudes that teachers have toward IE. This need was addressed via the development of a professional development curriculum to address the aspects of IE that were identified in this research study (See Appendix A).

Summary

The background on IE teaching practices and the attitudes that teachers have toward these teaching practices was presented in the first section of this research project study. The rationale and purpose of this study and the corresponding research questions were also presented, and the terms and concepts pertinent to this study were defined as well. The significance of this study was also presented. This section culminated in a

review of the research literature that underpins this study. The research methods that will

be used to conduct this research study are presented in Section 2.

Section 2: Research Methodology

The attitudes that teachers had toward aspects of IE and the extent and manner in which teacher education, teacher training, and teaching experience were associated with these attitudes was addressed in this study. This problem was addressed within a local school district located in the Northwest region of the United States. The aspects of IE that were examined were (a) advantages and disadvantages of IE, (b) professional implications of IE, (c) IE philosophy, and (d) logistical aspects of IE. A quasi-experimental research design was used to examine the extent and manner in which these attitudes differed with respect to the following measures of teacher training and teaching experience: (a) level of education, (b) certification level (c) certification area, (d) years of teaching experience, (e) years of experience with inclusive education, and (f) number of special education courses completed. The variation in each aspect of IE with respect to these teacher education, training, and experience factors was examined while controlling for gender and age.

In accordance with the quasi-experimental research design procedures, this study did not call for the random assignment of study participants nor the manipulation of the independent variables in any way (Tabachnick & Fidell, 2006). In accordance with this research design, I examined differences in teacher attitudes with respect to teacher training background and teaching experience within the existing school context. I deemed a quasi-experimental research design appropriate for this study.

Setting and Sample

The negative attitudes that regular classroom teachers had toward IE were examined within a local school district in the Northwest region of the United States. I had

served as a special education facilitator in this school district and was an elementary

school principal within this school district. The population of interest to this study was

pre-K to Grade 8 teachers currently teaching in this local school district. The participants

of this study were limited to those teachers who were teaching at the elementary or

middle school grade levels in this local school district and who have had students with

learning disabilities placed in their classroom. The study sample was the result of a

convenience sampling approach within this sampling frame, which included all teachers

who accepted the invitation to participate in this study and consent to the conditions of

the study as set forth by the institutional review board (IRB) and delineated via the

invitation to participate form.

An a priori power analysis was conducted to determine the sample size that was

needed to test each research hypothesis at a .05 level of statistical significance and a

power of .80, with a medium effect size. According to the results of this a priori analysis,

a sample size of 125 teachers ($n=125$) was sufficient to achieve these parameters. The

study sample size exceeded this n size.

<div align="center">**Instrumentation and Research Variables**</div>

Dependent Variables

I was interested in the aspects of IE that contributed to the attitudes that teachers

had toward IE teaching practices. These aspects of IE were measured via the validated

survey instrument, Scale of Teachers' Attitudes toward Inclusive Classrooms (STATIC).

This validated survey instrument was developed by Cochran (2000). This instrument

consists of 20 Likert scale survey items that measure attitudes toward the following

dimensions of IE: (a) advantages and disadvantages of IE, (b) professional aspects

regarding IE, (c) philosophical aspects regarding IE, and (d) logistical concerns of IE. This instrument measures attitudes along each dimension via a 5-point Likert scale of agreement (1 = *strongly disagree*, 5 = *strongly agree*). A low score indicates a negative attitude toward IE, while a higher score indicates a positive attitude toward IE (Cochran, 2000). These variables were measured via the composite score per each dimension of IE.

Independent Variables and Covariates

The attitudes that teachers had toward IE teaching practices were further examined with respect to the following nominal and ordinal measures of teacher training and teaching experience: (a) level of education, (b) certification level, (c) certification area, (d) years of teaching experience, (e) years of experience with inclusive education, and (f) number of special education courses completed. This was examined while controlling for age, gender, and ethnicity. The data measuring these independent variables and covariates were obtained via the corresponding survey items in the Professional Background, Experience, and Demographic Information section of the survey instrument.

<div align="center">

Data Collection and Analysis

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Data Collection Process

The data collection process commenced upon receiving IRB approval for this study. I sent an e-mail invitation to participate in this study to the population of teachers within the sampling fame of this study. I introduced myself and provided an overview of this study and my role as the primary researcher via this e-mail correspondence. The invitation to participate in this study included an electronic consent form that further detailed the rights of the study participants and the voluntary nature of the study in

accordance with IRB specifications. The consent form included the selection options of accept or decline. The participants indicated their consent to participate in this study by selecting accept.

The data for this study were obtained via the survey instrument described in the previous section. I administered this survey instrument via the electronic survey platform SurveyMonkey. The participants received access to this survey platform upon selecting accept on the electronic consent form. The survey instrument opened in a new window upon selecting accept on the electronic consent form. The survey platform guided study participants through the survey instrument and directed the study participants to select submit upon completion of the survey items, which returned the survey instrument to the hosting platform.

Data Analyses Procedures

The Statistical Package for the Social Sciences (SPSS) was used to assess and analyze the data in accordance with each research questions and corresponding null hypothesis. The data were screened for outliers, missing data points, and influential anomalies. A descriptive analysis of the data to explore the data for influential anomalies was then conducted. The first research question was then addressed through a descriptive analysis of the data measuring the attitudes toward IE. This descriptive analysis included cross-tabulation procedures to provide insights toward the attitudes that teachers had toward the dimensions of IE. Then, bivariate and univariate procedures were used to explore bivariate and univariate correlations and differences among relevant variables.

Multivariate analysis of the variance and covariance procedures were used to address Research Question 2 and Research Question 3. Specifically, per Research

Question 2, MANOVA procedures were used to examine the extent and manner in which teacher attitudes toward IE differed with respect to teacher training background and teaching experience. MANCOVA procedures were used to assess the extent and manner in which these differences varied with respect to gender, age, and ethnicity. MANOVA procedures were then used to examine the extent and manner in which these differences varied along each dimension of IE and to assess the extent and manner in which these differences varied with respect to gender, age, and ethnicity. In accordance with MANOVA and MANCOVA procedures, the main effects and interaction effects for statistical significance. The differences (see Results) for the corresponding F statistic for each main effect and each interaction at the $p < .05$ significance level were reported. In addition to the statistically significant main and interaction effects of the independent and covariate variables, I also assessed and reported the strength of each main effect and interaction via eta squared.

Assumptions, Limitations, Scope, and Delimitations

This project study was based on the assumption that negative attitudes toward IE are manifested in undesirable teaching practices and detract from student learning. Although the detrimental impact of negative attitudes had been established in the research literature, this detrimental impact had not been directly observed in this local school district setting. It was further assumed that the negative attitudes conveyed by the teachers in this school district was exacerbated by the accountability system in which the student achievement test score data of students with disabilities are incorporated in regular classroom achievement level data.

The assumption was also made that the survey instrument would provide a reliable and valid assessment of the attitudes that teachers had toward inclusion of students with disabilities in the regular classroom. It was further assumed that the dimensions of teacher attitudes toward IE reflected the corresponding constructs as examined in this study. Although the construct and external validity had been established for this survey instrument, I recognized the limitations of this instrument. This study was also bound by the statistical assumptions of the multivariate statistical analysis procedures that I used to test each research hypotheses.

The implications and conclusions that can be drawn from the findings of this study were, in turn, limited by the assumptions and delimitations of this study. The primary limitation of this study was the limited generalizability of the study findings. The conclusions and implications of these findings are limited to school settings with similar demographic attributes.

Data Analysis Results

The statistical analyses were conducted via the SPSS (v. 22.0.). The descriptive statistics of the study variables, including the demographic and profession-related variables as independent variables, and the STATIC questionnaire responses as dependent variables are presented next. The results of the bivariate and univariate analyses are then presented. The results of the inferential analysis that addressed the study's research questions are then presented.

Description of the Sample

The original sample consisted of 135 respondents who completed questionnaires collecting the characteristics of the teachers and their attitudes towards different aspects

of inclusive education (see Measures section below). For more than 95% of the cases, there were no missing data regarding the key variables used in analysis. For the remaining respondents, 0.7% to 2.2% of the values were missing. The Little's chi-square statistic was performed to determine which missing value imputation method was the most adequate. The Little MCAR test obtained for the data resulted in a chi-square = 261.34 ($df = 317$, $p > 0.05$), which indicates that the data are missing completely at random. Thus, I imputed the missing scores employing the expectation maximization algorithm (EM), which, according to Little and Rubin (2002), is an adequate procedure when the data are assumed to be missing completely at random (MCAR). I conducted the statistical analysis with the final sample of 135 respondents, with no missing data remaining in the dataset.

Table 1 presents an overview of the key demographic variables included in the study. A total of 24 (17.8%) participants were male, and 111 (82.2%) were female. Sixteen (11.9%) of all respondents were under 30 years of age, while most of them belonged to the age groups of 31 to 40 ($N = 46$ or 34.1%), 41 to 50 ($N = 40$ or 29.6%), and 51 to 60 years ($N = 23$ or 17%). The vast majority of respondents ($N = 127$ or 94.1%) identified as Caucasian, with only a few defining themselves as Asian (0.7%), Hispanic (3.7%), or African American (0.7%). With respect to their educational background, the majority of teachers ($N = 105$ or 77.8%) had earned a master's degree, 18 teachers (13.3%) had an educational specialist degree, 10 (7.4%) held a bachelor's degree, and the remaining two (1.5%) had earned a doctorate degree. Nineteen respondents (14.1%) reported that they had been teaching for less than 5 years, 29 (21.5%) said they had been teachers for 5 to 10 years, 30 (22.2%) had been teaching for 11 to 15 years, 27 teachers

(20%) had been teaching for 16 to 20 years, and 30 respondents (22.2%) had been

teachers for over 20 years.

Table 1

Descriptive Statistics of Demographic Variables

Demographic Variables	Response Categories	Frequency	Valid Percentage
Gender	Male	24	17.8
	Female	111	82.2
Age	20 – 30	16	11.9
	31 – 40	46	34.1
	41 – 50	40	29.6
	51 – 60	23	17.0
	Over 60	10	7.4
Race / Ethnicity	American Indian or Alaskan Native	0	0
	Asian / Pacific Islander	1	.7
	Black or African American	1	.7
	Hispanic	5	3.7
	White / Caucasian	127	94.1
	Multiple Ethnicity / Other	1	.7
Education	Bachelor's	10	7.4
	Master's	105	77.8
	Educational Specialist Degree	18	13.3
	Doctorate	2	1.5
Years of Experience as a Teacher	Less than 5 years	19	14.1
	5 to 10 years	29	21.5
	11 to 15 years	30	22.2
	16 to 20 years	27	20.0
	Over 20 years	30	22.2

Measures

I used the STATIC to measure the attitudes of regular classroom teachers in a

local school setting toward the four aspects of inclusive education. The four aspects, or

subscales, of the STATIC were (a) the advantages and disadvantages of inclusive

education, (b) professional aspects related to inclusive education, (c) philosophical

aspects related to inclusive education, and (d) logistical aspects related to inclusive education. In the present study, these four factors served as dependent variables.

Advantages and Disadvantages of Inclusive Education

To measure the teacher's attitudes towards the advantages and disadvantages of inclusive education, the survey included statements to which respondents gave their opinion on statements including "Students with special needs should be included in the regular education classroom" and "Students with special needs in the regular education classroom hinder the academic progress of the regular education student." Overall, the measure of "Advantages and disadvantages of IE" consisted of 7 Likert scale items, with scores ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Three of these items were reversed, with the higher overall score indicating more positive attitudes towards inclusive education. Combining all seven items showed an internal reliability of .86, which suggests strong internal consistency between items.

Professional Aspects Related to Inclusive Education

The second measure consisted of five Likert scale items (i.e., "I am confident in my ability to teach children with special needs" and "I become easily frustrated when teaching students with special needs"), with response scores ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Three items were reversed so that the higher score indicated more positive attitude towards inclusive education. For the total sample, Cronbach's alpha was .80, suggesting a high internal reliability between items.

