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Attitudes and Inclusion: An Examination of Teachers' Attitudes Toward Including Students with Disabilities

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LOYOLA UNIVERSITY CHICAGO

ATTITUDES AND INCLUSION: AN EXAMINATION OF TEACHERS'
ATTITUDES TOWARD INCLUDING STUDENTS WITH DISABILITIES

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION
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DOCTOR OF EDUCATION

PROGRAM IN CURRICULUM AND INSTRUCTION

BY

THOMAS J. WALKER

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ABSTRACT

This study examined the elements that may influence teacher attitudes in a positive manner toward including students with special needs. The purpose of this project was to explore the factors that may impact the attitudes of general education teachers toward including students with disabilities. The factors examined in this study included experience, professional development, and administrative support. Each of these factors have been indicated by research as having an impact on the attitudes of teachers toward inclusion, however a deeper understanding and description of how these factors impact teachers was needed. Elementary general education teachers were surveyed to determine their attitudes toward inclusion, involvement in professional development, and perceived support from administrators and special education teachers. Teachers were also randomly selected to participate in a short interview. The results from this study revealed that principal support, in the form of *emotional*, *instrumental*, and *informational* support, and professional development had a positive impact on teachers' attitudes toward including students with special needs. It is recommended that future research is needed to further investigate these two areas.

CHAPTER I

INTRODUCTION

Over the past three decades, school systems have experienced an increase of students with disabilities included in the general education classroom (U.S. Department of Education, 2001). Due to what can be described as a national movement toward inclusive education, general education teachers may be overwhelmed by the demands placed on them as an increase of students with diverse learning needs are placed in their classrooms (Shoho & Katims, 1998). A positive teacher attitude toward inclusion may be the key to the success of including students with special needs (Cochran, 1998). The attitudes of these teachers may play an important role to the success of an inclusion model and the factors which influence attitudes in a positive manor need to be examined. According to Kavale (2002), the requisite attitudes to include students with special needs in the general education setting are not yet in place.

The U.S. Department of Education (2001) reports that since the adoption of PL 94-142 Education for All Handicapped Children Act (1975), the number and percentage of school-age children receiving special education services has grown steadily since. Reauthorized in 1991 as the Individuals with Disabilities Education Act, IDEA mandated that children with disabilities are to be provided with a free and appropriate public school education. During the first year, IDEA served 3.7 million students, or 8% of the total school enrollment (U.S. Department of Education, 2001). By the 2003-2004 school year,

the number IDEA served reached 6.6 million students or 14% of the total school enrollment (U.S. Department of Education, 2001).

Along with changes in Federal laws, national court cases have also had an impact on special education placement decisions. In 1989, the *Daniel R.R. vs. State Board of Education* decision ruled that schools must provide an individual education tailored to the child's needs while at the same time educate students with disabilities with their nondisabled peers to the greatest extent possible (Barnes, 1994). The court decision included a two part test to determine if the least restrictive environment was appropriate for the student. First, could the child be educated in the regular education classroom adequately with support aids and services. Second, whether or not the student was mainstreamed into the general education classroom to the greatest amount possible (Barnes, 1994). Similarly, the 1993 *Oberti vs. Board of Education* decision placed the burden of proof on the school to justify excluding a student from the general education setting. The court stated that a child with a disability should be educated in the regular education classroom even if it is not the best academic setting for that child and that even if the educational experience is qualitatively or quantitatively different from regular education students does not justify exclusion (Barnes, 1994). These court decisions along with changes in Federal laws have facilitated an increase of including students with special needs in the regular education setting.

The boundaries that once separated special education from general education are becoming increasingly blurred (Daniel & King, 1997). Learning environments for students with disabilities have also seen a shift since 1975 (Center on Education Policy,

2002). Twenty-five years ago, most students with disabilities were segregated from their peers who were not disabled. However by 2002, most students with disabilities spend at least 40% of the school day in regular education classroom with their non-disabled peers (Center on Education Policy, 2002). During the 1988-1989 school year, approximately 31% of students with disabilities spent at least 80% of the school day in the regular education classroom setting; a decade later the percentage increased to 46%. In addition, another 29% spent at least 40% of their day in the regular education setting (Center on Education Policy, 2002). These changes indicate a trend toward the inclusion of special education students with their peers in the regular education classroom. With inclusive placement on the rise, new questions now require attention.

A common accepted definition of inclusion is the educational placement of students with disabilities in the general education classroom for most of the school day with support and services (Huber, Rosenfeld, & Fiorello, 2001; Luster & Durrett, 2003; Moore, Gilbreath, & Maiuri, 1998). Individually designed instruction and support for students with special needs in the inclusive setting allows each student to participate equally in the opportunities and responsibilities of the general education classroom (Moore, Gilbreath, & Maiuri, 1998). The concept of inclusion not only fueled a debate on the appropriate placement of students with special needs but also has called for a careful examination of inclusion-based education (Daniel & King, 1997).

Research shows that inclusion can be very successful for both regular education students and students with disabilities (Baumgartner, Lipowski, & Rush, 2003; Coombs-Richardson & Mead, 2001; Daniel & King, 1997; Handler, 2003; Heflin & Bullock,

1999; Hines, 2001; Holmes, 1999; Klingner, Vaughn, Schumm, Cohen, & Forgan, 1998; Lindsay, 2007; Moore, Gilbreath, & Maiuri, 1998; Salend & Duhaney, 1999; Sharpe, 1994; Vaughn, Elbaum, Schumm, & Hughes, 1998). Students with disabilities in an inclusion setting out perform their peers who receive instruction outside of the regular classroom setting (Hines, 2001; Klingner et al., 1998; Lindsay, 2007; Salend & Duhaney, 1999). Regular students also appear to benefit from inclusion practices both academically and socially (Salend & Duhaney, 1999; Sharpe, 1994). According to this line of research, inclusion seems to have a positive effect on all students academically and socially.

The inclusion of students with disabilities in the regular education classroom is becoming more prevalent in today's schools (Winzer, 1998). Research shows that several factors influence the success of an inclusion program (Huber, Rosenfeld, & Fiorello, 2001; Idol & Griffith, 1998; Moore, Gilbreath, & Maiuri, 1998; Sharpe, 1994). Two of the most important factors are teacher's attitudes toward inclusion and their beliefs in their ability to instruct students with disabilities (Avramidis, Bayliss, & Burden, 2000; Forlin, 2001; Raj, 2002; Riemer, 2004; Sharpe, 1994; Wolpert, 2001). As inclusion has seemingly become the preferred placement model for students with disabilities, teacher's attitudes toward including students with special needs has become an important variable in creating a successful inclusive classroom.

Statement of Purpose

An examination is needed in order to determine the elements that may influence teacher attitudes in a positive manner toward including students with special needs. The purpose of this project is to explore the factors that may impact the attitudes of general education teachers toward including students with disabilities. The factors examined in this study include experience, professional development and administrative support. Each of these factors has been indicated by research as having an impact on the attitudes of teachers toward inclusion. However a deeper understanding and description of how these factors impact teachers is needed.

Research Questions

1. What factors impact the attitudes of regular education elementary teachers toward including students with disabilities?
2. What elements of professional development impact regular education elementary teachers' attitudes toward inclusion?
3. How does experience working with disabled individuals impact regular education elementary teachers' attitudes toward inclusion?
4. How can administrative support impact the attitudes of regular education elementary teachers toward including students with special needs?

CHAPTER II

LITERATURE REVIEW

The purpose of this literature review is to examine the practice of including students with special needs in the regular education setting and the factors which may contribute to positive teacher attitudes toward inclusion. First, the literature related to the impact inclusion has on both students with and without disabilities will be examined. Next, research on teacher attitudes toward inclusion will be considered to determine the effect attitudes have on the success of including students with disabilities. Then, examinations of the factors that may affect teachers' attitudes in a positive manner will be analyzed. These factors will include experience, training and professional development, and support from special education teachers and school administration. Last, effective professional development practices will be investigated in order to determine a foundation for effectual professional development regarding inclusion.

Inclusion represents a philosophical shift in the practice of education that requires the restructuring of schools to eliminate the separation of regular and special education and to create a new system to accommodate the needs of the students (Edmunds, 2000). Supporters of the inclusion movement argue that all learners reap the benefits from an inclusion setting (Fulk & Hirth, 1994). Research indicates that not only students with disabilities out perform their peers in separate special education classrooms (Daniel & King, 1997; Luster & Durrett, 2003; Peetsma, Vergeer, Karsten, & Roeleveld, 2001),

students without disabilities also benefit from an inclusion setting (Huber, Rosenfeld, & Fiorello, 2001; Sharpe, 1994).

While it appears that inclusion can benefit both students with and without disabilities, research has focused on the elements of successful inclusion including the attitudes of general education teachers (Forlin, 1997; Hastings & Oakford, 2003; Hwang & Evans, 2001; Oldfield, 2009; Colber, 2010). Identified factors that may affect teachers' attitudes toward including students with special needs comprise of professional development (Bradley & West, 1994; Colling, Fishbaugh, & Hermanson, 2003; Hastings & Oakford, 2003; Smith & Smith, 2000), pre-service training (Forlin, 1997; Lambert, Curran, Prigge, & Shorr, 2005; Beacham & Rouse, 2012; Swain, Nordness, & Leær-Janssen, 2012), and administrative support (Guzman, 1994; Heflin & Bullock, 1999; Mamlin, 1999; Villa, Thousand, Meyers & Nixon, 1996; Irvine et al., 210; Martin, 2010) and experience (Freytag, 2001).

Inclusion Research

Impact on Students with and without Disabilities (Academics/Social)

The following section will examine the impact inclusion has for both students with disabilities and their general education peers. Increased academic achievement for both students with disabilities (Daniel & King, 1997; Luster & Durrett, 2003; Peetsma et al., 2001) and their nondisabled peers (Huber, Rosenfeld, & Fiorello, 2001; Sharpe, 1994) has been documented in a variety of research. A positive impact on social outcomes for students with disabilities when included in the general education classroom has also been examined (Klingner et al., 1998; Vaughn et al., 1998). Including students with disabilities

appears to have a positive impact on both students with disabilities and their nondisabled peers.