Philosophical Aspects Related to Inclusive Education

Another set of four Likert scale items was used to measure teachers' attitudes towards the philosophical aspects related to inclusive education. For this measure, the

survey asked respondents to indicate their agreements (5-*strongly agree*) or disagreement

(1–*strongly disagree*) on statements including "I believe that academic progress is

possible in children with special needs" and "Special in-service training in teaching

special needs students should be required for all regular education teachers."

Logistical Concerns Related to Inclusive Education

The last Likert scale measure assessed teacher's attitudes towards logistical

concerns related to inclusive education and consisted of four items including "I do not

mind making physical arrangements in my room to meet the needs of students with

special needs" and "Adaptive materials and equipment are easily acquired for meeting the

needs of students with special needs." As with previous measures, the response categories

ranged from 1 *Strongly disagree*) to 5 (*strongly agree*). The Cronbach's alpha for the

internal reliability of all four items was .50, which indicated a rather poor internal

consistency between items. Table 2 presents the reliability scores for all scales used in the

analysis.

Table 2

Sample Size, Number of Items Within a Measure, and Reliability Scores

Measure	*N* of Sample	*N* of Items	Cronbach's Alpha
Advantages and Disadvantages of Inclusive Education	135	7	.88
Professional Aspects Related to Inclusive Education	135	5	.80
Philosophical Aspects Related to Inclusive Education	135	4	.48
Logistical Concerns Related to Inclusive Education	135	4	.50

I used several individual demographic and profession-related variables in the analysis as independent variables and covariates. The variable of gender was dichotomous and, therefore, was used in the further analysis as dummy variables (*male* =0 and *female* =1). I recoded the ethnicity variable into a dichotomous dummy variable (*Caucasian*=1, *Other*= 0). I measured the remaining variables of age, education, and teaching experience as either ordinal or interval variables. I stopped reviewing here due to time constraints. Please go through the rest of your section and look for the patterns I pointed out to you. I will now look at Section 3.

Data Analysis

Normality Test & Inspecting Outliers

In order to proceed with the analysis and answer research questions, the researcher summed and averaged the scale items to create a mean score for each respondent. Combining and aggregating originally ordinal data allows the data to be treated as metric and proceed with the normality test (Thode, 2002). Table 2 presents

Kolmogorov-Smirnov and Shapiro-Wilk indexes and significance levels for all four

measures.

Table 3

Data Normality Indexes for All Three Measures

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	*P*-value	Statistic	df	*P*-value
Advantages and Disadvantages of IE	.06	135	.20	.99	135	.38
Professional Aspects Related to IE	.12	135	.00	.96	135	.00
Philosophical Aspects Related to IE	.13	135	.00	.94	135	.00
Logistical Concerns Related to IE	.16	135	.00	.97	135	.00

With respect to the *"Advantages and Disadvantages of IE"* measure, both

Kolmogorov-Smirnov and Shapiro-Wilk's tests (p > .05) and a visual inspection of the

histograms and normal Q-Q plots (see Figure 1) showed that the scores were

approximately normally distributed across the sample, with the skewness of -0.18

(SE=0.21) and kurtosis of 0.17 (SE=0.41). The histogram for the *"Advantages and

Disadvantages of IE"* measure presented in Figure 1 appears to be normal (i.e., bell-

shaped), with the one peak in the middle at around 4-value. In addition, the pattern of

dots in the normal-quantile-plot (or Q-Q plot) lies relatively close to a straight line. All

this suggests that job stress data come from an approximate normal distribution.
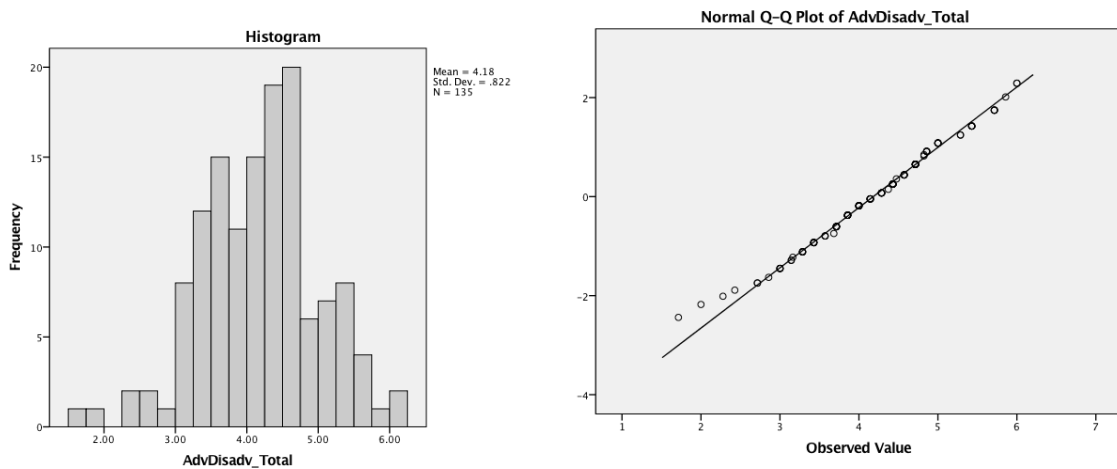
Figure 1. Visual normality test for "Advantages and disadvantages of IE" variable.

The tests of data normality for the remaining variables suggest a slight violation of the normality test. That is, for the "*Professional Aspects Related to IE,*" "*Philosophical Aspects Related to IE,*" and "*Logistical Concerns Related to IE*" constructs, both Kolmogorov-Smirnov and Shapiro-Wilk's tests are highly significant (p < .01), suggesting that the assumption of normally distributed data is violated. In addition, the skewness and kurtosis scores for all these measures are as follows: skewness of -0.68 (SE=0.21) and kurtosis of 0.75 (SE=0.41) for "*Professional Aspects Related to IE;*" skewness of -0.87 (SE=0.21) and kurtosis of 1.71 (SE=0.41) for "*Philosophical Aspects Related to IE;*" and skewness of -0.52 (SE=0.21) and kurtosis of -0.02 (SE=0.41) for "*Logistical Concerns Related to IE.*"

The visual inspection of histograms and plots (Figures 2-4) indicate that the scores are not normally distributed. For example, the histogram of the "*Professional Aspects Related to IE*" measure (Figure 2) seems to diverge from a normal distribution curve and looks more like a random and slightly skewed-left distribution (Thode, 2002) with a couple of peaks. According to the histogram, this distribution has a larger number of occurrences of 4 to 6 values as compared to the number of 1-3 values. The Normal Q-Q for the same measure also deviates from a straight line, and thus indicates the departure of the data from a normal distribution shape.
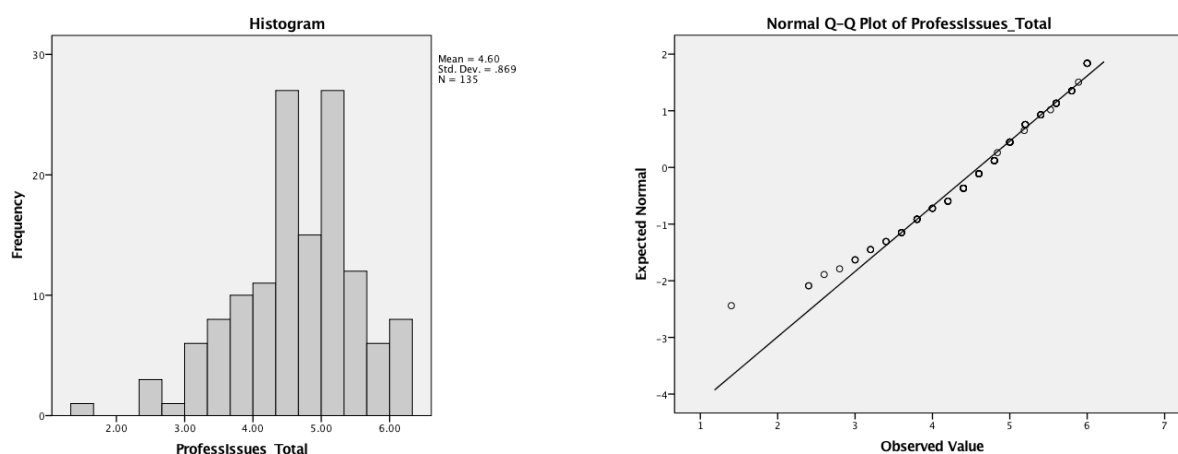
Figure 2. Visual normality test for the "Professional aspects related to IE" measure.

The histograms and Normal Q-Q plots for the "*Philosophical Aspects Related to IE*" and "*Logistical Concerns Related to IE*" measures suggest the same aspects. Both histograms (Figures 3-4) are skewed to left, with the peak score placed at around 5-value. Similarly, the Normal Q-Q plots deviate from a straight line, which indicates some degrees of skewing and non-normal distribution in the data.
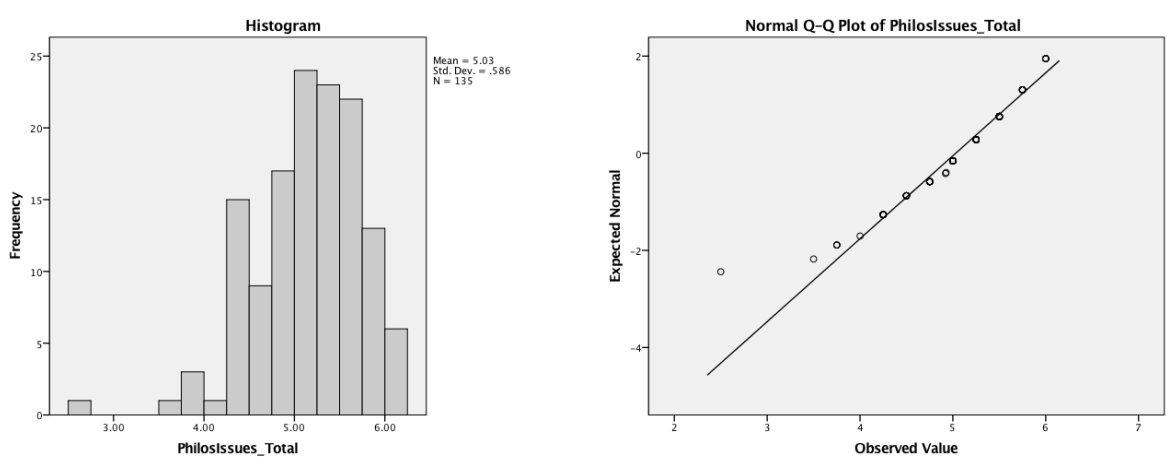
Figure 3. Visual normality test for the "Philosophical aspects related to IE" measure.
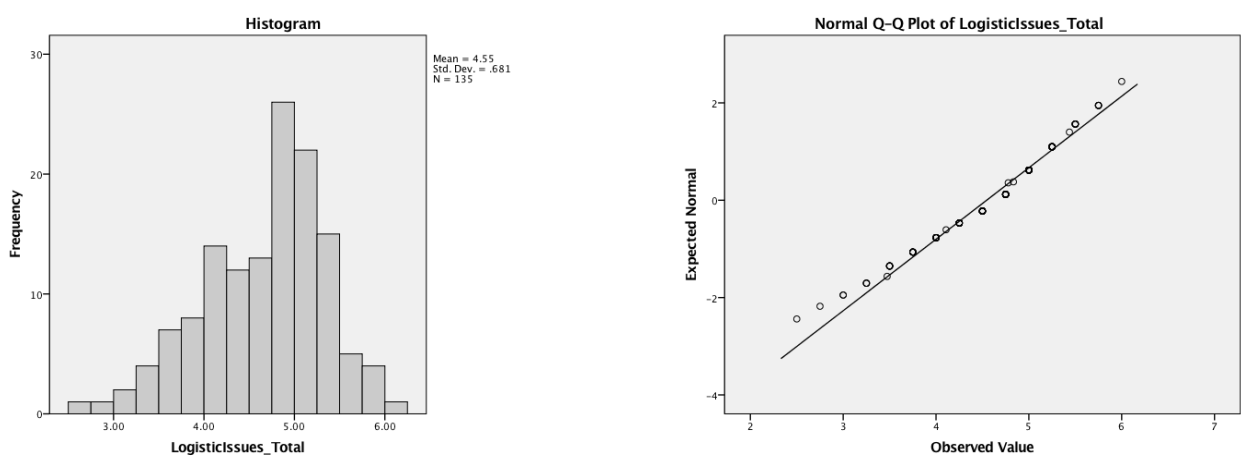
Figure 4. Visual normality test for the "Logistical concerns related to IE" measure.