Luster and Durett (2003) explored the relationship between inclusion rates and the performance levels of students with disabilities on standardized state assessments for fourth and eighth graders as well as graduation rates for students with disabilities. They determined a positive correlation between inclusion and higher rates on district performance scores and high school diplomas earned by students with disabilities. Peetsma et al. (2001) matched primary students with disabilities educated in a separate class to those in an inclusion setting over a four year period in the Netherlands. Their results indicated more progress in the academic performance of students educated in an inclusive setting compared to their matched pairs in a separate special education setting. Daniel and King (2001) reported similar results tracking third and fifth grade inclusion students who experienced higher gains in reading scores. Other studies have determined that social outcomes for students with disabilities increase in the inclusion setting as well (Klingner et al., 1998; Vaughn et al., 1998).

Holmes (1999) conducted a case study of the implementation of inclusion in five elementary schools located in a North Louisiana parish. Through reflective journals, review of documents, and interviews with teacher and administrators, she reported that with the proper modifications most of the students placed in an inclusion setting progressed well and received positive comments from a majority of the general education teachers who indicated that inclusion was an excellent choice for many students with special needs (Holmes, 1999). This study also indicated academic gains equal to or better

then past achievements in a self-contained setting and general education students appeared to gain as well through peer tutoring.

Social outcomes for students with disabilities are another area of concern when considering placement of students with disabilities (Vaughn et al., 1998). In 1998, Vaughn et al. conducted their study of 183 elementary students under the assumption that students with disabilities will be better accepted, have more friends, and feel better about themselves if placed full time in the general education classroom. Using rating scales, student reporting and observations, they compared students with disabilities from two different placement options. One group of students with disabilities received consultation/collaborative services only while the second group was involved in a co-teaching model. Vaughn et al. concluded that students in the consultation/collaborative teaching model demonstrated more positive outcomes on friendship quality, peer acceptance, improved self-concepts and had an increase in reciprocal friendships when compared to their peers in a more restrictive environment.

Klingner et al. (1998) reported their findings of 32 students with special needs and their views of their own inclusion placements. Through interviews, the researchers discovered that these students believed that learning was stressed more in the inclusion classroom, previous experience in the special education classroom proved to not be challenging enough, and they were able to make more friends with in the inclusion model. Klingner et al. concluded that inclusion was viewed by many students as beneficial and preferable while maintaining support for a continuum of service delivery

options and for considering the placement of each child individually based on their unique needs.

In a similar study, Giangreco, Dennis, Cloninger, Edelman, and Schattman (1993) interviewed 19 general education teachers who have included students with disabilities into their classrooms. Initially, all the teachers reacted negatively towards accepting educational responsibility of students with disabilities. By the end of the first year, 17 out of 19 teachers interviewed reported an increase in ownership, involvement and personal interaction (Giangreco et al., 1993). The teachers indicated higher skill acquisition including communication, social skills, motor activities and academic skills in students with disabilities. The overall impact on both disabled and non-disabled students was positive according to their teachers (Giangreco et al., 1993).

The research on the effects of inclusion on academic performance of non-disabled students has also resulted in positive outcomes (Huber, Rosenfeld, & Fiorello, 2001; Sharpe, 1994). Sharpe found no statistically significant academic differences between students in an inclusion setting and those who were not. Huber, Rosenfeld, and Fiorello (2001) indicated that inclusion practices academically benefited low achieving students. The wealth of research indicates a positive correlation between higher academic performance and social outcomes for students with disabilities educated in an inclusive environment without a negative impact on their non-disabled peers (Daniel & King 1997; Huber, Rosenfeld, & Fiorello, 2001; Luster & Durrett 2003; Peetsma et al. 2001; Sharpe, 1994).

Huber, Rosenfeld and Fiorello (2001) reported their research regarding 477 low, middle, and high-achieving general education students across a three year period. The students were randomly selected from three Eastern Pennsylvania elementary schools ranging in grades from first to fifth. The students were categorized and compared depending on how many students with disabilities were included in their general education classroom. The results indicated a statistically significant positive effect on low and middle-achievers' math and reading scores (Huber, Rosenfeld, & Fiorello, 2001) when students with disabilities were included in their classrooms. Huber, Rosenfeld and Fiorello point to the possibility of the implementation of inclusive practices to the impact on the general education students' scores.

Additional studies indicate that there does not appear to be a negative effect on general education students when including students with disabilities into their classrooms (Sharpe, 1994). Using group achievement test scores and report card ratings in the academic areas of reading, language arts, mathematics and the behavior areas of conduct and effort, Sharpe examined the performance between 35 general education students educated in an inclusive environment to 108 students not educated in an inclusive environment. The results indicated no statistical differences between the groups of general education students educated in an inclusive classroom compared to those students educated in a non-inclusive classroom (Sharpe, 1994).

The impact of including students with disabilities into the general education classroom has been extensively documented. Research has demonstrated a positive correlation between including students with disabilities and their academic progress

(Daniel & King, 1997; Luster & Durrett, 2003; Peetsma et al., 2001). Including students with disabilities also appears to have a positive effect on their nondisabled peers (Huber, Rosenfeld, & Fiorello, 2001; Sharpe, 1994) indicating that inclusion practices benefit all students, especially low achieving students (Huber, Rosenfeld, & Fiorello, 2001). Social outcomes for students with disabilities are another area with positive correlations when included in the general education classroom. Students report increased friendship quality, peer acceptance and improved self-concepts when included in the regular education classroom (Vaughn et al., 1998). According to the research, including students with disabilities can have a positive impact on both academic achievement and social outcomes for all students.

Factors of Successful Inclusion

Attitudes

Research indicates that general education teachers tend to have negative perceptions about inclusion (Cochran 1998; Cook, Semmel, & Gerber, 1999; Familia-Garcia 2001; Forlin 2001; Heflin & Bullock 1999). These negative attitudes exist despite the evidence advocating the benefits of inclusion for a variety of students (Daniel & King, 1997; Huber, Rosenfeld, & Fiorello, 2001; Luster & Durrett 2003; Peetsma et al., 2001; Sharpe, 1994). General educators may be overwhelmed with the demands placed on them by more and more students with diverse learning needs placed in their classes because of the national movement toward inclusive education (Shoho & Katims 1998). However, teachers' attitudes towards students with disabilities are critical (Forlin, 1997;

Hwang & Evans, 2010) and various methods of making an impact on teachers' attitudes are needed (Hastings & Oakford, 2003; Oldfield, 2009; Colber, 2010).

Cochran (1998) created the Scale of Teachers' Attitudes Toward Inclusion to measure teachers' views. Using the 20-item Likert scale STATIC, Cochran surveyed 516 teachers from five school districts in the Southeastern United States region from eighteen elementary schools, six middle schools, five high schools and two special education schools from urban, suburban and rural communities. Cochran's results indicated higher positive attitudes among special education teachers when compared to regular education teachers. Elementary educators also scored higher when compared to secondary education teachers. Cochran concluded that success of inclusion depends upon teachers' attitudes. Teachers who exhibit negative attitudes toward inclusion may have a direct impact on the success of the included students (Cochran, 1998).

In a small sample study conducted in the New York City school system, Familia-Garcia (2001) assessed the attitudes of teachers toward including students with disabilities into general education classrooms. Of the special education teachers surveyed, all reported positive attitudes concerning working in an inclusion setting, even if mandated (Familia-Garcia, 2001). However, among the general education teachers, half were willing to try the inclusion model while the other half refused to even attempt inclusion. These teachers also reported that inclusion would not work and eighty percent of them indicated they would change schools or retire if mandated to work in an inclusion setting (Familia-Garcia, 2001).

Avramidis, Bayliss and Burden (2000) examined how experience affects attitudes. The researchers used a Likert scale survey to determine educator's attitudes toward the inclusion of students with disabilities. This data was then examined against statistics collected relating to professional development, university course work and experience of the teachers. Eighty-one respondents were included in the study from twelve primary and four secondary schools ranging from urban, suburban and rural areas. The authors found that teachers who had been implementing inclusive programs for multiple years held significantly higher attitudes when compared to their counterparts (Avramidis, Bayliss, & Burden, 2000). Likewise, higher levels of professional development affected attitudes in a positive direction. This training also boosted teacher confidence levels in meeting IEP requirements. Within the training sub-section, the authors found that external training had more of a positive effect on attitudes than did school-based training. The educators surveyed indicated a need for support, training and material resources as areas of need for including students with special needs into their classrooms (Avramidis, Bayliss, & Burden, 2000).

According to Minke, Bear, Deemer, and Griffin (1996), experience working in an inclusion setting may have a positive effect on teacher's attitudes. The researchers surveyed 185 regular education teachers who taught in traditional classrooms and 71 regular education teachers and 64 special education teachers who co-taught in inclusion classrooms. The results indicated the special education and regular education teachers who co-taught in an inclusion setting held the most positive views of inclusion as well as the highest perceptions of self-efficacy, competency and satisfaction while regular

education teachers in traditional settings held the least positive perception (Minke et al., 1996). Minke et al. concluded that regular education teachers' attitudes toward inclusion may be affected in a positive manner through successful experience.

Giangreco et al. (1993) documented the effect experience has on attitudes of general education teachers as well. Their qualitative study consisted of interviewing 19 general education teachers from ten different public schools in Vermont. The teachers indicated cautious and negative attitudes towards including students with special needs initially. However, upon interaction with the students, 17 out of the 19 teachers reported an increased ownership and involvement with the inclusion process (Giangreco, 1993). These teachers indicated a type of transformation including a willingness to learn new skills needed to teach in an inclusive setting as well as a positive change in their attitudes. Giangreco concluded that direct experience of working with the child who received specialized services on an ongoing basis was a critical factor in the transformation of the general education teachers.

Forlin (2001) explored the potential stressors for teachers when including students with special needs. A group of 571 primary school teachers from Queensland, Australia, were surveyed in four areas including demographics and personal teaching data, information about students with disabilities, stressors associated with inclusion, and coping strategies used in inclusion (Forlin, 2001). Forlin's results indicated that teachers' professional competence, which involves the teacher's commitment to maintain effective teaching for all children in their classroom, was an area of stress for teachers. The results

also indicated that an increase in the number of years of experience and formal training with inclusion resulted in a reduction in stress.