Before the analyses, the researcher tested all dependent variables for outliers. The researcher investigated univariate outliers by box plots, and defined outliers as scores that differed from the mean by three standard deviations (Field, 2009). The researcher examined multivariate outliers using Cook's D test, according to which, the values of Cook's distance that are greater than 4/N (in this case, 4/135 = .03) may be problematic. There were six potential outliers (Figure 5). The values of Cook's distance test, however,

were lower than 0.03 for all measures (i.e., Cook's D was 0.01 for *"Advantages and*

Disadvantages of IE" and *"Professional Aspects Related to IE,"* and 0.007 for

"Philosophical Aspects Related to IE"), suggesting that these outliers were not

problematic. In addition, testing for outliers using the "trimmed mean" confirmed that

outlying scores had no significant impact on the overall means for the relevant measures.

Therefore, the researcher decided to leave the six outliers, as they were not problematic

and merely signified the averaged overall points on either the high or low end of the

Likert-scale spectrum.
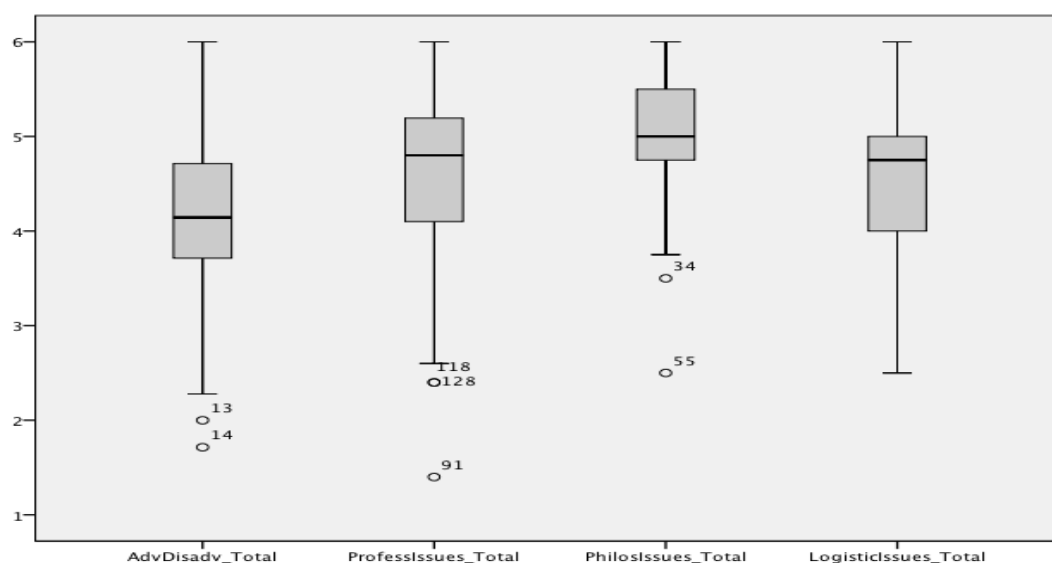
Figure 5. Visual inspection of univariate outliers.

Descriptive Statistics

The scale items for all four STATIC subscales were summed and averaged to

create a mean score for each respondent. The researcher composed a single Likert scale

variable out of a series of four or more Likert-type items (Jamieson, 2004; Norman,

2010). Table 4 presents the sample size, means, standard deviation, and correlation

coefficients among the key scale variables. All of these variables were originally ordinal; the Spearman's correlation results are reported in the table below.

Table 4

Descriptive Summary of the Four Dependent Variables

Variables	N	Mean	SD	1	2	3	4
1. Advantages and Disadvantages of Inclusive Education	135	4.18	.82	1	.34**	.47**	.24**
2. Professional Aspects Related to Inclusive Education	135	4.60	.87	.34**	1	.32**	.48**
3. Philosophical Aspects Related to Inclusive Education	135	5.03	.59	.47**	.32**	1	.24**
4. Logistical Concerns Related to Inclusive Education	135	4.55	.68	.24**	.48**	.24**	1

**Correlation is statistically significant at the $p < .01$ level.

As seen in Table 3, all correlation coefficients are statistically significant at the .01 level, indicating a moderate positive relationship between the different aspects of inclusive education. The highest correlation was between the "*Professional Aspects Related to IE*" (*M* = 4.60) and "*Logistical Concerns Related to Inclusive Education*" (*M* = 4.55)*,* and "*Advantages and Disadvantages of IE*" (*M* = 4.18) and the *"Philosophical Aspects Related to IE"* (*M* = 5.03), with the correlation coefficients $r(135) = .48$ and $r(135) = .47$, $p < 0.1$, respectively.

Research Question 1

Research Question 1 asked, "What are the attitudes of regular classroom teachers in a local school setting toward the following aspects of inclusive education?" The visual representation of these results is presented in Figure 6. The overall scores of the different aspects of inclusive education show that the teachers in this study positively endorsed the philosophical aspects related to the inclusive education ($M = 5.03$), followed by the professional aspects ($M = 4.60$) and logistical concerns ($M = 4.55$) related to inclusive education in the classroom. The attitudes towards the advantages and disadvantages of inclusive education were slightly less positive ($M = 4.18$).
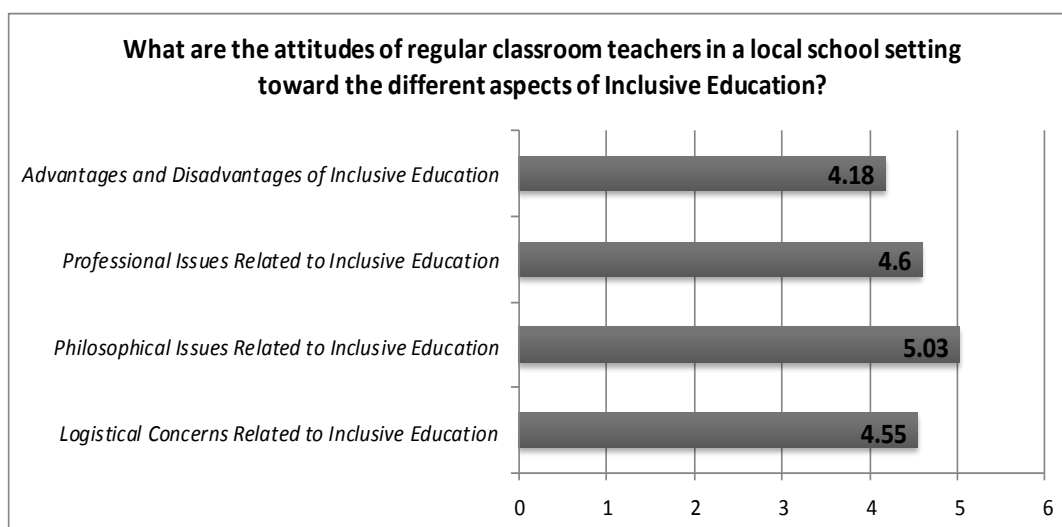
Figure 6. Teachers' attitudes towards the different aspects of inclusive education.

Research Question 2 and 3

The researcher addressed Research Questions 2 and 3 using Multivariate Analysis of the Variance procedures. More specifically, for Research Question 2, the researcher used a two-way MANOVA analysis to examine the extent and manner in which teacher's attitudes toward different aspects of inclusive education differ with respect to teacher

education and teaching experience. In so doing, the researcher entered the four measures of inclusive education into analysis as dependent variables, whereas teacher's education background and teaching experience were independent variables. The results of the two-way MANOVA analysis are presented in Table 5.

Table 5

Two-way MANOVA Results for the Overall Sample

Independent Variables & Interaction	Dependent Variables	F	df	P-value	Partial Eta Squared
Education	Advantages and Disadvantages of IE	2.06	3	.11	.05
	Professional Aspects Related to IE	.37	3	.77	.01
	Philosophical Aspects Related to IE	.82	3	.48	.02
	Logistical Concerns Related to IE	1.02	3	.39	.02
Teaching Experience	Advantages and Disadvantages of IE	.19	5	.97	.01
	Professional Aspects Related to IE	.71	5	.62	.03
	Philosophical Aspects Related to IE	1.64	5	.16	.06
	Logistical Concerns Related to IE	.58	5	.72	.02
Education* Teaching Experience	Advantages and Disadvantages of IE	.55	3	.65	.01
	Professional Aspects Related to IE	1.56	3	.20	.04
	Philosophical Aspects Related to IE	.71	3	.55	.02
	Logistical Concerns Related to IE	1.44	3	.23	.03

The multivariate results lacked statistical significance for both education degree held by the teacher (Pillai's Trace = .90, F = .94, df = (12, 366), p = .50, partial η^2 = .03) and teaching experience (Philai's Trace = .15, F = .98, df = (20, 492), p = .49, partial η^2 = .04), indicating that there are no significant differences in the inclusive education scores among teachers with different levels of educational background and years of experience. In addition, the interaction effect between the teacher's education and years of teaching is also insignificant (Philai's Trace = .16, F = 1.69, df = (12, 366), p = .07, partial η^2 = .05).

With respect to Research Question 3, the researcher performed MANCOVA

procedures to assess the extent and manner in which the variation in the inclusive

education scores are different with respect to teacher's gender, age, and ethnicity. In so

doing, the researcher added the variables to the MANCOVA tests one by one. Overall,

the multivariate results remain insignificant for both education degree held by the teacher

and their teaching experience. The newly added gender variable did not significantly

contribute to the variation in inclusive education scores (Philai's Trace = .01, F = .19 df =

(4, 112), p = .94, partial η^2 = .01). The multivariate results also indicated that there are no

significant interaction effects between gender and teacher's education (Philai's Trace =

.05, F = .51, df = (12, 342), p = .91, partial η^2 = .02) and gender and teaching experience

(Philai's Trace = .13, F = .96, df = (16, 460), p = .50, partial η^2 = .03). Table 6 presents

the results for the tests of between-subjects effects (i.e., direct and interaction effects).

None of the effects were statistically significant, suggesting that the effects of teacher's

education and teaching experience on the inclusive education scores do not differ with

respect to their gender.

Table 6

Results of MANCOVA Analysis with Respect to Teacher's Gender

Independent Variables & Interaction	Dependent Variables	F	df	P-value	Partial Eta Squared
Gender	Advantages and Disadvantages of IE	.04	1	.84	.00
	Professional Aspects Related to IE	.33	1	.57	.00
	Philosophical Aspects Related to IE	.20	1	.66	.00
	Logistical Concerns Related to IE	.03	1	.87	.00

Education	Advantages and Disadvantages of IE	1.04	3	.38	.03
	Professional Aspects Related to IE	.45	3	.72	.12
	Philosophical Aspects Related to IE	1.44	3	.26	.04
	Logistical Concerns Related to IE	1.00	3	.39	.03
Teaching Experience	Advantages and Disadvantages of IE	.26	5	.94	.01
	Professional Aspects Related to IE	.99	5	.42	.04
	Philosophical Aspects Related to IE	.94	5	.46	.04
	Logistical Concerns Related to IE	.18	5	.97	.01
Education* Teaching Experience	Advantages and Disadvantages of IE	.67	3	.57	.02
	Professional Aspects Related to IE	2.09	3	.11	.05
	Philosophical Aspects Related to IE	.41	3	.75	.01
	Logistical Concerns Related to IE	1.35	3	.26	0.3
Gender* Education	Advantages and Disadvantages of IE	.97	3	.41	.03
	Professional Aspects Related to IE	.68	3	.57	.02
	Philosophical Aspects Related to IE	1.04	3	.38	.03
	Logistical Concerns Related to IE	.18	3	.91	.01
Gender* Teaching Experience	Advantages and Disadvantages of IE	.97	4	.43	.03
	Professional Aspects Related to IE	.88	4	.48	.03
	Philosophical Aspects Related to IE	1.27	4	.28	.04
	Logistical Concerns Related to IE	1.92	4	.11	.06

In the next MANCOVA test, the researcher entered the ethnicity variable to test if the variation in dependent variables was different for teachers with different ethnic background. As in previous tests, the multivariate results were insignificant for both education degree held by the teacher and their teaching experience. The newly added

ethnicity variable did not significantly contribute to the variation in inclusive education

scores (Philai's Trace = .03, F = .75 df = (4, 115), p = .56, partial η^2 = .03). The

multivariate results also indicated that there are no significant interaction effects between

ethnicity and teacher's education (Philai's Trace = .02, F = .52, df = (4, 115), p = .72,

partial η^2 = .02) and ethnicity teaching experience (Philai's Trace = .03, F = .49, df = (8,

232), p = .86, partial η^2 = .05). Table 7 presents the results for the tests of between-

subjects effects (i.e., direct and interaction effects) with the ethnicity variable included.

None of the effects were statistically significant, suggesting that the effects of teacher's

education and teaching experience on the inclusive education scores do not differ with

respect to their ethnicity.

Table 7

Results of MANCOVA Analysis with Respect to Teacher's Ethnicity

Independent Variables & Interaction	Dependent Variables	F	Df	P-value	Partial Eta Squared
Ethnicity	Advantages and Disadvantages of IE	2.40	1	.12	.02
	Professional Aspects Related to IE	.02	1	.88	.00
	Philosophical Aspects Related to IE	.36	1	.55	.00
	Logistical Concerns Related to IE	.03	1	.86	.00
Education	Advantages and Disadvantages of IE	1.53	3	.21	.04
	Professional Aspects Related to IE	.29	3	.83	.01
	Philosophical Aspects Related to IE	.25	3	.55	.02
	Logistical Concerns Related to IE	.77	3	.19	.04
Teaching	Advantages and Disadvantages	.22	5	.95	.01

Experience	of IE				
	Professional Aspects Related to IE	.65	5	.67	.03
	Philosophical Aspects Related to IE	1.08	5	.37	.04
	Logistical Concerns Related to IE	.18	5	.66	.03
Education* Teaching Experience	Advantages and Disadvantages of IE	.28	3	.84	.01
	Professional Aspects Related to IE	1.57	3	.20	.04
	Philosophical Aspects Related to IE	.79	3	.50	.02
	Logistical Concerns Related to IE	1.23	3	.30	0.3
Ethnicity* Education	Advantages and Disadvantages of IE	.61	1	.44	.01
	Professional Aspects Related to IE	.01	1	.93	.04
	Philosophical Aspects Related to IE	.52	1	.47	.02
	Logistical Concerns Related to IE	.71	1	.40	.03
Ethnicity* Teaching Experience	Advantages and Disadvantages of IE	.40	2	.96	.00
	Professional Aspects Related to IE	.28	2	.76	.01
	Philosophical Aspects Related to IE	.22	2	.81	.00
	Logistical Concerns Related to IE	.82	2	.44	.01

In the final MANCOVA test, the researcher added the variable of age to examine if the variation in dependent variables differ in response to respondent's age. The multivariate results of MANCOVA test showed that education degree held by the teacher and their teaching experience are insignificant in explaining the variance in inclusive education scores. Similarly, the variable of age did not significantly contribute to the variation in the different aspects of inclusive education (Philai's Trace = .19, $F = 1.24$ *df*

= (16, 400), p = .23, partial η^2 = .05). The multivariate results also indicated that there are

no significant interaction effects between age and teacher's education (Philai's Trace =

.22, F = .98, df = (24, 400), p = .49, partial η^2 = .06) and age and teaching experience

(Philai's Trace = .37, F = 1.01, df = (40, 400), p = .46, partial η^2 = .09).

Table 8 presents the results for the tests of between-subjects effects (i.e., direct

and interaction effects) with the variable of age included. In this model, there is a

significant relationship between teacher's experience and their attitudes towards

philosophical aspects related to the inclusive education (F = 3.86, p = .03, partial η^2 =

.11). In addition, the researcher found a significant interaction effect between teacher's

age and teaching experience on their philosophical aspects (F = 7.98, p = .01, partial η^2 =

.21). None of the remaining effects were statistically significant, suggesting that the

effects of teacher's education and teaching experience on the inclusive education scores

do not differ with respect to their age.

Table 8

Results of MANCOVA Analysis with Respect to Teacher's Age

Independent Variables & Interaction	Dependent Variables	F	df	P-value	Partial Eta Squared
Age	Advantages and Disadvantages of IE	1.93	4	.11	.07
	Professional Aspects Related to IE	.22	4	.93	.01
	Philosophical Aspects Related to IE	1.58	4	.19	.06
	Logistical Concerns Related to IE	.58	4	.68	.02
Education	Advantages and Disadvantages of IE	1.25	3	.13	.05
	Professional Aspects Related	.41	3	.68	.02

	to IE				
	Philosophical Aspects Related to IE	.34	3	.35	.03
	Logistical Concerns Related to IE	.51	3	.40	.03
Teaching Experience	Advantages and Disadvantages of IE	.80	5	.56	.05
	Professional Aspects Related to IE	1.08	5	.38	.02
	Philosophical Aspects Related to IE	2.53	5	.03*	.03
	Logistical Concerns Related to IE	.54	5	.75	.03
Education* Teaching Experience	Advantages and Disadvantages of IE	.19	3	.84	.01
	Professional Aspects Related to IE	1.59	3	.20	.04
	Philosophical Aspects Related to IE	2.13	3	.50	.02
	Logistical Concerns Related to IE	.68	3	.30	0.3
Age* Education	Advantages and Disadvantages of IE	.74	6	.62	.03
	Professional Aspects Related to IE	.68	6	.67	.01
	Philosophical Aspects Related to IE	1.46	6	.20	.10
	Logistical Concerns Related to IE	.45	6	.84	.01
Age* Teaching Experience	Advantages and Disadvantages of IE	1.26	10	.26	.11
	Professional Aspects Related to IE	.74	10	.68	.07
	Philosophical Aspects Related to IE	2.62	10	.01*	.21
	Logistical Concerns Related to IE	.68	10	.74	.06

Section 3: The Project

Introduction

The purpose of this research study was to examine the attitudes that regular classroom teachers had toward IE practices and to examine the extent in which educational background, teacher training, and teaching experience contributed to the variation in these attitudes. The findings of this research study provided the basis for developing a professional development curriculum to address this problem within the local school setting of interest. The findings from this study were used in conjunction with the conclusions and recommendations put forth in the current research. The background on this project is presented in the section that follows. The project deliverable is presented in Appendix A.

Rationale

The culminated project that resulted from this research study was a training curriculum that was developed to address the aspects of IE that the teachers rated as less positive. In accordance with the findings from this research study, in this training curriculum, I focused on the philosophical aspects of IE and the logistical concerns that teachers had IE teaching practices. Although the advantages and disadvantages of IE may also be addressed in this training curriculum, this aspect of IE was not emphasized within this particular curriculum per the perceived needs to the teachers in this study.

Review of the Literature

The research relevant to the proposed professional development/training curriculum project is reviewed in this section. The literature reviewed includes recommendations from academic as well as governmental professionals regarding the

creation of an inclusive classroom. The relevant implementation policies are also reviewed to ensure that the recommended training curriculum not only adheres to the policies in the United States, but may be adapted for instructors in other cultures. The literature for this review was obtained via the EBSCOHost and Google Scholar databases of scholarly journals. The sources reviewed also included the recommendations and policies of governments and other agencies, such as UNICEF, UNESCO, the United States Department of Education, and smaller school districts.

The U.S. Department of Education (USDOE, 2015) identified barriers to inclusion at the early childhood level. These barriers include a lack of training/professional development and teachers' attitudes and beliefs, variables which I explored in this study. The USDOE also suggested that teachers often misinterpret requirements from the IDEA; some teachers may perceive that IDEA recommends homeschooling or private school settings for students with disabilities over inclusion in the general classroom. Another area of concern is the lack of comprehensive services in early childhood programs; although early intervention programs exist, health and education services are often provided in separate settings, which leads to a lack of "coordination in comprehensive supports" (USDOE, 2015, p. 7). In relation to these barriers, the USDOE recommended inclusion at the early childhood level.

In order to create an inclusive learning environment, it is important to first create a partnership between special educators, health care providers, and early childhood educators. In addition, schools should standardize requirements for early childhood educators, as the USDOE (2105) cited a "large variability in the training, education, and expertise of the early childhood workforce…[regarding] child development, early

childhood pedagogy, individualizing instruction, managing challenging behavior, promoting social-emotional development, and scaffolding learning across activities and between peer groups" (p. 6-7). Other recommendations include co-teaching models with speech-language pathologists, occupational therapists, and teachers of the blind and deaf. Although most of these suggestions rely upon state action, teachers should be willing and prepared to further their education in preparation to serve a wider range of students. Future professional training curricula could include elements of specialized disability certifications, as well as techniques for effective co-teaching.

Inclusive policies require a set of resources and policies in order to be successfully implemented. Falvey (1995) cited regulated staffing requirements, emergency procedures, and funding support as necessary for implementation of inclusive policies. Emergency procedures are an important aspect of professional training curricula. Burke (2010) developed such an emergency procedure plan for the Marin County School District. This plan was intended to "assist school administrators, teachers, special education staff, parents, and students in planning for the support that may [be] required for students with special needs in the event of an emergency" (Burke, 2010, p. 4). Many of the plan's recommendations for teachers related to awareness—of which students may require emergency support, of the types of hazards that the school may face, of how existing emergency procedures would hinder students with disabilities, and of evacuation sites that are accessible to such students (Burke, 2010). Burke also recommended that teachers discuss emergency response protocols during IEP meetings or other reviews with parents. Burke recommended that teachers create a buddy system for students with disabilities; this would include identifying a buddy who is willing, physically strong

enough to assist, and able to be trained on the needs of his or her special needs partner. The teachers should also designate a "backup" buddy, in case the original is out sick or in a different part of the school from their buddy. Such strategies are further examples of professional training opportunities for educators.

Fragmented education acts as a barrier to inclusion (Sailor & Burrello, 2015). Because general education teachers and staff are not required to assume responsibility for all students, there has been a "culture of 'pass it along to the specialists,'" which has resulted in unequal and somewhat "territorial" delivery of services (Sailor & Burrello, 2015, p. 10). In addition, segregated programs are double the cost of integrated programs. Stout (2001) agreed that the separate special education and regular education systems are often counterproductive. Stout proposed that teachers instead learn approaches including station teaching, parallel teaching, cooperative learning, co-teaching, or team teaching to ameliorate the differences between these systems. Quirk (2015) emphasized that teachers should become prepared to shift their role as a sole leader to a group member, and to plan "whole class" education rather than segmented lessons (p. 27).