Research on student teachers is also important as the attitudes they form during training are likely to affect their behavior throughout their teaching career (Hastings & Oakford, 2003). Hastings and Oakford surveyed university students enrolled in elementary and secondary education programs. Their results indicated increased negative attitudes for including students with behavior and emotional disabilities compared to intellectual disabilities. In addition, secondary student teachers indicated higher positive attitudes compared to their elementary counterparts (Hastings & Oakford, 2003).

The successful inclusion of students with disabilities into the regular education classroom depends on the positive attitudes of teachers (Cochran, 1998; Forlin, 1997). One area that appears to have a positive effect on teachers' attitudes is experience with inclusion (Avramidis, Bayliss, & Burden, 2000; Forlin, 2001; Minke et al., 1996). This experience may come from teaching in an inclusion setting for multiple years (Avramidis, Bayliss, & Burden, 2000), in a co-teaching setting (Minke et al., 1996), or direct experience working with a student who receives specialized services (Giangreco et al., 1993). Other factors including training and support need to be examined to determine the impact on teachers' attitudes toward inclusion (Hastings & Oakford, 2003).

Training (Pre-service/Professional Development)

According to Villa et al. (1996), separate pre-service and continuing education programs for general and special education teachers have contributed to under prepared educators in skills and expectations for including students with special needs. The most

profound need of teachers is their necessity for more and better professional development programs that are specifically designed to address implementation concerns about inclusion (Edmunds, 2000; Dodge-Quick, 2011). The success of inclusion is dependent upon preparing general education teachers for inclusive classroom settings (Lesar et al., 1996). General education teachers must be comfortable and competent at adapting and modifying curriculum and instruction to meet the needs of all their students including students with disabilities (Stanovich & Jordan, 2002).

As general education teachers become more directly responsible for educating students with disabilities, many may feel unprepared to meet the specific needs of these students (Colling, Fishbaugh, & Hermanson, 2003). Freytag (2001) presented her study on the impact of preservice experiences on teacher efficacy and inclusion. She utilized the Teacher Efficacy Scale to survey 48 teachers from ten public schools in a large, metropolitan area in central Florida. Of the 48 teachers, 75% were general education teachers, 25% special education teachers, and all were considered beginning teachers with 0-4 years of experience. Freytag reported a higher confidence level in teaching ability and the global belief that educators can impact student learning among special education teachers when compared to general education teachers. However, she found no statistically significant difference between scores on the Teacher Efficacy Scale and the number of courses taken that addressed inclusion.

Colling, Fishbaugh and Hermanson's (2003) final evaluation of the Montana Training for Inclusive Education indicated positive results for the preparatory inclusive educational practices program. Over a four year period, 272 educators from 31 schools

participated in this training to address inclusion strategies which included workshops on teaming, cooperative learning, team building collaboration, and peer coaching skills. The results from the final questionnaire found that the teachers' perceived ability to effectively meet the needs of all students in the regular classroom scored significantly higher when compared to teachers who did not participate in the program (Colling, Fishbaugh, & Hermanson, 2003).

Educators have repeatedly indicated the need for additional training to enable them to meet the needs of students with special needs included in the general education classrooms (Bradley & West, 1994). Bradley and West conducted focus groups among educators in a mid-Atlantic metropolitan school system. Eight major training needs were identified including program modifications, working with others, impact of students and parent involvement. Knowledge of specific disabilities, attitudes of educators, expectations of included students and the background of inclusion were also identified by teachers as areas of need for training. According to Bradley and West, staff development must address the expressed needs of educators.

Smith and Smith (2000) found that sufficiently differentiated training was lacking for the six primary teachers interviewed for their study to determine the difference between feeling successful with inclusion versus feeling unsuccessful. Over a series of four interviews, the teachers identified that the most valuable in-service training focused on teachers observing in successful inclusion classrooms (Smith & Smith, 2000). According to Smith and Smith, adequate training in such areas as characteristics of specific disabilities, making instructional accommodations, and developing collaboration

skills among school personnel would significantly aide regular education teachers to better meet the demands of including students with special needs.

Edmunds (2000) conducted a single school study of 61 junior and senior high school teachers to determine a response to measures of perceptions of inclusion, needs for effective inclusion practice and teachers' knowledge of inclusion. The data revealed that the teachers did not feel adequately prepared to work with students with special needs. The three highest ranked variables by the teachers for successful inclusion to occur were in-service sessions regarding inclusion, experience in teaching students with disabilities and university courses specific to inclusion (Edmunds, 2000). Edmunds concluded that teachers are inadequately prepared for inclusion and there is a demand for inclusion specific training to increase teacher's self-confidence which will enable them to implement inclusion more successfully.

Higher education institutions will need to redesign their training programs to include more planning for universal design of instruction and alternative learning styles throughout all educational pedagogy (Wolpert, 2001). A study conducted at six teaching universities in Australia and South Africa examined pre-service training and the effects on attitudes toward students with special needs (Forlin, 1997). Questionnaires were distributed among 2,850 students enrolled in teacher preparation programs throughout the six universities. Forlin's results indicated a greater level of discomfort among those students who were mandated to complete a course involving inclusion while those who elected to take the course reported a lower level of discomfort pertaining to teaching children with disabilities. The study also indicated a correlation between the amount of

contact with individuals with disabilities and the level of perceived comfort. The greater amount of contact the pre-service educator had with disabled individuals, the less discomfort was perceived by the student indicating a need to incorporate genuine experience during pre-service training courses (Forlin, 1997).

To determine the effects training has on the attitudes of student teachers toward the inclusion of students with intellectual, emotional and behavioral disabilities, Hastings and Oakford (2003) examined the results of the Impact of Inclusion Questionnaire completed by 93 student teachers. Within this group of respondents, two different questionnaires were utilized. One version measured the student teachers' attitudes about students with intellectual disabilities, the other about emotional and behavioral disabilities. The results indicated that students with emotional and behavioral problems were deemed to have a higher rate of negative impact on the classroom compared to those with intellectual disabilities. However, those training to work with older students were less negative than those training to work with younger students when dealing with students with emotional or behavioral disabilities. Teacher experience with special needs did not seem to be a factor relating to attitudes (Hastings & Oakford, 2003).

Lambert, Curran, Prigge and Shorr (2005) examined the effect that an introductory course regarding students with exceptionalities had on the preservice teacher's attitudes toward inclusion. The authors used pre- and post- survey information to determine if the course had an impact on the preservice teacher's attitudes toward inclusion. The researchers also hoped to discover potential differences between elementary and secondary preservice teacher groups. The course included historical and

legal information in addition to the general educator's role in pre-referral, referral, assessment, IEP's and instructional modifications. The results indicated that preservice teachers' attitudes positively increased across the board as a result of the course; however their attitudes toward including students with more severe disabilities rated less positively than those with mild disabilities. While elementary preservice teachers rated higher on the pre-survey, the secondary preservice group made higher gains after the course (Lambert et al., 2005).

Few general education teachers have received the training necessary to adapt their instruction and maximize their students' achievement and many are presently teaching students with little or no formal training (Coombs-Richardson & Mead, 2001). In an attempt to educate teachers, Project Inclusion, a two year project funded by the Louisiana Education Quality Fund, offered teachers a three course program involving consulting teacher strategies, methods of teaching basic subjects to students with disabilities and classroom organization and management of students with disabilities (Coombs-Richardson & Mead, 2001). Through surveys and interviews, data was collected to determine the participant's knowledge of special education issues, beliefs, attitudes and instructional practices. Coombs-Richardson's results indicated participants had a great awareness of themselves, colleagues and the individual needs of their students. They also reported greater collaboration with special education teachers and a quality effort in helping all students in need of assistance.

These studies have shown that training and professional development has a positive effect on teachers' attitudes toward including student with special needs into the

regular education classroom (Colling, Fishbaugh, & Hermanson, 2003; Coombs-Richardson & Mead, 2001; Lambert et al., 2005; Beacham & Rouse, 2012; Swain et al., 2012). They have also indicated a need for additional pre-service training (Forlin, 1997; Freytag, 2001) as well as professional development for teachers already in the field (Bradley & West, 1994; Edmunds, 2000; Dodge-Quick, 2011). According to Smith and Smith (2000), preparing teachers for inclusion classrooms should focus on such areas as characteristics of specific disabilities, making instructional accommodations and developing collaboration skills among school personnel. The success of inclusion is reliant upon preparing general education teachers (Lesar et al., 1996) to be competent in meeting the needs of all their students including those with disabilities (Stanovich & Jordan, 2002).

Support (Administration/Special Education)

General education teachers look to administrators and special education teachers for support as the inclusion movement expands (Cook, Semmel, & Gerber, 1999; Irvine et al., 2010; Martin, 2010). Several studies indicate administrative support as a critical factor for a successful inclusion program. Villa et al.'s (1996) study of 690 educators across the U.S. and Canada identified administrative support as one of the factors associated with more positive attitudes toward inclusion. Insufficient support was also identified by Heflin and Bullock (1999) resulting in the failure of including students with special needs. According to Guzman (1994), in order to implement inclusion successfully, principals should offer ongoing structured collegial support and professional

development opportunities and provide specific skills and knowledge training to their staff.

Using the Regular Education Initiative Teaching Survey, Cook, Semmel, and Gerber (1999) surveyed 49 principals and 64 special education teachers to assess their attitudes on inclusion. The participants were drawn from a wide range of educational environments including 33 elementary schools and 24 junior high schools across two southern California counties. Their results indicated that principals have stronger support for the idea that included students improve their academic achievement. Both agreed, however that regular education teachers do not have the instructional skills to meet the needs of students with disabilities in the general education setting (Cook, Semmel, & Gerber, 1999).

Mamlin (1999) identified strong leadership as one of the factors in creating a successful inclusion program. Through observations and interviews, Mamlin documented the importance of a strong leader who provides for collaboration among staff. Leadership style was also considered a factor as a leader needs to be well informed and have the ability to guide the staff to new understandings. In order to contribute to successful teaching practices, when including student with disabilities, the influence of a principal is an important factor (Stanovich & Jordan, 2002).

In order to create a successful inclusive environment, administrative support is vital (Heflin & Bullock, 1999; Villa et al., 1996). Administrative support is needed to provide colleges with opportunities for collaboration and professional development to educate staff on specific skills and knowledge regarding including students with special

needs (Guzman, 1994). Without sufficient administrative support, including students with disabilities may result in failure (Heflin & Bullock, 1999).

Effective Professional Development

Schools systems across the country appear to be in a constant and consistent state of reform and restructuring. The primary instrument identified by reform and restructuring proposals to bring about needed change is to provide educational staff with quality professional development (Guskey, 1994). However, the characteristics that influence the effectiveness of staff development are varied and highly complex (Guskey, 2003). Traditionally, professional development effectiveness relied on the satisfaction of the participants, however today's educators desire more precise guidelines on developing quality staff development as well as methods to evaluate the effectiveness of the activities on student learning outcomes (Guskey, 1994).

The American Educational Research Association (2005) organizes the history of professional development into two separate eras. The first era began in the early 1960's and focused on "generic" teaching skills. These skills included classroom time management and demonstrations, assessing students' comprehension, maintaining active engagement and grouping students which had a small to moderate effect on the students' basic skills (AERA, 2005). Then in the 1990's, there appeared to be a shift in focus on student learning. Students' reasoning and problem solving skills became the focal point of professional development programming rather than basic skills (AERA, 2005). With this shift of focus also came a resurgence of research on the development, quality, and effectiveness of professional development programs.

A multidimensional relationship exists between the activities of professional development and improvements in student learning (Guskey & Sparks, 2002). However, the quality of the professional development can be influenced by a multitude of factors. According to Guskey (2002), these factors can be classified into three major categories: content characteristics, process variables and context characteristics. The content characteristics refer to the “what” of the professional development. These characteristics may concern new knowledge, skills and understandings that are the foundation of any professional development activity (Guskey & Sparks, 2002). The process variables refer to the “how” of the professional development activity. The variables may not only include the type and forms of the professional development activities but also the way those activities are planned, organized, carried out and followed up (Guskey & Sparks, 2002). The last category, context characteristics, refer to the who, when, where and why. These characteristics include the qualities of the individual educators, the environment they teach in, and the students they instruct. It also includes the whole organization or system in which the new knowledge gained from the professional development activities are to be put into practice (Guskey & Sparks, 2002).

The influence professional development has on student outcomes are accomplished through the positive change on the knowledge and practices of the teachers and school administrators (Guskey & Sparks, 2002). The most immediate and significant outcomes of professional development activities lie with the teachers’ knowledge and practices. This equates to the most significant factor for influencing the relationship between professional development and improving student outcomes (Guskey & Sparks,

2002). The knowledge and practices of administrators are also influenced by the quality of the professional development program. Administrators may not influence student outcomes directly however Guskey (2002) identifies two ways in which administrators can influence student outcomes indirectly. Through their interactions with teachers and their leadership in forming school practices and the school culture, administrators can have immense influence over student outcomes (Guskey & Sparks, 2002).

Historically, the effectiveness of professional development has been based on teacher satisfaction with the activities or some indication of change in the participant's knowledge (Guskey, 1994). However, this offers little guidance to the developers of professional development who want to know the exact elements of creating an effective professional development program. According to Guskey, the context of which the professional development takes place has great influence over the effectiveness of the activities. Due to this dynamic interplay, it is impossible to create exact statements regarding the elements of an effective professional development. However, Guskey offers a series of six guidelines to aid educators in creating effective professional development for their schools.

The first guideline outlined by Guskey (1994) is recognizing that change is both an individual and organizational process. In order for lasting change to take place, both the individual and the organization itself must change. Within the context, teachers are primarily responsible for implementing change within the organization. The key is to find the most favorable mix of individual and organizational elements that will ensure success in a particular environment (Guskey, 1994). The second guideline Guskey states is to

think big but start small. If the individuals within the organization are overwhelmed by the magnitude of change, the less likely they will be to implement it. The most successful professional development programs are ones that seek change in a gradual and incremental manner.

The third guideline recommends that the individuals involved work in teams to maintain support (Guskey, 1994). Change can bring about a sense of discomfort if the individuals sense that they have no input into the process, therefore all components of a professional development program should involve teams of individuals working together (Guskey, 1994). Next, procedures need to be included for feedback regarding the results of the implementation of new knowledge garnered from the professional development activities. The individuals involved need regular feedback on the effects of the programming which will increase the acceptability and retainment of the new practices by those individuals who are implementing them (Guskey, 1994). According to Guskey, the feedback must be meaningful for the participants involved and provided in a timely fashion according to the program needs.

The fifth guideline provided by Guskey (1994) is to offer continued follow-up, support and pressure. In order to promote continuation, support integrated with pressure are needed. In any effort to change, the participants need encouragement, motivation and the occasional prod to ensure the longevity of any reform movement. The last guideline outlined by Guskey involves integrating programs. It must be demonstrated how the new innovations can be incorporated into the existing and established frameworks of the organization. During the professional development activities, the innovations must be

presented as part of a consistent framework for improvement (Guskey, 1994). According to the American Educational research Association (2005), professional development will result in improved instruction and student learning when it is connected directly to the school's curriculum, state standards, and assessments.

In one of the most extensive studies on the effects of staff development activities, Garet, Porter, Desimone, Birman, and Yoon (2001) reported that the strongest relationship for changing teacher behavior involves focusing on content knowledge, providing opportunities for active learning and presenting an overall coherence of the staff development activities. Focus is on content addresses connecting specific strategies to specific subject areas. Pedagogical knowledge should be passed on to teachers in the context of their subject areas rather than providing generic teaching strategies that would not be very effective in changing teachers' behavior. Garet et al. (2001) also points to the importance of providing teachers with opportunities to apply their new knowledge within their classrooms. Allowing for opportunities to utilize new instructional strategies in actual classroom settings will have a greater impact on changing the behavior of teachers. According to the American Educational Research Association (2005), professional development must provide teachers with a way to directly apply what is learned. Finally, Garet et al. (2001) found the overall coherence to be an important factor in the effectiveness of staff development programming. The program needs to be recognized as a coherent and integrated whole with each session building on previous sessions.

Professional development should be a purposeful effort in guiding educators to create learning environments which affect student learning outcomes in a positive way

(Guskey, 2002). Guskey identifies five levels of evaluating professional development in order to determine if the activities are achieving their purpose (see Table 1). According to the American Educational Research Association (2005), effective evaluation of a professional development program should include classroom practices, the impact on teachers' performance, and the effect of student learning.

Table 1

Five Levels of Evaluating Professional Development (Guskey & Sparks, 2002)

Evaluation Level	Questions Addressed	Supporting Evidence	Measured Outcomes
Level 1: Participants' Reactions	-Environmental considerations - Satisfaction with materials	Questionnaires	Initial satisfaction with the experience
Level 2: Participants' Learning	-Acquirement of intended knowledge and skills	-Demonstrations - Participant reflections -Participant portfolios	New knowledge and skills of participants
Level 3: Organization Support & Change	-Supported implementation - Public support - Addressed problems quickly and efficiently -Sufficient resources available - Organizational impact	-School records - Structured interviews with participants, and administrators - Participant portfolios	Organization's advocacy, support, accommodation, facilitation, and recognition
Level 4: Participants' Use of New Knowledge & Skills	-Applied new knowledge effectively	-Questionnaires - Structured interviews -Participant reflections -Participant portfolios -Direct observations	Degree and quality of implementation
Level 5: Student Learning Outcomes	-Impact on students academically and/or socially	-Student records - School records - Questionnaires - Structured interviews with students, parents, teachers and/or administrators - Participant portfolios	Student learning outcomes

Professional development programs that do not consider the integrated and complex relationship between professional development and student learning are unlikely to succeed (Guskey & Sparks, 2002; Dodge-Quick, 2011). The context of the learning environment (Guskey & Sparks, 2002), teacher input (Guskey, 2003), and evaluating the effects on teachers' behavior and student learning (Guskey, 2002) must be considered when planning and developing quality staff development. Due to the complex influence of context, it is impossible to identify specific elements of an effective professional development program (Guskey, 1994); however these procedural guidelines may provide educators with the necessary tools for the planning, developing, implementing and evaluating quality professional development programs.

Conclusion

According to the research, successful inclusion can be academically and socially beneficial for both students with and without disabilities (Daniel & King, 1997; Huber, Rosenfeld, & Fiorello, 2001; Luster & Durrett, 2003; Peetsma et al., 2001; Sharpe, 1994). However, in order to create a successful inclusion environment, a positive teacher attitude is needed (Cochran, 1998; Forlin, 1997; Hwang & Evans, 2011; Oldfield, 2009; Colber, 2010). Several factors have been identified through research as having an effect on teachers' attitudes toward inclusion including experience (Avramidis, Bayliss, & Burden, 2000; Forlin, 2001; Minke et al., 1996), pre-service training (Forlin, 1997; Freytag, 2001; Beacham & Rouse, 2012; Swain et al., 2012), professional development (Bradley & West, 1994; Edmunds, 2000; Dodge-Quick, 2011) and administrative support (Heflin & Bullock, 1999; Villa et al., 1996; Irvine et al., 2010; Martin, 2010).

In spite of the existing research, many questions remain concerning the impact various factors may have on the attitudes of teachers toward including students with disabilities. Experience with inclusion appears to be a factor leading to positive attitudes, however further research is needed to examine various types of experience that may influence attitudes. Professional development also appears to have a positive effect on teacher's attitudes toward inclusion however further information needs to be ascertained to determine the effective attributes of inclusion training. Researchers point to administrative and special education support as contributing to positive attitudes toward inclusion, yet how this manifests itself is still to be described. A closer look is needed in order to describe these factors and their attributes within the context of the day to day operations of an inclusive setting.

The research indicates a call for careful examination of inclusion based education to alleviate the fears that surround the practice of educating students with disabilities in the general education setting (Daniel & King, 1997; Oldfield, 2009). As more students with disabilities gain access to the general education classroom environment the education community must find ways to support the regular education teachers in order to promote positive attitudes towards inclusion. Providing teachers with the training and tools necessary to foster positive attitudes about inclusion is a key step to insuring the success of inclusion (Huber, Rosenfeld, & Fiorello, 2001; Colber, 2010).