Sailor and Burrello (2015) also recommended that teacher training and development to include "alternatives to seclusion and restraint," as well as integrated curriculum models such as project-based learning (p. 13). Stout (2001) listed professional development opportunities including areas of life-centered curricula, higher order thinking skills, interdisciplinary teaching, and multicultural curricula. Quirk (2015) proposed that educator professional development should include a universal design for learning (UDL) framework, as well as preventative positive behavior support (PBS) techniques for classroom management. CONNECT (2012) outlined that in a scenario

where an inclusive setting is unable to fully meet a student's needs, the school should

first offer the student supplementary aids, such as technological tools or classroom

supports. Boyd, Seo, Ryndak, and Fisher (2005) suggested a number of "modifications to

classroom routines, instructional activities, and environments" that educators could make

in order to improve inclusive classrooms (p. 5). The proposed project in teacher

development curricula may include these skills and approaches.

UNESCO (2009) reported that worldwide, many barriers to classroom inclusion

are financial. UNESCO quoted the amount needed to reach the goals set by Education for

All as $11 billion USD. However, this number could be mitigated by creating more cost-

efficient and effective school systems. For example, much spending is attributed to

students who repeat grade levels; such money would be better spent in the creation of

early intervention programs to identify and support students who are in danger of

repeating or dropping out. Furthermore, cost-saving interventions may include peer

teaching; trainer-of-trainer professional development models; and multiage, multigrade,

and multiability classrooms. Additional recommendations for teachers were "flexible

teaching-learning methodologies" and "continuous in-service development" (UNESCO,

2009, p. 19). Lastly, UNESCO provided a checklist for teachers to determine whether or

not their existing curriculum is inclusive. This checklist would be a resource in the

creation of professional development/training curricula for inclusive classrooms.

IEPs are an aspect of inclusive education. Bui, Quirk, Almazan, and Valenti

(2010) cited that when students successfully transfer from special education settings to

general education classes, IEP quality improves regarding measures of generalization,

functionality, and age-appropriateness. In Nigeria, where there is a lack of federal

mandates concerning IEPs, Eskay and Oboegbulum (2013) cited that this is a barrier to successful inclusive education in this country. According to Eskay and Oboegbulum, this creates a situation in which many students with disabilities are inappropriately labeled and placed; however, it is difficult for teachers or parents to challenge or modify existing IEPs. According to PBSParents (n.d.), schools can experiences significant negative consequences from failing to adhere to students' IEPs. In addition, parents who disagree with an IEP evaluation must turn to a third party evaluator at private expense. The IEPs provide information to the school administrators regarding how many students are disabled, what the extent of their disability is, and what short- and long-term goals the students are striving to reach. The Special Education Guide (2016) reported that the challenge after identifying the curricular adaptations for a student becomes implementing these adaptations. This guide provided several recommendations for IEP implementation, including coordination with special education teachers and pre-teaching challenging topics to students who may need extra time. Stout (2001) proposed that schools should implement an IEP appeal process in order for teachers to be able to challenge IEP placements and implementations as inappropriate. In order to successfully implement an IEP or identify an inappropriate IEP, teachers would likely require specialized training during professional development sessions; this is an area that I considered for the training curriculum project.

Vrasmas (2014) provided a general list of directions and approaches that such a curriculum should include. These practices included using cooperative learning, scaffolding, heterogeneous/flexible group arrangements, and making reasonable adjustments along the way based on individual needs (Vrasmas, 2014). Similarly,

Giangreco, Cloninger, Dennis, and Edelman (2002) cited heterogeneous grouping and shared activities as two of the basic components of an inclusive education curriculum. Giangreco et al. also recommended various problem-solving strategies when working with a mixed school population. Giangreco et al. wrote that problem-solvers—referring to both teachers and students in the inclusive environment—remain optimistic, defer judgment, encourage freewheeling, alternate between divergent and convergent thinking, and are not afraid to take action. These behaviors promote an encouraging and interesting learning environment for all students and should be included in any teacher training curriculum for IE.

Ornelles (2006) explored an inclusive curriculum through the lens of two students with disabilities. After performing classroom observations and interviews with the participants, Ornelles listed several aspects of the curriculum that improved the students' learning. Ornelles cited three types of classroom support: direct, indirect, and preparation and planning prior to inclusion. In the latter, the special education teacher prepared the students for an upcoming lesson. Direct supports included recognition, questioning, modeling, and verbal prompting. Indirect supports included partnering the students with their more able peers. Ornelles also reported that the general education and special education teacher often coordinated for assemblies and recess, which allowed the students in each classroom to socialize. Land (2004) made similar suggestions regarding co-teaching between general and special education teachers. Methods for sharing the classroom included interactive teaching, alternative teaching, parallel teaching, and station teaching. Land also recommended heterogeneous grouping, alternate assignments, multiple means of expression, and flexible means of engagement.

The Pennsylvania Department of Education (PDOE, 2014) and Jorgensen, McSheehan, and Sonnenmeier (n.d.) provided teacher behaviors for an inclusive classroom. Jorgensen et al. cited "people first language," speaking directly to the student rather than to a paraprofessional and providing the student with a method to communicate at all times. Jorgensen et al. also noted that it would be helpful for general education teachers to receive training on special education. The PDOE's list of tips for an inclusive classroom included emphasizing ideas that transcend grade levels, building prerequisite skills before introducing new ones, providing captions and descriptions for visual and audio materials, and giving immediate feedback. Opertti (2009) cautioned against using a one-size-fits all model for inclusive education; these methods will vary based on the location and resources of the school, the number of students with disabilities, and the severity of disability. Despite this caution, I included these classroom techniques in the proposed training curriculum.

The policies and recommendations from countries outside of the United States are reviewed next. This research provided information on creating inclusive education teacher training curricula that may be adapted for educators in different countries and cultures. Although I focused on schools in the United States, there are global initiatives such as Education for All that will apply to many countries.

In Poland, students with disabilities attend one of three types of schools: special schools, which provide specialized support depending on disability; integrated schools, which feature a 1:4 ratio of special learning students to general students; or mainstream schools, with one or two students with special learning needs in each classroom (author, year). However, most students with disabilities are in separate special education

institutions (Wilczenski & Nygren, 2014). In 2003, the Ministry of Education in Poland

recommended a segregated approach to special education, wherein the child may receive

education in a care center in his or her home or in a special education center; this

recommendation is in direct contrast to many state and federal recommendations, which

promote collaboration over segregation (Wilczenski & Nygren, 2014). The Ministry also

recommended that students with disabilities should spend fewer hours in school than their

general education peers, which furthers the divide between these groups of students; this

is also in direct contrast to most of the body of literature, in which researchers have

indicated that inclusion socially and academically benefits the students with disabilities

(Wilczenski & Nygren, 2014). Wilczenski and Nygren posited that many teachers in

Poland perceive inclusive education as contingent upon several factors and conditions,

such as the student's emotional or physical development; if these conditions are not met,

the teachers perceive that the students would be better off in a specialized setting. If I was

to develop a training curriculum for Polish teachers, it would be necessary to promote the

teachers' awareness of the academic, social, and financial benefits of inclusion.

According to Eskay and Oboegbulem (2013), the education system in Nigeria has

not undergone the same level of reform that Western societies have witnessed in the past

decade. Such reforms in the United States created options for students with disabilities

such as instructional programming, nonbiased assessment, identification and referral,

determination of a least restrictive environment, assessment, placement aspects, and other

legal mandates that may not be present in less-developed countries. A barrier to

integrated education is the lack of funding from the Nigerian government; schools cannot

effectively train their staff or create special education units without such funds. This, in

turn, leads to less professional development for teachers, which then results in an increase of negative attitudes towards students with disabilities. Eskay and Oboegbulum described this as a self-feeding cycle, citing that "lack of training facilities, human and material resources, and the unfavorable attitude of the society towards children with disabilities have added to the funding constraint" (p. 316). In order to address this, Eskay & Oboegbulum's list of recommendations included "initial training and retraining of general and special education teachers," as well as funding for "designing instructional environments, such as accommodation, adaption modifications to materials, strategies, equipment, and other facilities" (p. 317-18). A professional development curriculum may not be able to address all of the issues facing Nigerian inclusive education. However, as Eskay & Oboegbulum described funding and attitudes as having a positive correlation, it may be possible to improve access to funding by improving teachers' attitudes towards students with disabilities.

In India, disability has only recently become a political and educational issue. In fact, Giffard-Lindsay (2007) reported that "a basic disability statistic was recently included in the 2001 Census for the first time…[but] the addition of this disability statistic may indicate the positive influence of the introduction of the inclusive education concept" (p. 7). Moreover, disability statistics in India are skewed by selective reporting as well as an outdated approach to measuring disability. Giffard-Lindsay wrote that the five accepted categories of disability—mental, locomotor, hearing, speech, and sight—do not include disabilities such as autism. Previous initiatives such as Integrated Education for Disabled Children (IEDC, 1974) and the Project Integrated Education of Disabled Children (PIED, 1985) had been largely unsuccessful, but recent acts such as the Sarva

Shiksha Abhiyan and the Right to Education have gained more impetus (Madan &

Sharma, 2013).

India is different from many of the countries cited in this review in that the Indian

government alone is not responsible for the implementation of inclusive education.

Rather, a large number (at least 1,000) of nongovernmental organizations (NGOs)—

local, national, and international alike—are currently implementing a large portion of the

IEDC policy in this country. These NGOs attempt to make up for the lack of services

being provided by the Indian government (Giffard-Lindsay, 2007). In addition, Indian

private schools are attempting to provide an alternative for students with disabilities;

however, when Singal and Rouse (as cited in Giffard-Lindsay, 2007) studied 11 inclusive

schools in Delhi, Giffard-Lindsay determined that most of these schools contained their

disabled students in a separate unit from the mainstream school. Also in these schools,

"the educational status of parents played an important part in the direct academic support

of their child…[and] there was little support for the teachers, with no formal training and

a lack of communication" (Giffard-Lindsay, 2007, p. 16). These factors challenge the

implementation of IE in India. I stopped reviewing here due to time constraints. Please go

through the rest of your section and look for the patterns I pointed out to you. I will now

look at your Section 4.

Madan and Sharma (2013) outlined several recommendations for promoting

inclusive education in India. One of these includes the identification of one or two

teachers to play a pivotal role in the initial stage of implementation, in addition to support

professionals such as a counselor or a special education teacher. These selected teachers

and staff would require a specialized training curriculum to address the aspects associated

with initial implementation; this is a possible avenue for the current research project.

Moreover, Madan and Sharma (2013) cited that, as in many countries, the attitudes of

Indian teachers determine the difference between successful and unsuccessful

education—specifically, Indian teachers may display "negative attitudes, lack of affect,

and poor preparation" in relation to students with disabilities (p. 10). Lastly, the authors

recommended that general education teachers undergo specialized training, both short-

term and ongoing, for students with special needs. These programs are suggested to focus

on the "sociological aspects of disability…. [and] strategies that teachers can adopt for

working with children in the classroom" (Madan & Sharma, 2013, p. 11). Giffard-

Lindsay (2007) cited many of the same recommendations, including training about

specific disabilities and about how to treat students with disabilities. These avenues,

which other researchers and organizations have echoed, are also possible areas of interest

for global training curricula.

The Central Eastern Europe and Commonwealth of Independent States (CEECIS)

Region has the highest number of children in institutional care in the world (UNICEF,

2011). More significantly, the number of disabled children in the CEECIS Region does

not include over one million children who are likely outside of the school system.

UNICEF cited many of the same causes for this problem as those in other countries. For

example, there are few social service providers, and a lack of human and financial

resources. There are incomplete and incorrect data regarding the number of students with

disabilities who require services. The negative attitude towards the disabled from the

public and the educators alike also worsens the situation. UNICEF (2011) reported that

these attitudes stem from the historical Soviet treatment of disabilities through

"defectology, based on the philosophy that disabilities are faults that can be corrected if appropriate services are provided" (p. 8). This philosophy resulted in the placement of many students with mild disabilities into residential homes, where they would live in separation from their families and society. These institutions have suffered reports of physical abuse, neglect, and physical and medical restraint; UNICEF reported that disabled children in institutions have double the death rate of those in the general public. Due to the public shame associated with having a child with a disability, self-report data is an issue in the CEECIS Region as it is in India (Giffard-Lindsay, 2007). Also as in India, many NGOs and other donor organizations have created fully inclusive classrooms throughout Eastern Europe.

In order to address the situation in the CEECIS Region, however, it is clear that the problem lies in teacher training. Only nine of the 22 countries in the CEECIS Region said that they have teachers that have been trained for inclusive education; only four of these countries reported having pre-service inclusive teacher training. Moreover, teacher training in general is a problem across the entire region. UNICEF (2011) reported, "In some countries, teachers have as little as one day to practice teaching before they are hired as teachers, with very few ever having the chance to observe an inclusive classroom in action" (p. 12). Thus, the issue of teacher training curricula is more straightforward than in other countries; rather than addressing specific barriers to IE, training professionals in the CEECIS Region may wish to simply provide general teacher training, as well as practical experiences, that include elements of inclusive education.

In contrast to Poland, Nigeria, and India, the United Kingdom has a current and thorough system to provide inclusive education. This includes a system to identify and

address disabilities early. Called the SEN Code of Practice, this instrument includes a toolkit of best practices, day-to-day issues, and information on how to identify, assess, and meet students' special education needs (UKDfES, 2001). In contrast to other systems, wherein not even a teacher may challenge an IEP, the UK seeks to ensure that "the views of the child should be given due weight when considering whether or not he/she should be educated in a mainstream school;" the parents may also provide such input (UKDfES, 2001, p. 6). Moreover, it is not possible to remove a child from a mainstream school due to the child's needs being unmet by the school; rather, the government expects that all mainstream schools can service all students, and seeks to improve the school rather than move the child. This is achieved through several practices outlined by the Department for Education and Skills (2001), including using flexible grouping arrangements, setting appropriate targets, and maintaining the student's self-esteem by praising his or her strengths. Such suggestions could be important aspects of the proposed teacher training curriculum; rather than providing a contrast with barriers to address, the United Kingdom has provided an excellent model for including students with disabilities in the general education classroom.

In this literature review, the researcher described many aspects of an inclusive classroom curriculum. In the United States, inclusive educators are hindered by fragmented delivery between education and healthcare services, limited power over IEPs, and lack of experience with co-teaching models. However, many researchers and agencies have provided lists of best practices and classroom management tips for inclusive education. Other countries have had varying results with inclusive education policies. Nigeria, Poland, India, and the CEECIS Region all face barriers including

societal attitudes toward the disabled, a lack of federal mandates, and limited funding. In contrast, the United Kingdom has provided a model of successful inclusive education. The researcher will use this information during the creation of a 3-day teacher training/professional development curriculum for inclusive education.

Implementation

After completing the proposed professional development curriculum, the researcher aims to present the curriculum for use in school districts in the United States. In addition, the researcher may wish to adapt the curriculum to fit the policies and regulations of other countries and cultures. Although the findings of the current study related to pre-K to grade 8 teachers, the researcher also may wish to modify the curriculum for early childhood, high school, or college educators.

Potential Resources and Existing Supports

Potential resources for the implementation of this project include the researcher's colleagues and contacts in the local school district. The researcher may perform pilot tests of the curriculum in this district, receiving feedback and criticism from the educators and administrators.

Potential Barriers

Potential barriers to the project include resistance to further IE implementation or to perceived "unnecessary" professional development programs. As the researcher has learned through the body of research, teacher attitudes and perceptions regarding inclusive education and disabilities in general are of key importance to the success of an implementation plan.

Proposal for Implementation and Timetable

The researcher plans to develop the curriculum and materials over the course of 6 months. After the materials are complete, the researcher will begin sending out inquiries to her contacts in the school district to gauge interest in the curriculum. If there is interest, the researcher would aim to implement 3-4 pilot tests of the curriculum, using a group of approximately five teachers each time. Each pilot test would take place in a different month, giving the researcher time to use the participants' feedback to adjust the curriculum as necessary.

Project Evaluation

The researcher plans to use the aforementioned pilot tests of the curriculum to evaluate the success of the project. Specifically, the researcher will create pre- and post-tests that the participants will fill out before and after the professional training is complete. The surveys will measure the change in the participants' attitudes regarding IE, as well as their knowledge of the best practices. For this, the researcher may reuse elements of the *Scale of Teachers' Attitudes toward Inclusive Classrooms* (STATIC) instrument. However, the overall goal of this curriculum is not goals-based, but outcomes-based. The curriculum is only useful if the teachers implement their new knowledge in the inclusive classroom. The key stakeholders will be the teachers, as well as the professionals who will be implementing the curriculum (which will only include the researcher at first).

Implications Including Social Change

Local Community

The researcher hopes that this curriculum will improve the teaching practices of

pre-K through grade 8 teachers in the school district, by providing them with concrete

lessons on IE skills, classroom behaviors, and co-teaching methods. The students—both

with and without disabilities—will experience an improved academic environment, with

fewer behavioral issues and greater collaboration and learning. The curriculum will also

include strategies for discussing disabilities with students' parents, which will improve

the communication between parent, teacher, and school.

Far-Reaching

All of the above-mentioned benefits to the local school district will also be

applicable if the researcher is able to successfully implement this training curriculum in

schools around the country, or around the world. Countries such as the United States and

the United Kingdom are relatively advanced in their IE implementation goals, but less-

developed countries such as Nigeria and India still have a long way to go. This

curriculum may be more needed in these cultures, where attitudes and beliefs related to

disability are less positive, and where governmental policies have not yet had great effect.

Conclusion

In this section, the researcher described the intended study project: a teacher

training/professional development curriculum related to IE. Specifically, the researcher

will use the findings from the body of literature, as well as the findings of the current

study, to create a 3-day training program for pre-K through grade 8 teachers. This

program will address specific aspects of IE that researchers have reported as barriers to

successful implementation. These will include (a) negative attitudes and beliefs, (b) lack of communication, and (c) lack of IE and special education training. After completion of this curriculum, the researcher will seek to improve it through repeated pilot tests, before presenting it for use in the greater U.S. and for adaptation worldwide.

Section 4: Reflections and Conclusions

Introduction

In this project study, I addressed the problem of negative attitudes that regular classroom teachers had toward the inclusion of students with disabilities in the regular classroom setting. To answer the research questions, I used a quasi-experimental research design with a sample population of 135 regular classroom teachers within the local school setting. In this section, I will reflect upon the findings and their implications. This will include the strengths of the project, as well as recommendations for future research to remedy the project's limitations. I will reflect upon the study's implications for scholarship; project development; leadership and change; and my own abilities as a scholar, practitioner, and project developer. I will reflect upon the project's impacts on social change, as well as any implications, applications, and directions for future research. Section 4 will end with a summary and conclusion.

Project Strengths

I found that educators with more advanced higher education degrees had more positive views of inclusive education. In response to these findings, I designed a project centered around a teacher training program curriculum about IE. I designed this project to address these findings, as well as the findings in the literature that additional teacher training improves teachers' attitudes about IE. Researchers from countries around the world, as well as from the United States, have reported that inadequate and inconsistent standards for educators hinder the implementation of goals such as Education for All (author, year). In the curriculum, I will address areas of concern indicated in the literature

such as co-teaching strategies, classroom management tips, emergency procedures, and information related to learning disabilities.

Recommendations for Remediation of Limitations

The primary limitation of this study was the limited generalizability of the study findings. The conclusions and implications of these findings are limited to school settings with similar demographic attributes. In order to remediate these limitations, future researchers may wish to survey a larger, perhaps national, sample. The use of schools from multiple geographic areas, with varying availability of funding, professional development, and administrative support, may contribute to results that are applicable to schools throughout the United States. Future researchers could expand the study's generalizability by surveying early childhood or college educators, instead of limiting the population to those teaching pre-K to Grade 8. This study was also limited by its design, in that the instrument only measured the educators' perceptions of inclusive education at one point in time. Future scholars may mediate this limitation by implementing a longitudinal study design, perhaps before and after a teacher training program, in order to see which areas are still lacking after the training is complete. This information could be useful to the body of literature and to the development of future professional development curricula.

Scholarship

I found that the entire sample had largely positive attitudes toward inclusion as measured by scores on the full STATIC measure (Research Question 1). Most teachers positively endorsed the philosophical aspects related to the inclusive education ($M =$ 5.03), followed by the professional aspects ($M = 4.60$) and logistical concerns ($M = 4.55$)

related to inclusive education in the classroom. With regard to the STATIC subscales, there was not a significant relationship between teachers' attitudes and race, gender, or ethnicity. However, in this model, there was a significant relationship between teachers' experience and their attitudes towards philosophical aspects related to the inclusive education ($F = 3.86$, $p = .03$, partial $\eta^2 = .11$). In addition, I found a significant interaction effect between teachers' age and teaching experience on their philosophical aspects ($F = 7.98$, $p = .01$, partial $\eta^2 = .21$). Teachers who held bachelor's degrees and master's degrees plus 30 units had significantly higher attitudes toward professional aspects on inclusion than teachers holding a master's degree, and teachers who held master's degrees and master's plus 30 units had 91 significantly more positive attitudes toward logistical aspects of inclusion than teachers with bachelor's degrees, suggesting that additional training in education affects attitudes towards IE and perhaps the confidence level in teaching.

These results are largely aligned with the results in the body of scholarly literature. Teachers' being prepared to teach all students, especially student with disabilities, is critical in the IE model (Oyler, 2011). After completing this study, training would be a recommended next step for this district as reflected in the data analysis that teachers with a high education level reflected more positive results than teachers with less education.

The differences in attitudes toward inclusion may be due to differing levels of college training with regard to methods for teaching students with learning disabilities (Holdheide & Reschly, 2008; Hsien et al., 2009). The benefits of training are supported in the literature. Jenkins and Yoshimura (2010) stressed the importance of keeping general

education teachers abreast of teaching strategies and professional development activities to increase professional growth. During these professional development sessions, teachers can share ideas and their expertise (Blair, Lee, Cho, & Dunlap, 2010; Jenkins & Yoshimura, 2010). Professional development activities also can provide opportunities for teachers to collaborate.

Project Development and Evaluation

Through the limitations of the current research and project, I learned that it is difficult to use quantitative data to identify areas for improvement. The use of qualitative data would have provided more areas of knowledge for me to use in the development of the professional training curriculum. For example, in the quantitative analysis, I found that the teachers' attitudes towards the advantages and disadvantages of inclusive education were slightly less positive ($M = 4.18$) than their attitudes toward the other dimensions of IE. This information, while providing a general direction, does not indicate which advantages and disadvantages of IE were rated lower; this is a limitation of surveys that make use of closed-ended survey questions, as well as a limitation of quantitative research in general. With the use of a qualitative or mixed methodology, I could have created open-ended questions, such as asking the participants to list the perceived advantages and disadvantages of IE, as well as follow-up questions about the areas listed.

Leadership and Change

Through the results of the study, as well as the findings from the body of literature, I learned that leaders at many different levels must cooperate in order to address the issues surrounding inclusive education. Although I designed a curriculum for

inclusive education teacher professional development, leaders at the school administration must recognize the need for such a program at their schools and must be willing to advocate for the use of such a curriculum. This, in turn, requires state and federal support. For example, many of the reported barriers related to funding and resources. In addition, I found that teachers with more education are more supportive of inclusive education, and this mirrors the recommendations in the literature to increase hiring standards; this, too, would require state and federal support.

Analysis of Self as Scholar

As a scholar, I realized that the use of the STATIC instrument used did not align with the elements of IE mentioned in the body of literature. Thus, I determined that in future studies, I should first review the body of literature before selecting—or self-designing—an instrument for measurement. Rather than nebulous concepts such as logistical concerns, such a self-designed instrument would have addressed issues such as classroom disruptions, heterogeneous partnering, or the buddy system.