CHAPTER III
METHODOLOGY

Introduction

Further research is needed in order to determine and describe the factors that may influence teacher attitudes in a positive manner toward including students with special needs. The following questions will be addressed through analysis of survey data and interview responses:

1. What factors impact the attitudes of regular education elementary teachers toward including students with disabilities?
2. What elements of professional development impact regular education elementary teachers' attitudes toward inclusion?
3. How does experience working with disabled individuals impact regular education elementary teachers' attitudes toward inclusion?
4. How can administrative support impact the attitudes of regular education elementary teachers toward including students with special needs?

Methodology

Participants

Elementary (K-8th grade) general education teachers from a large Midwestern urban school system were surveyed. Survey packets were mailed to teachers at four elementary schools within the district. Each teacher received a letter outlining the study

as well as a statement of confidentiality. Each packet also contained the survey and statement of participation for the interview portion. These interviews were scheduled individually for those participants who volunteered. A stamped return envelope was also included in order to return the materials.

Sampling, Measures and Procedures

In order to collect data for quantitative analysis, a combination of two established surveys and demographic data were used. Cochran's (1998) 20 question STATIC survey determined teachers' attitudes toward inclusion and was combined with Littrell et al. (1994) 40-item survey to measure principal support. In addition, four demographic questions relating to experience and amount of pre-service and professional development involving inclusion. The final survey consisted of 64 items.

Cochran's (1998) *Survey of Teacher's Attitudes Toward Inclusive Classrooms* was used to survey teachers' attitudes toward inclusion. Cochran evaluated the 20-item survey in 32 schools across five school districts in a southeastern state with a return rate of 36%. The 516 respondents consisted of both elementary and secondary teachers as well as regular education teachers and special education teachers from a variety of settings including urban, suburban, and rural schools. Cochran indicated a consistent Cronbach alpha reliability coefficient of .89 which held consistent for the total group as well as individual groups of elementary/secondary and regular/special education teachers. The survey questions are divided into four factor groups (Cochran, 1998) (see Appendix A).

STATIC is a 20-item survey instrument consisting of statements regarding including students with disabilities in the general education classroom. Individuals surveyed indicate their agreement level for each statement using a six point Likert scale with a range of responses: 0= Strongly Disagree, 1 = Disagree, 2 = Not sure, but tend to disagree, 3 = Not sure, but tend to agree, 4 = Agree and 5 = Strongly Agree. When scoring STATIC, the examiner must first reverse code for items 3, 4, 7, 9, 13 and 15. Once these items are reversed coded, the sum of the twenty items for each subject could then be considered an index of their attitude toward inclusion. Individuals with higher scores are considered to have a more positive attitude toward inclusion, while lower scores are considered to have less positive or more negative attitudes toward inclusion (Cochran, 1998).

Littrell's (1994) original instrument consisted of eight pages with the first section of 40 items relating to principal support. The survey was reviewed by an undisclosed number of experts trained in survey methodology. A field test was conducted with seven general education teachers and nine special education teachers and revisions were made to the instrument based on feedback. The first section consisted of 40 survey questions, categorized according to a four dimensional framework for support which included *emotional, instrumental, informational, and appraisal* support. Participants responded using a 4-point Likert scale indicating 1 for *no extent* and *not important* to 4 *great extent* and *very important*.

A composite score was calculated for each construct for the field test. The Cronbach's alpha coefficients for the individual constructs ranged from .80 to .93. The

scores were combined to form a total for extent of support and a total for importance of support. The Cronbach's alpha coefficients decreased to .49 for extent and .64 for importance which implies that each construct was distinct. For the purpose of this research, only extent of support will be examined.

Survey packets were mailed to elementary teachers at their schools within a large Midwestern school district. Each packet included a letter to the teacher describing the study, consent form, survey, an interview volunteer form, and return stamped envelopes. Selected participants were contacted in order to conduct interviews at the participant's convenience for date, time and location outside of the school setting. Interviews were recorded using a digital recorder and transcribed by the researcher.

Data Analysis

An average score was calculated for each participant for the constructs of attitudes (items 5-24) as well as principal support (items 25-64). Additionally, an average score was calculated for each principal support construct (*emotional, instrumental, informational* and *appraisal*). In order to determine a possible relationship between the variables attitudes and experience, a spearman correlation was performed using the average score of the attitudes construct and items 1 and 2 of the survey. The variables of attitudes and pre-service/professional development were examined by performing a spearman correlation between the average score of the attitudes construct and items 3 and 4 of the survey. A spearman correlation was also used to determine if a relationship exists between the average score of attitudes and the overall score for principal support. In

addition, each principal support construct (*emotional, instrumental, informational* and *appraisal*) was examined against the average attitude score using a spearman correlation.

Participating teachers were asked to volunteer for a follow up interview in order to elaborate on the quantitative results. The participants were asked to elaborate on their experiences with administrative support, pre-service training, and professional development experiences. Six interview subjects were randomly selected based on their years of experience; three teachers with less than five years of experience and three teachers with five or more years of experience. These interviews took place outside of school at a location chosen by the participants. Interviews were recorded using a digital recorder and transcribed by the researcher. Transcripts were examined to discover common themes and patterns that emerged from content analysis.

Frequency Information

Data was collected from four schools within a large mid-western urban school system. School A student enrollment included 270 students of which 11.1% have Individual Education Plans. Student to teacher ratio was 25:1 and the average teacher experience was 11.1 years. School B serviced 786 students and 12.1% of those students had IEPs. Average teacher experience was 13.7 years and the student to teacher ratio was 24:1. Student enrollment for School C was 573 with 13.6% of those student receiving special education services. The average teacher experience was 13.7 years and the teacher to student ration was 26:1. School D enrollment was at 317 students with 13.6% of those students with IEPs. The average teacher experience was 13.2 years and the student to teacher ratio was 25:1.

Ninety-two general education teachers from the four schools participated in the survey. Participants provided information regarding experience teaching, experience with inclusion, and amount of pre-service and professional development involving inclusion. According to the data (see Table 2), 19 teachers had 0-1 years experience with including students with disabilities, ten had 2-3 years experience, nine had 4-5 years, 19 had 6-10 years, and 35 teachers had 10 or more years experience with inclusion. The number of pre-service courses (see Table 3) teachers completed that focused on including students with special needs indicated 45 teachers completed 1-2 courses, 19 had 3-4 courses and 28 teachers completed five or more courses. All of the 92 participants indicated that they had completed at least one course focusing on including students with disabilities. The participants were also asked to identify how many professional development workshops they completed that focused on inclusion. Ten teachers indicated zero professional workshops, ten teachers reported 1-2 workshops, 32 indicated 3-4 workshops, and 28 indicated five or more professional development workshops.

Table 2

Number of Years Including Students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0-1 years	19	20.7	20.7	20.7
2-3 years	10	10.9	10.9	31.5
4-5 years	9	9.8	9.8	41.3
6-10 years	19	20.7	20.7	62.0
More than 10 years	35	38.0	38.0	100.0
Total	92			

Table 3

Number of Pre-Service Courses

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-2	45	48.9	48.9	48.9
3-4	19	20.7	20.7	69.6
5plus	28	30.4	30.4	100.0
Total	92			

Table 4

Number of PD Workshops

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	10	10.9	10.9	10.9
1-2	10	10.9	10.9	21.7
3-4	32	34.8	34.8	56.5
5plus	40	43.5	43.5	100.0
Total	92			

CHAPTER IV
DATA COLLECTION AND ANALYSIS

Introduction

The purpose of this study was to investigate the factors that may impact the attitudes of general education teachers toward including students with disabilities. The study utilized surveys and interviews as a means to gauge the attitudes of general education teachers and the factors that may influence their attitudes. The guiding research questions for this study were:

1. What factors impact the attitudes of regular education elementary teachers toward including students with disabilities?
2. What elements of professional development impact regular education elementary teachers' attitudes toward inclusion?
3. How does experience working with disabled individuals impact regular education elementary teachers' attitudes toward inclusion?
4. How can administrative support impact the attitudes of regular education elementary teachers toward including students with special needs?

Quantitative data was collected using a combination of two established surveys. Cochran's (1998) 20 question STATIC survey to determine teachers' attitudes toward inclusion combined with Littrell et al. (1994) 40-item survey to measure principal support. In addition, four demographic questions relating to teaching experience,

experience with inclusion, and amount of pre-service and professional development involving inclusion.

The survey was sent to educators in the school system to complete and return via the U.S. postal system. The STATIC portion required individuals surveyed to indicate their agreement level for each statement using a six point Likert scale with a range of responses:

0= Strongly Disagree

1 = Disagree,

2 = Not sure, but tend to disagree

3 = Not sure, but tend to agree,

4 = Agree

5 = Strongly Agree.

Littrell's (1994) survey to measure principal support required participants to indicate their agreement level for each statement using a four point Likert scale indicating 1 for *no extent and not important* to 4 *great extent and very important*. The surveys were mailed to 150 teachers at four different schools and 92 were returned completed which represents a 61% rate of return. The information gathered from this research project is presented in both quantitative and qualitative means as it pertains to each research question.

Survey/Interview Results

An average score was calculated for each participant for the constructs of attitudes (items 5-24) as well as principal support (items 25-64). Additionally, an average score was calculated for each principal support construct (*emotional, instrumental, informational* and *appraisal*). A spearman correlation was performed using the average score of the attitudes construct and items 1 and 2 of the survey. The variables of attitudes and pre-service/professional development were examined by performing a spearman correlation between the average score of the attitudes construct and items 3 and 4 of the survey. A spearman correlation was also used to determine if a relationship existed between the average score of attitudes and the overall score for principal support. In addition, each principal support construct (*emotional, instrumental, informational* and *appraisal*) was examined against the average attitude score using a spearman correlation. A spearman correlation represents a bivariate measure of association (strength) of the relationship between two variables. It varies from 0 (random relationship) to 1 (perfect linear relationship) or -1 (perfect negative linear relationship). Strength of correlation (r) is indicated by the following: very strong between 1 and .7, strong between .7 and .5, moderate between .5 and .3, and questionable between .3 and 0.