Analysis of Self as Practitioner

As an educational practitioner, I found I should engage in continued professional development in order to maintain a current skillset in a changing modern world. I have experience in several areas of special education, but I realize that further education could be useful, especially in areas such as co-teaching strategies and emergency preparedness plans. I also understand that my own attitudes towards inclusive education and students with disabilities are a determining factor of whether or not my inclusive teaching will be effective; thus, it is important to stay positive, open-minded, and educated about students with disabilities.

Analysis of Self as Project Developer

As a project developer, I realized that I struggled with the use of quantitative data. Regarding both the study results and the review of professional literature, I found it easier to use qualitative data when determining best educational practices. Quantitative data often indicated a what, while qualitative data indicated the how or why. Moreover, previous researchers in the body of literature largely used quantitative data to measure results and used qualitative data to describe processes. Thus, because I aimed to focus on the process of inclusive education rather than its results, I will use qualitative data for similar projects in the future.

The Project's Potential Impact on Social Change

I found an overall positive attitude towards teaching students with a disability in the regular education setting. Sze (2009) highlighted that teacher attitude is a predictor of teacher effectiveness in teaching student with a disability in a regular classroom setting; Sze concluded that teachers with negative attitudes are less effective than those with positive attitudes. Teachers' attitudes toward special needs students affects the delivery of instruction and influences the implementation of inclusive practices, contributing to student achievement outcomes (Hwang & Evans, 2011).

I found that teachers in this district had an overall positive attitude toward IE and negative attitudes were not present in educating special education students within this district. With this knowledge, school administrators should be aware of hiring efforts to maintain these positive attitudes. By ensuring teachers' attitudes toward inclusion are positive, administrators can help the district as a whole to become more effective in implementing inclusive strategies and, ultimately, lessening the achievement gap between

special education students and their nondisabled peers. School administrators should also become involved in the creation of effective teacher training and professional development programs about IE. The curriculum project that I designed as a follow-up for this study may function as a prototype for such development programs.

Implications, Applications, and Directions for Future Research

In addition to the recommendations targeted to address the limitations of the current study, I also have recommendations for the expansion of the body of literature in this domain. First, future researchers may wish to explore differences in teachers' attitudes towards inclusion at the elementary, middle, and high school levels. These researchers could analyze whether differences exist between these groups and could determine the presence of other variables that may be related to teachers' attitudes toward inclusion.

Future researchers may also use a qualitative or mixed methodology to address similar research questions. The use of qualitative methods, such as interviews would provide depth to the teachers' perceptions of elements of inclusive education. This would be helpful in the development of educator training curricula, as teachers could articulate skillsets that they perceive themselves or their colleagues to be lacking. Such a qualitative approach could include the perspectives of special education professionals in addition to the general education professionals. Many researchers in the body of literature have indicated that collaborative teaching methods, such as parallel or co-teaching, are the future of inclusive education; thus, an effective teacher training program must address both of these populations.

Conclusion

I used data from one district, but exploring teacher's attitudes toward IE in any district can lead to school district administrators to provide teachers with the necessary training, support, and resources for the implementation of the IE. Through the current study, I determined that teachers required educational resources to effectively implement inclusive education practices. Using these findings, I designed a curriculum for educator professional development. The results of the study, as well as the subsequent study project, could have been improved by several factors, including an increased and varied sample size and the use of qualitative data. Nevertheless, teachers and administrators may use the results of the current study to improve their own education, self-efficacy, and attitudes.

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Appendix A: Teacher Training Curriculum

Professional Development Program for PreK-5 Teachers,

Promoting Research-Based Co-Teaching Instructional Practices in IE Classrooms

An important recommendation resulting from the project study on teachers' attitudes toward inclusive classroom is to design and deliver remedial training to classroom teachers. The need is to address barriers to implementation of effective inclusive education, including negative teacher attitudes and beliefs, lack of communication, and lack of IE and special education training. Accordingly, the researcher designed a professional development (PD) program aimed at developing the knowledge, skills, and attitudes of PreK-5 teachers in a diverse, lower-income district school with a large SWD student population.

An overarching consideration of any change program is whether the best starting point is attitude or behavior. That is, does one start by trying to convince the participant of the need and value to change ("attitude"), or by transferring the knowledge and skills to implement the change ("behavior")? In this professional development program on IE, the researcher hypothesized that transfer of knowledge and skills to teachers will lead to their comfort and confidence which, in turn, will drive a positive attitude and desire to implement the practices in the classroom.

The goal of the professional development program is to deliver an integrated series of training lessons on co-teaching practices applied in IE classrooms, to teach staff at a diverse PreK-5 school with a large SWD population, through a training schedule that realistically fits the school calendar and staff availability. The success vision is that,

during the course and by the end of the program, classroom teachers will enthusiastically

apply new, research-based co-teaching practices with mastery, and thereby improve

learning by both students with disabilities and all students in the inclusion classrooms.

The professional development program focuses on five different research-based

co-teaching strategies applicable to the IE classroom. In a series of five separate lessons

scheduled over consecutive professional development during the academic year, teachers

will learn about, discuss, demonstrate, and gain proficiency in all five co-teaching

strategies, ultimately choosing the strategy best suiting a given lesson and set of students.

While fitting with teacher availability, breaking up the training in this way also permits

absorption of new material over an extended period of time, and transfer of new

knowledge from temporary working memory to long-term memory.

In designing and delivering this professional development program, the researcher

sought to avoid the problem of traditional training where, for example, participants show

up at a regularly scheduled time and place for "PD" without advance notice of purpose or

application, and without any means to measure participant reaction, learning, and

application, and without any means to follow-up or measure impact on students. In

contrast, the researcher incorporated specific steps before, during, and after the individual

training sessions to maximize the probability the IE practices are adopted, and student

learning is enhanced.

Toward that end, the researcher applied the learning framework described in

Elkeles, and that has been introduced and implemented broadly by the ROI Institute.

This framework promotes explicit focus and measurement of training at four levels: 1)

reaction, i.e. the participant's initial reaction to the new material, and his/her intent to use

it; 2) learning, i.e. demonstrated specific skills and knowledge to apply; 3) application,

i.e. evidence that the learning is applied regularly in the field; and 4) impact, i.e.

measurement of the intended result on the system or beneficiary(ies).

Specific operating components of the professional development program

included:

- Pre-session reading and questions, distributed by the building administrator

  (principal) to participants, to preview training purpose and topic, and engage the

  learners before they arrive.

- Well integrated combination of short lecture, full group and small group discussion,

  and videos during each lesson, to engage learners with "short bursts" of activity.

- Tests for understanding to confirm participant understanding, or indicate areas that

  need reinforcement.

- Participant action plans concluding each lesson, through which participants will apply

  what they learn in the classroom, and reflect on and report back experiences at the

  next lesson.

- End-of-lesson anonymous surveys that measure participant reaction to learning on a

  1-5 Lickert scale, to indicate intent to use, and as in leading indicator of and impact.

- Non-evaluative classroom observations of each teacher by the building administrator

  during the two weeks following each lesson, to record evidence of learning of the

  research-based instructional practices.

- Confidential questionnaire completed by each participant at the end of the PD

  program, with responses to questions about application of practices and success.

- Estimated impact on student learning, measured by comparison of classes to similar "control groups" whose teachers did not receive training, and/or trend line analysis of assessment scores.

By adopting these operating components, the researcher avoided a potential weakness in professional development in Education; that is, the failure to engage fully the participant throughout the training cycle, i.e. before, during, and after the training session. Professional development must be more than a one-off, standalone "event". Rather, training sessions should be preceded by work that previews the subject, and prepares the participant for formal training. The training session itself, like any lesson for group of diverse learners, must be well planned, prepared, and executed, to motivate and teach its participants. Teachers must then have the opportunity and the accountability to implement what has been taught and learned. Follow-up is critical in this regard, particularly by the school principal to whom the teachers report. It is therefore important that principals be knowledgeable about co-teaching strategies, and be motivated to observe and guide teachers as they implement what they have learned. Finally, the effectiveness of the professional development program must be evaluated and quantitatively measured at multiple levels, including the ultimate impact on students.

To summarize, the goal of the professional development program promoting research-based co-teaching instructional practices in IE classrooms is to transfer research to practice, i.e. to translate the insights from the study project into better teacher instruction, and faster student learning in the classroom. The PD program incorporates a comprehensive approach to design, implementation, and evaluation, and is intended to

build teacher knowledge and skills, thereby creating teacher confidence, comfort, and

positive attitude, all of which in turn leads to student learning.

Professional Development Program for PreK-8 Teachers,
Promoting Research-Based Co-Teaching Instructional Practices in IE Classrooms

Success Vision:

Classroom teachers enthusiastically apply new, research-based co-teaching instructional practices with mastery, and thereby improve learning by students with disabilities and all students in the inclusion classroom.

Professional Development Format:

Five, four-hour lessons conducted during the school year

Training Objectives:

Participating classroom teachers will understand, demonstrate proficiency in, and gain the confidence and enthusiasm to apply regularly in the inclusion classroom one or more of five research-based co-teaching instructional practices:

- One-Teach One-Assist Model

- Parallel Teaching Model

- Station Teaching

- Teaming

- Alternative Teaching

Materials

- Pre-session reading material specific to session

- Overview video**:** Models of Instruction (Methods of Co-Teaching)

  https://www.youtube.com/watch?v=TCn4qDyuZVE

- Videos illustrating each co-teaching instructional strategy

- Participant action plan template

- End-of-session participant survey

- Post-session teacher observation (non-evaluative) template

- Post-session application survey

- Smartboard

- Whiteboard, flip chart

DAY 1: Background Information and One-Teach One-Assist Module

(Day 1: 8:30-12:30pm)

Pre-session reading:

- Distributed to participants from building administrator (principal) three days before

  training session:

  - General background on Inclusion Education and research project that is basis of

    session.

  - Is Co-Teaching Effective? by Marilyn Friend and Deanna Hurley-Chamberlain

    (Smartboard)

Other materials:

- Whiteboard, flip chart

- Smartboard

- Participant action plan

- Participant survey on lesson

- One copy for each teacher on Six Approaches to Co-Teaching by SERC

Session objectives:

- Teachers will understand the definition of co-teaching.

- Teachers will have background knowledge on co-teaching.

- Teachers will have introductory understanding of the five co-teaching models covered during the professional development sessions.

- Teachers will understand and have confidence in the ability to apply one specific strategy: One-Teach One-Assist.

Procedure:

- The facilitator will:

  1. Introduce the Action Plan and Participant Survey templates, to be completed at the end of the session.

  2. Ask teachers to complete a KWL chart on the board, on the topic of co-teaching.

  3. Lead an interactive discussion on why co-teaching has become such an important topic in schools today (NCLB, IDEA, Inclusion, etc.).

  4. Briefly review pre-reading article: key points, definition, strategy, and purpose. Specifically, what co-teaching is, and what it is not.

  5. Conduct test for understanding.

  6. Show video on One-Teach One-Assist: https://www.youtube.com/watch?v=AeUa_cdaC6w

  7. Hand out Six Approaches to Co-Teaching by SERC, and review the approaches.

  8. Explain One-Teach One-Assist: one teacher is teaching the content to the students, while the other teacher is circulating around the room.

  9. Highlight the importance of having one teacher being able to collect formative assessment data, in real time while the lesson is being taught.

10. Explain why it is important that teachers switch roles: so that one is not seen as an "aide".   Meanwhile, the assisting teacher should not unnecessarily distract the students.

11. Show You Tube video on One-Teach One-Assist:

   https://www.youtube.com/watch?v=rmP_WBmyDcY

12. Discuss what the video shows, with guiding questions:

   o   What seemed to work well?

   o   What didn't?

   o   What would you definitely be able to implement in your classroom?

   o   Brainstorm ideas for lessons that would work well with this model (break into small groups, depending on the size of the whole group)

13. Debrief: Review key points of specific model.

Lesson Close and Assignment:

- Using the Action Plan template, teachers will list 2-3 next steps to apply what they have

  learned in the session, including using the One-Teach One-Assist model in at least

  one lesson during the following week.

  o   Discuss the importance of reflecting on the lesson. When teachers return for the next session, they will talk about how they think their respective lessons went.