In addition to participating in the survey, participants also had the opportunity to participate in an interview. Six teachers were randomly selected based on their indicated willingness and their years of teaching experience. Three teachers with less than five years experience and three teachers with five or more years of experience were randomly selected. The interview questions focused on general attitudes toward including students

with disabilities, perception of principal and special education support, and their experience in professional development workshops that focused on inclusion.

1. What factors impact the attitudes of regular education elementary teachers toward including students with disabilities?

The data analysis demonstrated a strong correlation between teachers attitudes toward including students with disabilities and number of professional development workshops focusing on inclusion ($r = .628$). A strong correlation was also indicated between teacher attitudes and principal support ($r = .546$). Within the principal support constructs, strong correlations were also indicated between teachers attitudes and emotional support ($r = .506$), instrumental support ($r = .528$), and informational support ($r = .529$). The construct on appraisal support indicated a moderate correlation ($r = .482$). Moderate correlations were indicated between attitudes and courses completed by teachers that focused on inclusion ($r = .466$) and number of years including students with disabilities ($r = .465$). The weakest correlation identified in the data analysis was between the teachers' attitudes toward including students with disabilities and the number of years of teaching experience ($r = .223$).

Within the interview portion, challenges identified by teachers with less than five years of teaching experience, included resources and time constraints. Common themes identified with resources included strategies to keep students engaged, assistance in scaffolding or differentiating instruction and strategies dealing with behavioral issues. All three teachers expressed concerns with time constraints with a primary concern for time to adequately plan for their students with disabilities.

When asked to identify challenges in implementing inclusion, two of the three teachers with five or more years of experience indicated that they do not have issues with including students in their classrooms. Both of these teachers indicated that it was difficult in the beginning of their career but have since learned effective strategies to provide quality instruction to students with disabilities. One teacher stated that she felt “very comfortable now including special education students”. The third teacher with five or more years of experience reflected similar themes as the teachers with less experience including time constraints and resources such as support of special education staff and parents.

In order to identify potential factors that may impact teachers’ attitudes toward including students with disabilities, the interview participants were questioned about their perceptions of a successful inclusion program. One of the common themes when asked about elements of successful inclusion from all three of the teachers with less than five years of experience was the importance of parent support. One of the teachers stated, “I think that open and productive communication between the teacher and parent is important.” Two of the teachers indicated the importance of being organized and prepared while the third offered the importance of seeking out professional development to support classroom instruction.

Two common themes surfaced when the teachers with five or more years of experience were asked what factors they attribute to successful inclusion. First, the importance of support and second, the importance of resources, was summed up by one teacher’s statement, “Having a good staff and resources to help me.” Having additional

support staff was identified by all teachers as an important factor in successfully including students with disabilities. Resources including materials and technology were also identified by these teachers as important factors for inclusion. According to the six interview participants, the three most common factors in a successful inclusion program are availability of resources and support from parents and additional staff.

2. *What elements of professional development impact regular education elementary teachers' attitudes toward inclusion?*

Two areas of training including pre-service courses and professional development workshops were examined. Table 5 outlines the relationship between pre-service courses dealing with inclusion and attitudes of the teachers toward inclusion. A mild correlation $r = .466$ suggests a moderate relationship between the two variables. The number of professional development workshops pertaining to inclusion and the attitudes of teachers including students with disabilities is shown in Table 6. A correlation of $r = .628$, considered to be a strong correlation, indicates that there is a strong relationship between pre-service courses and professional development workshops dealing with inclusion and may have a positive impact on teachers' attitudes toward including students with disabilities.

Table 5

Attitudes and Pre-Service Courses

			Number of pre-service courses	Attitude Average
Spearman's rho	Number of pre-service courses	Correlation Coefficient	1.000	.466**
		Sig. (2-tailed)	.	.000
		N	92	92
	Attitude Average	Correlation Coefficient	.466**	1.000
		Sig. (2-tailed)	.000	.
		N	92	92
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 6

Attitudes and Professional Development

			Number of PD workshops	Attitude Average
Spearman's rho	Number of PD workshops	Correlation Coefficient	1.000	.628**
		Sig. (2-tailed)	.	.000
		N	92	92
	Attitude Average	Correlation Coefficient	.628**	1.000
		Sig. (2-tailed)	.000	.
		N	92	92
**. Correlation is significant at the 0.01 level (2-tailed).				

Interview questions dealing with professional development focused on effective elements of the workshops that focused on including students with disabilities. All six

teachers indicated the importance of learning new instructional strategies to enhance their inclusive practices. Three reoccurring themes emerged; differentiated instruction, multi-modality learning, and integrating technology. Four out of the six teachers stated that learning differentiated instructional techniques to meet the students at their instructional level was an important aspect of productive professional development. Half of the teachers also discussed the effectiveness of learning how to create more of a multi-modality approach to their instruction including kinesthetic, tactile and hands-on activities. Two of the teachers also pointed out the importance of integrating technology when including students with disabilities. One teacher explained, "I have found that integrating technology into instruction motivates students and appeals to students with different learning styles." Based on the feedback, professional development workshops that focused on differentiated instruction, multi-modality learning, and integrating technology were most useful when including students with disabilities.

Division between the two groups of teachers was noted when asked what skills or knowledge they needed to be more effective with inclusion teaching. Two out of the three teachers with less than five years of experience indicated the need to learn more strategies and instructional tools when dealing with students with emotional and behavioral issues. While two out of three teachers with five or more years of experience pointed toward the need for better ways of reviewing, evaluating, and updating strategies used when including students with disabilities. One of the teachers with less than five years and two out of three with more than five years of experience also indicated the need for continued collaboration between educators as well as peer observations and reviews.

3. *How does experience working with disabled individuals impact regular education elementary teachers' attitudes toward inclusion?*

Based on the information in Table 7, the correlation between the year a educator received their teaching certification and the attitudes toward including students with disabilities was $r = .223$ which suggests a weak or questionable relationship between these two variables. The number of years a teacher has taught does not appear to have a positive effect on their attitudes toward including students with disabilities. However, Table 8 displays the correlation between the number of years' experience a teacher has including students with special needs and their attitudes towards inclusion. The analysis shows $r = .465$ which indicates a moderate correlation. This indicates that experience including students with disabilities may have a positive effect on the attitudes of teachers toward inclusion.

Table 7

Attitudes and Teaching Experience

		What year did you obtain your certification?	Attitude Average
Spearman's rho	What year did you obtain your certification?	Correlation Coefficient	1.000
		Sig. (2-tailed)	.223*
		N	.033
	Attitude Average	Correlation Coefficient	1.000
		Sig. (2-tailed)	.223*
		N	.033
			92
			92

*. Correlation is significant at the 0.05 level (2-tailed).

Table 8

Attitudes and Experience with Inclusion

		Number of years including students	Attitude Average
Spearman's rho	Number of years inclusion students	1.000	.465**
	Correlation Coefficient	.	.000
	Sig. (2-tailed)	92	92
	Attitude Average	.465**	1.000
	Correlation Coefficient	.000	.
	Sig. (2-tailed)	92	92

** . Correlation is significant at the 0.01 level (2-tailed).

4. *How can administrative support impact the attitudes of regular education elementary teachers toward including students with special needs?*

Table 9 displays the data regarding the relationship between the general education teachers' perception of principal support and their attitudes toward including students with disabilities. A strong correlation of $r = .546$ was noted between these two variables. This indicates that teachers who feel supported by their principal have an increased positive attitude toward including students with disabilities. Within the principal support factor, the constructs of *emotional*, *instrumental*, *informational*, and *appraisal* were examined against the teachers' attitudes toward including students with disabilities. Strong correlations were noted between attitudes and the constructs of *emotional* support $r = .506$ (see Table 10), *instrumental* support $r = .528$ (see Table 11), and *informational* support $r = .529$ (see Table 12) $r = .529$. Table 13 displays the data regarding the last principal construct of *appraisal* which showed a correlation of $r = .482$ which is

considered a moderate relationship. All four principal support factors showed a correlation with positive teacher attitudes toward including students with disabilities. However, the data indicates that principal support in the form of emotional, instrumental, and informational support may have the greatest impact on teacher attitudes toward inclusion.

Table 9

Attitudes and Principal Support

			Attitude Average	Principal Support Average
Spearman's rho	Attitude Average	Correlation Coefficient Sig. (2-tailed) N	1.000 . 92	.546** .000 92
	Principal Support Average	Correlation Coefficient Sig. (2-tailed) N	.546** .000 92	1.000 . 92

** . Correlation is significant at the 0.01 level (2-tailed).

Table 10

Attitudes and Emotional Support

			Attitude Average	Emotional Support
Spearman's rho	Attitude Average	Correlation Coefficient Sig. (2-tailed) N	1.000 . 92	.506** .000 92
	Emotional Support	Correlation Coefficient Sig. (2-tailed) N	.506** .000 92	1.000 . 92

** . Correlation is significant at the 0.01 level (2-tailed).

Table 11

Attitudes and Instrumental Support

			Attitude Average	Instrumental Support
Spearman's rho	Attitude Average	Correlation Coefficient	1.000	.528**
		Sig. (2-tailed)	.000	.000
		N	92	92
	Instrumental Support	Correlation Coefficient	.528**	1.000
		Sig. (2-tailed)	.000	.000
		N	92	92

** . Correlation is significant at the 0.01 level (2-tailed).

The area of teachers' perception of principal support during the interviews revealed mixed responses. While all six teachers reported that their principal either offered or encouraged professional development, principal supported collaboration was another matter. When asked if their principal facilitated common collaboration time with special education staff only one teacher with less than five years of experience indicated the principal facilitates these meetings while the remaining two indicated that this does not happen at their school and any collaboration time is coordinated by the teachers themselves. One teacher explained, "Teachers and special education staff can meet before, during, and after school. Much of this is done without the principal's help." All three teachers with five or more years of experience indicated that their principal schedules common planning times for collaboration between general and special education staff.

Table 12

Attitudes and Informational Support

			Attitude Average	Informational Support
Spearman's rho	Attitude Average	Correlation Coefficient	1.000	.529**
		Sig. (2-tailed)	.	.000
		N	92	92
	Informational Support	Correlation Coefficient	.529**	1.000
		Sig. (2-tailed)	.000	.
		N	92	92

** . Correlation is significant at the 0.01 level (2-tailed).

Table 13

Attitudes and Appraisal Support

			Attitude Average	Appraisal Support
Spearman's rho	Attitude Average	Correlation Coefficient	1.000	.482**
		Sig. (2-tailed)	.	.000
		N	92	92
	Appraisal Support	Correlation Coefficient	.482**	1.000
		Sig. (2-tailed)	.000	.
		N	92	92

** . Correlation is significant at the 0.01 level (2-tailed).

The two groups of teachers were also divided when asked to describe the support they receive from their principal. All of the teachers in the less than five years of experience category indicated the support came from additional staff in the form of aides. While two of the teachers with five or more years implied that their principal supports them by providing instructional materials and a positive learning climate. One of these

teachers explained, “The principal is responsible for establishing an environment where teaching and learning by all can be achieved.”

Two common themes emerged from both groups when asked how the special education staff supports their everyday instruction. Both groups indicated the importance of instructional strategies for differentiating instruction as well as response to intervention. Individuals in both groups also indicated how the special education staff supports them by maintaining and explaining special education documents. This included IEP accommodations and modifications as well as levels of performance and disability awareness.

Even though most of the teachers indicated they receive some support in the form of special education staff, two of the teachers with less than five years experience and two teachers with five or more indicated the need for additional support from special education teachers. One stated, “More time for the special education teachers to spend within the classroom would be helpful.” The third teacher with less than five years suggested a more active role for the principal while the last teacher with more than five years pointed to greater parental support. One of the teachers with less than five years of experience summarized this sentiment by stating, “Building strong teams to support one another is crucial for successful inclusion. Strong teams continuously develop their practices together, and share a voice in all decisions as they relate to student achievement.”

Summary

Information in this chapter was presented with quantitative and qualitative findings as it pertained to each research question. The survey portion provided correlation results between teachers attitudes toward including students with disabilities and the number of years teaching, number of years including students with special needs, amount of pre-service courses and professional development workshops that focused on inclusion, as well as their perceived principal support. Six participants also participated in a short interview regarding their general attitudes towards inclusion, the support they receive from their principal and special education staff, and effective practices they garnered from professional development workshops focusing on inclusion.

The data analysis indicated the strongest relationships between teachers' attitudes toward including students with disabilities and two factors; professional development and principal support. Moderate correlations were indicated between teacher attitudes and the courses completed by teachers that focused on inclusion as well as the number of years including students with disabilities. The weakest correlation identified by the data was between the teachers' attitudes toward including students with disabilities and the number of years of teaching experience. The data suggests that in order to improve teachers' attitudes toward including students with disabilities, schools will need to focus on delivering effective professional development focused on inclusion and support provided by the administration.

CHAPTER V

RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate the factors that may influence the attitudes of regular elementary education teachers toward including students with disabilities. Specifically, this study looked at how professional development, experience including students with disabilities, and administrative support may impact the attitudes of teachers including students with special needs.

Including students with disabilities in the regular education classroom is becoming more prevalent in today's school systems (Winzer, 1998). According to the research, several factors may determine the success of an inclusion program (Huber, Rosenfeld, & Fiorello, 2001; Idol & Griffith, 1998; Moore, Gibreath, & Maiuri, 1998; Sharpe, 1994). Two of these factors have consistently been identified as significantly important to the success of inclusion; teachers' attitudes toward inclusion and their beliefs in their ability to instruct students with disabilities (Avramidis, Bayliss, & Burden, 2000; Forlin, 2001; Raj, 2002; Riemer, 2004; Sharpe, 1994; Wolpert, 2001). This current study investigated which factors may affect teachers' attitudes toward including students with disabilities including professional development, experience with including students with disabilities, and administrative support.

The data from this research indicated several key indicators of how teachers' attitudes toward including students with disabilities can be affected in a positive manor.

The two most significant elements effecting teachers' attitudes in a positive way identified by the data included principal support and professional development. In order to increase the success of inclusion programs, school systems need to take into account teachers' attitudes and how to affect those attitudes in a positive manor. The two areas of principal support and professional development need to be explored in order to increase the success of including students with disabilities.

Discussion by Research Questions

What factors impact the attitudes of regular education elementary teachers toward including students with disabilities?

The current study revealed strong correlations between teachers' attitudes toward including students with disabilities and two factors; professional development and principal support. Moderate correlations were indicated between pre-service courses completed by teachers that focused on inclusion and number of years including students with disabilities. The weakest correlation indicated by this study resulted in the numbers of years of teaching experience and the attitudes of teachers including students with disabilities. This may indicate that the amount of teaching experience does not have an effect on the attitudes of those teachers toward inclusion. During the interview portion of the current study, the teachers revealed that the challenges of implementing inclusion included support and resources. The resources requested by the teachers included strategies for student engagement, assistance in scaffolding and differentiating instruction and strategies dealing with behavioral issues. Adequate time to plan and having the support of parents was also a concern for these teachers.

According to this investigation, in order to effect teachers' attitudes in a positive manor toward including students with special needs, teachers need to participate in on-going professional development that focuses on inclusion, support from their administrators, and experiences with a successful inclusion setting. This finding is also reflected in Edmunds (2000) which found that the three highest ranked variables according to teachers for a successful inclusion program were in-service sessions regarding inclusion, experience in teaching students with disabilities, and university courses specific to inclusion.

Including students with disabilities has become a common practice in all school systems. In order for inclusion to be successful, teachers' attitudes toward including students with disabilities must be taken into account. This study suggests two key elements that can affect attitudes of teachers in a positive manor; principal support and professional development. School systems should consider these when implementing an inclusion program in order to increase their chances for success.

What elements of professional development impact regular education elementary teachers' attitudes toward inclusion?

The current study investigated two areas of training including pre-service courses and professional development sessions. According to the results of this study, pre-service courses taken that focused on inclusion demonstrated a moderate correlation to the attitudes of teachers toward inclusion. Professional development workshops completed suggested a strong correlation with a positive increase in attitudes toward including students with disabilities. This may indicate not only the importance of pre-service

training that teachers receive in the area of inclusion but also the on-going professional development throughout a teacher's career on the subject of inclusion.

These findings have also been supported in prior research. Avramidis, Bayliss, and Burden (2000) found that higher levels of professional development affected the attitudes of general education teachers toward including students with disabilities in a positive direction. They also indicated that educators reported a need for support, training and material resources as areas of need for including students with special needs (Avramidis, Bayliss, & Burden, 2000). This concept was also a reoccurring theme from the interview participants from the current study.

Smith and Smith (2000) indicated that the most valuable in-service training according to teachers is observing in inclusion classrooms. The researchers also indicated the need for additional training in the areas of characteristics of specific disabilities, making instructional accommodations, and developing collaboration skills among staff. This is consistent with the current study which revealed three common themes identified by the participants when asked about effective elements of professional development; differentiated instruction, multi-modality learning, and integrating technology.

According to Edmunds (2000), the most profound need of teachers is the necessity for more and better professional development programs that are specifically designed to address including students with disabilities and the success of inclusion is dependent upon preparing general education teachers (Lesar et al., 1996). Colling, Fishbaugh and Hermanon (2003) found that many general education teachers feel unprepared to meet the specific needs of students with disabilities. In order to determine

if appropriate training and professional development had a positive effect on teachers' attitudes toward including students with disabilities, survey data was analyzed between the teachers' attitudes and the amount of pre-service training and professional development workshops that focused on inclusion.

Continuing professional development appears to have a direct impact on teachers' attitudes toward including students with disabilities. According to both previous research and the current study, common elements of the focus of these professional workshops have been identified. These elements include direct information regarding specific disabilities, making appropriate instructional accommodations and modifications, differentiated and multi-modality learning, integrating technology and developing collaboration skills. In order to develop a strong and successful inclusion program, school districts may need to develop a professional development plan that focuses on these areas.

How does experience working with disabled individuals impact regular education elementary teachers' attitudes toward inclusion?

Two aspects of experience and attitudes toward including students with disabilities were examined in the current study. First, the amount of years of teaching experience which indicated a weak or questionable correlation. Second, the amount of years including students with special needs suggested a moderate correlation. According to this analysis, the amount of years a teacher has taught does not have an effect on the teacher's attitude toward including students with special needs. However, the amount of years of experience a teacher has with including students with special needs may have a

positive effect on their attitude. This suggests that both teacher training programs and school systems may benefit from greater amount of access to established inclusion programs for both teachers in training and experienced teachers.

These findings are consistent with the results suggested by previous research. Avramidis, Bayliss and Burden (2000) found that teachers who had been implementing inclusive programs for multiple years held significantly higher attitudes when compared to their counterparts. Likewise, Minke et al. (1996) reported that regular education teachers who co-taught in an inclusion setting held the most positive views of inclusion while regular education teachers in traditional settings held the least positive perception.

Positive attitudes of teachers may directly impact the success of including students with disabilities in the regular classroom setting (Cochran, 1998; Forlin, 1997). One factor that appears to have a positive effect on teachers' attitudes is experience with inclusion (Avramidis, Bayliss, & Burden, 2000; Forlin, 2001; Minke et al., 1996). Previous research has demonstrated that this experience may come from teaching in an inclusion setting (Avramidis, Bayliss, & Burden, 2000), in a co-teaching setting (Minke et al., 1996), or direct experience working with students who receives specialized services (Giangreco et al., 1993).

How can administrative support impact the attitudes of regular education elementary teachers toward including students with special needs?

The teachers' perception of principal support and their attitudes toward including students with disabilities was also examined. The current study suggested a strong correlation between principal support and the attitudes of teachers including students with

special needs. Within the principal support factor, four constructs were also examined; *emotional, instrumental, informational, and appraisal* support. Strong correlations were shown in this current study between the attitudes of teachers including students with disabilities and principal support in the form of *emotional, instrumental, and informational*. The principal support construct of *appraisal* demonstrated a moderate relationship. Principal support appears to be a key element of how teachers view including students with disabilities.