- Distribute the pre-reading article for the next professional development: 6 Steps to Successful Co-Teaching, by Natalie Marston).

- Administer a simple, confidential reaction survey whereby each participant ranks on a 1-5 Lickert scale their view of the session, in terms of relevance, necessity,

importance, and applicability to job, and the intent to use the information and strategy in the near-term.

DAY 2: Parallel Teaching Module

(Day 2: 8:30-12:30pm)

Pre-session reading:

- Message sent to participants from building administrator (principal) three days before training session, reminding them of reading assignment and material distributed at end of Day 1: 6 Steps to Successful Co-Teaching by Natalie Marston.

Other materials:

- Whiteboard, flip chart

- Smartboard

- Participant action plan

- Participant survey on lesson

- One copy for each teacher of Pairing Up by Liana Heitin

Session objectives:

- Teachers will refresh their understanding of co-teaching definition, and the five co-teaching models covered during the professional development sessions

- Teachers will understand the pros and cons of Parallel Teaching.

- Teachers will understand and have confidence in the ability to apply one Parallel Teaching.

Procedure:

- The Facilitator will:

1. Distribute the Action Plan and Participant Survey templates for Day 2, to be completed at the end of the session.

2. Briefly review pre-reading article, and field comments and address questions.

3. Define and explain the Parallel Teaching strategy.

4. Show introductory video: https://www.youtube.com/watch?v=gLi4LiUopwY.

5. Stress the importance of both teachers being strong in the content area.

6. Discuss different types of grouping strategies.

7. Discuss challenges that this model brings, e.g. distractions, space constraints, etc.

8. Conduct test for understanding.

9. Show illustrative video: http://www.youtube.com/watch?v=fIPWrrUU-pk&feature=related

10. Discuss what the video shows, with guiding questions:

   o What seemed to work well?

   o What didn't?

   o What would you definitely be able to implement in your classroom?

   o Brainstorm ideas for lessons that would work well with this model (break into small groups, depending on the size of the whole group)

11. Debrief: Review key points of specific model.

Lesson Close and Assignment:

- Using the Action Plan template, teachers will list 2-3 next steps to apply what they have learned in this session, including using the Parallel Teaching model in at least one lesson during the following week.

- Teachers will need to reflect on the lesson themselves, and with their respective co-teacher. When teachers return for the next session, they will talk about the pros and cons of the strategy, and how they think their lessons went.

- Distribute the pre-reading article for the next professional development: <u>Pairing Up</u> by Liana Heitin.

- Administer a simple, confidential reaction survey whereby each participant ranks on a 1-5 Lickert scale their view of the session, in terms of relevance, necessity, importance, and applicability to job, and the intent to use the information and strategy in the nearterm.

DAY 3: Station Teaching

(Day 3: 8:30-12:30pm)

Pre-session reading:

- Message sent to participants from building administrator (principal) three days before training session, reminding them of reading assignment and material distributed at end of Day 2: <u>Pairing Up</u> by Liana Heitin.

Other materials:

- Whiteboard, flip chart

- Smartboard

- Participant action plan

- Participant survey on lesson

- One copy for each teacher of <u>Collaboration Between General and Special Education:</u> <u>Making It Work</u> by Michael N. Shape and Maureen E. Hawes (resource)

Session objectives:

- Teachers will reinforce their understanding of co-teaching definition, and the five co-teaching models covered during the professional development sessions

- Teachers will understand the benefits and challenges of with station teaching.

- Teachers will understand that parallel teaching and station teaching, while seeming alike, are very different, and the differences between the two.

- Teachers will understand and have confidence in the ability to apply Station Teaching.

Procedures:

- The facilitator will:

1. Distribute the Action Plan and Participant Survey templates for Day 3, to be completed at the end of the session.

2. Review the key points of the pre-reading article, with an extra focus on the grouping strategy.

3. Define and explain the Station Teaching strategy.

4. Show introductory video: https://www.youtube.com/watch?v=hrprg1r7kSs

5. Explain the differences between station teaching and parallel teaching.

6. Record teachers' preliminary list of the pros and cons for this model, on flipchart.

7. Discuss pros and cons of Station Teaching.

8. Conduct test for understanding.

9. Show illustrative video: http://www.youtube.com/watch?v=KfFDrSG41As

10. Discuss what the video shows, with guiding questions:

o What seemed to work well?

o What didn't?

o What would you definitely be able to implement in your classroom?

o Brainstorm ideas for lessons that would work well with this model (break into small groups, depending on the size of the whole group)

11. Debrief, reviewing key points of lesson.

Lesson Close and Assignment:

- Using the Action Plan template, teachers will list 2-3 next steps to apply what they have learned in this session, including using the Station Teaching model in at least one lesson during the following week.

  o When teachers return for the next session, they will talk about the pros and cons of the strategy, and how they think their lessons went.

- Teachers will be asked to try this model at least once in the following week and discuss what they found, pros, cons, etc.. Teachers will also be given the following weeks reading and asked to have it completed, Common Co-Teaching Issues, an article adapted from the *Teaching Exceptional Children*, Vol.30, No.2, NOV/DEC 1997, page 8

- Administer a simple, confidential reaction survey whereby each participant ranks on a 1-5 Lickert scale their view of the session, in terms of relevance, necessity,

importance, and applicability to job, and the intent to use the information and strategy in the near-term.

DAY 4: Team Teaching

(Day 4: 8:30-12:30pm)

Pre-session reading:

- Message sent to participants from building administrator (principal) three days before training session, reminding them of reading assignment and material distributed at end of Day 3: Common Co-Teaching Issues**,** an article adapted from the *Teaching Exceptional Children*, Vol.30, No.2, NOV/DEC 1997, page 8

Other materials:

- Common Co-Teaching Issues (1copy)

- Whiteboard, flip chart

- Smartboard

- Participant action plan

- Participant survey on lesson

- One copy for each teacher of Two Cooks in the Kitchen by Mary Ellen Flannery

Session objectives:

- Teachers will engage in a "process check" on the value of these sessions, and their applicability to the classroom.

- Teachers will understand the fundamentals, and the benefits and challenges of Teaming.

- Teachers will understand and have confidence in the ability to apply Team Teaching.

Procedure:

- The facilitator will:

    1. "Step back" and start differently than previous sessions, engaging the group in informal discussion on where it is, and how and where this training process is going.

    2. Distribute the Action Plan and Participant Survey templates for Day 4, to be completed at the end of the session.

    3. Briefly review the key points of the pre-reading article.

    4. Define the Teaming strategy.

    5. Capture on board or flip chart the teachers' list of Teaming issues, and elicit group discussion about ways to prevent or resolve these barriers to success.

    6. Show introductory video: https://www.youtube.com/watch?v=MVeFjRdSH3c

    7. Capture teachers' list of pros and cons of Team Teaching.

    8. Conduct test for understanding.

    9. Show illustrative video: https://www.youtube.com/watch?v=V91SWY32EH4

    10. Discuss what the video shows, with guiding questions:

        o   What seemed to work well?

        o   What didn't?

        o   What would you definitely be able to implement in your classroom?

        o   Brainstorm ideas for lessons that would work well with this model (break into small groups, depending on the size of the whole group)

    11. Debrief, reviewing key points of lesson.

Lesson Close and Assignment:

- Using the Action Plan template, teachers will list 2-3 next steps to apply what they have learned in this session, including using the Team Teaching model in at least one lesson during the following week.

  o When teachers return for the next session, they will talk about the pros and cons of the strategy, and how they think their lessons went.

- Distribute the pre-reading article for the next professional development: Two Cooks in the Kitchen by Mary Ellen Flannery.

- Administer a simple, confidential reaction survey whereby each participant ranks on a 1-5 Lickert scale their view of the session, in terms of relevance, necessity, importance, and applicability to job, and the intent to use the information and strategy in the nearterm.

DAY 5: Alternative Teaching

(Day 5: 8:30-12:30pm)

Pre-session reading:

- Message sent to participants from building administrator (principal) three days before training session, reminding them of reading assignment and material distributed at end of Day 4: Two Cooks in the Kitchen by Mary Ellen Flannery.

Other materials:

- Whiteboard, flip chart

- Smartboard

- Participant action plan

- Participant survey on lesson

- One copy for each teacher of <u>50 Ways to Keep Your Co-Teacher: Strategies for Before, During, and After Co-Teaching</u> by Wendy W. Murawski and Lisa Dieker

Session objectives:

- Teachers will understand the definition of the Alternative Teaching model.

- Teachers will learn effective grouping strategies.

- Teachers will be able to choose effective times to implement Alternative Teaching.

- Teachers will understand and have confidence in the ability to apply Team Teaching.

Procedures:

- The facilitator will:

  1. Distribute the Action Plan and Participant Survey templates for Day 4, to be completed at the end of the session.

  2. Briefly review the key points of the pre-reading article.

  3. Define the Alternative Teaching strategy.

  4. Show introductory video: https://www.youtube.com/watch?v=fr-S5CGDXBQ

  5. Capture teachers' list of Alternative Teaching pros and cons.

  6. Conduct test for understanding.

  7. Show illustrative video: http://www.youtube.com/watch?v=MQoh14NZyJo.

  8. Discuss what the video shows, with guiding questions:

     o What seemed to work well?

     o What didn't?

     o What would you definitely be able to implement in your classroom?

     o Brainstorm ideas for lessons that would work well with this model (break into small groups, depending on the size of the whole group)

9. Debrief, reviewing key points of lesson.

Lesson Close and Assignment:

- Using the Action Plan template, teachers will list 2-3 next steps to apply what they have learned in this session, including using the Team Teaching model in at least one lesson during the following week.

- Distribute <u>50 Ways to Keep Your Co-Teacher: Strategies for Before, During, and After Co-Teaching</u> by Wendy W. Murawski and Lisa Dieker.

- Distribute confidential questionnaire about what the participants see as the applicability and value of what they learned in the series of training sessions, requesting anonymous return in two days.

Professional Development Exit Survey

1. I have received the training I need to successfully use co-teaching strategies and implement inclusion.

Strongly Agree	Neither Agree/ Disagree	Strongly Agree	Somewhat Disagree	Strongly Disagree
1	2	3	4	5

2. I believe students with disabilities can receive an appropriate education in an inclusive regular education classroom.

Strongly Agree	Neither Agree/ Disagree	Strongly Agree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

3. I have seen evidence of improved academic outcomes for students with disabilities in inclusion classrooms.

Strongly Agree	Neither Agree/ Disagree	Strongly Agree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

4. I have the necessary cooperation and assistance from educational support personnel (paraprofessionals) to implement inclusion successfully.

Strongly Agree	Neither Agree/ Disagree	Strongly Agree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

5. I find it difficult to modify my instructional strategies and my teaching style to meet the needs of students with disabilities.

Strongly Agree	Neither Agree/ Disagree	Strongly Agree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

6. I have sufficient resources to implement inclusion effectively.

Strongly Agree	Neither Agree/ Disagree	Strongly Agree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

7. I have found that inclusion and this professional development has encouraged me to experiment with new teaching practices.

Strongly Agree	Neither Agree/ Disagree	Strongly Agree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

Appendix B: Permission to use the Scale of Teacher's Attitudes Toward Inclusion

(STATIC)

10/25/15

Dear Ms. Greene,

Thank you for your interest in the STATIC instrument. I am overwhelmed at the interest it has generated since having created it. It has been used in more than 25 countries and translated into at least 12 languages. Now, having been used in scores of studies, it has become the foremost instrument of its kind.

I am pleased to grant permission for you to use the STATIC in your dissertation study. Included below is a link to the STATIC instrument, scoring information, and a summary of the development of the instrument to assist in your project. I wish you the very best with your research and honored to be a part of it.

Sincerely,

H. Keith Cochran, Ph.D

Sent from my Verizon Wireless 4G LTE DROID