According to the interview results, the lack of principal supported collaboration time between regular education and special education teachers was a concern. Half of the respondents indicated that support mainly came from special education staff and not the principal while two out of the six participants indicated that their principal supports them by providing instructional materials and a positive learning environment. Four out of the six interviewees indicated the need for additional support from special education teachers specifically in the form of direct time provided by a special education teacher in the regular education classroom. The participants have clearly indicated the need for continuing principal support in multiple areas especially in the area of collaboration time between general education and special education staff.

Along with professional development, administrative support appears to have the strongest impact on the positive attitudes of teachers toward including students with disabilities. According to the current study, teachers look to their administrators to keep them informed of special education law, applications, and procedures. Teachers also expect their administrators to supply them with the appropriate materials and adequate

planning time when including students with disabilities. Teachers' attitudes toward inclusion may also improve if they feel emotionally supported by their principal as well as receive acknowledgement for their work.

As including students with disabilities expands, general education teachers look to administrators and special education teachers for support (Cook, Semmel, & Gerber, 1999). One of the key factors in creating a successful inclusion program is strong leadership according to Mamlin (1999). Elements of effective leadership identified by Mamlin were providing for collaboration among staff and someone who is not only informed but has the ability to relate that information in an effective way to staff. Administrative support is vital for a successful inclusion program (Heflin & Bullock, 1999; Villa et al., 1996). Without sufficient support, including students with disabilities may result in failure (Heflin & Bullock, 1999). As previous and current research has demonstrated, administrative support may be one of the key components to a successful inclusion program.

Recommendations

The success of an inclusion program is dependent upon many different factors. However, the attitude of the teacher toward including students with disabilities is critical to the success of an inclusion program. This study investigated how the elements of experience, professional development and training, and support from the principal and support staff influence the attitudes toward inclusion. Based on the results of this study several recommendations can be made.

Recommendation 1: Principals should examine the importance of their support of teachers attempting to include students with disabilities and in what aspects that support should take place. The current study indicated a strong correlation between principal support and the attitudes of teachers toward including students with disabilities. The strongest correlations existed between attitudes and the areas of *emotional, instrumental, and informational* support. According to the teachers interviewed for this study, they want their administrators to keep them informed of special education law, applications, and procedures. They also expect to receive support in the form of being supplied with appropriate materials and adequate planning time. Last, teachers look to their principals for acknowledgement of their work. Principals may benefit from a deeper understanding of how they deliver these types of support to their teaching staff which in turn will influence attitudes toward including students with disabilities in a positive manor.

Recommendation 2: Teachers require and desire professional development activities that directly deal with inclusion. According to the current study, the amount of professional development activities completed that focused on inclusion had a strong correlation with a positive increase in attitudes toward including students with disabilities. These activities, based on teachers' feedback, should include but not be limited to direct information regarding specific disabilities, instructional accommodations and modifications, differentiated instruction, learning modalities, developing collaboration skills and integrating technology. Administrators and teachers should collaborate to determine their areas of need when planning professional development activities.

Recommendation 3: The results of this study also indicated a need for increased collaboration time between regular and special education teachers. Collaboration time between regular education and special education teachers is vital when including students with special needs. Special education teachers have the ability to aid regular education teachers with individual students and skills including instructional strategies, accommodations and modifications, disability characteristics, and IEP reviews. Staff daily schedules should be implemented to ensure collaboration time between regular and special education teachers.

Recommendation 4: Increased support within the regular education classroom provided by special education staff. In order to truly support regular education teachers and their students with disabilities, special education teachers need to be allowed the time and access to co-teach and team teach with their regular education teacher counterparts. As more students with disabilities are included in the general education setting, special education teachers will require greater access to those classrooms as opposed to delivering instruction outside of the general education classroom.

Recommendations for Future Research

The current research revealed that principal support and professional development has a positive impact on teachers' attitudes toward including students with special needs. It is recommended that future research is needed to further investigate these two areas. The constructs of *emotional*, *instrumental*, and *informational* support from the principal should be investigated in order to determine specific elements of each construct that may affect a teachers' attitude toward inclusion. This information would be highly beneficial

to administrators when supporting their general education teachers with inclusion. Additionally, research is needed to determine specific elements of professional development that may have a direct impact on teachers' attitudes toward including students with special needs. Professional development activities then may be centered around the most important aspects that have the greatest impact on the attitudes of teachers.

Another area of investigation may include how the attitudes of general education teachers are affected by school clinicians and instructional aides. Students with disabilities often have other professionals who provide direct services to them including speech pathologists, nurses, social workers and psychologists. Special education aides are also often utilized within the general education classroom. It would be beneficial to understand the relationship between the support of these professionals on general education teachers' attitudes toward including students with disabilities and how this support affects the success of an inclusion program.

One area that is still in its infancy within this school district is Response to Intervention. Many of the same aspects of including students with disabilities also lends itself to Response to Intervention. Teachers have clearly stated within the qualitative analysis the need for instructional strategies and increased abilities to differentiate instruction which are skill sets for both inclusion and RtI. Further research is needed to determine how RtI is implemented, how it effects inclusion, and how RtI affects teachers' attitudes.

One limitation of this study includes the small sample size of only four elementary schools. In order to increase the external validity and generalizability of the results, future studies should comprise of a larger and broader sample size to include middle and high schools. Additionally, there was a small sample size ($n=6$) for the qualitative portion of the current study. In order to paint a clearer picture of how to support general education teachers' quest to fully include students with disabilities, a larger pool of subjects is needed to participate in the qualitative data collection. Continuing to develop a better understanding of how to improve teachers' attitudes toward including students with disabilities not only benefits those students but may have a positive impact on schools system wide.

APPENDIX A

SUMMARY OF THE CONTENT BY FACTOR LOADING OF THE STATIC

Item	Item content
Factor 1: Advantages and Disadvantages of Inclusive Education	
7	Special education students should be in special education classes
11	Special education students learn social skills from regular education
12	Special education students have higher academic achievements when included
13	Achievement is difficult for special education students when included
14	Special education students have higher self-esteem when included
15	Special education students hinder academic progress of general education classes
20	Special education students should be in general education classes
Factor 2: Professional Issues Regarding Inclusive Education	
1	Confidence in ability
2	Confidence in training
3	Frustration/tolerance when teaching special education students
4	Anxiety towards teaching special education students
9	Problems teaching children with cognitive deficits
Factor 3: Philosophical Issues Regarding Inclusive Education	
5	All students can learn
6	Special education students can learn
10	Handling behavior problems
16	Training for teaching special education students
Factor 4: Logistical Concerns of Inclusive Education	
8	Accommodating the physically disabled
17	Making special physical arrangement
18	Material/equipment easily acquired
19	Principal supportive

APPENDIX B

PERMISSION TO UTILIZE STATIC

RE: survey use permission

From: adele.hutchinson@sagepub.com on behalf of **permissions (US)** (permissions@sagepub.com)
Sent: Wed 11/04/09 3:40 PM
To: 'Tom Walker' (tjw1128@hotmail.com)

Dear Tom,

Please consider this written permission to use and adapt the scale detailed below for your dissertation. Proper attribution to the original source should be included. The permission does not include any 3rd party material found within the work. Please contact us for any future usage or publication of your dissertation.

Best,

Adele

From: Tom Walker [<mailto:tjw1128@hotmail.com>]
Sent: Wednesday, November 04, 2009 12:03 PM
To: permissions (US)
Subject: RE: survey use permission

I am currently writing my dissertation for my ED.d degree in curriculum and instruction. My project involves the attitudes of general education teachers toward including students with disabilities and the factors that may influence their attitudes. The factors I'm looking at include principal support, experience and involvement in professional development. I already have permission to use a survey to establish teachers' attitudes (STATIC) but still in need of a survey to establish principal support in order to perform correlational stats with against the STATIC survey responses. My hypothesis is that with increased principal support, attitudes of teachers will be more positive when including students with special needs. I found Littrell's survey and thought it would be a perfect fit for my project-Tom

From: permissions@sagepub.com
To: tjw1128@hotmail.com
Date: Wed, 4 Nov 2009 11:41:39 -0800
Subject: RE: survey use permission

Dear Tom,

Thank you for your request. What will the scale be used for?

APPENDIX C

PERMISSION TO UTILIZE LITTRELL'S SURVEY OF PRINCIPAL SUPPORT



MISSOURI SOUTHERN STATE UNIVERSITY

September 6, 2007

Mr. Tom Walker
1419 E. 89th Street
Chicago, IL 60619

Dear Mr Walker,

Thank you for your inquiry about the *Scale of Teachers; Attitudes Toward Inclusive Classrooms (STATIC)*. I have enclosed with this letter a copy of the most recent copyrighted version of the *STATIC* to date and a scoring key for your use. Additionally, you will find a summary of the development of the *STATIC*. It will provide for you an abbreviated explanation of the psychometric properties of the *STATIC*.

You may reproduce the *STATIC* for use in your research project(s) on inclusion. The only requirements that I have for the use of the instrument is that you: (1) ascribe authorship to me *on the instrument*, and acknowledge me as the author of the instrument, using one of the citations below, in any publication that may arise from your use of it; and (2) request permission for each major use of the instrument beyond its use in your present research project (*just a simple way of helping me know how and where it is being used*). You may make changes to the demographical data you choose to collect or the instructions for collecting the demographic data to meet the needs of your particular study. However, the 20 items specific to inclusion must remain intact as originally published.

Good luck with your research! Please call or write if I can assist you further.

Sincerely,

A handwritten signature in blue ink, appearing to read "H. Keith Cochran".

H. Keith Cochran, Ph.D.
Department of Psychology
3950 East Newman Road
Joplin, Missouri 64801
Cochran-k@mssu.edu
Appropriate citations:

APPENDIX D

PERMISSION FROM SCHOOL DISTRICT



Office of Special Education & Supports · 125 South Clark Street, Suite 800 · Chicago, Illinois 60603
Telephone: 773-553-1800

Gretchen Brumley
Deputy Chief

Richard G. Smith, Ed. D.
Chief Officer

Jean McKeown Papagianis
Deputy Chief

November 15, 2010

To Whom It May Concern:

In accordance to the Research Review Board policy, I am writing this letter of support for research to be conducted by Thomas Walker. His research regarding the attitudes of teachers toward including students with disabilities in the general education classroom, and the factors that may affect those attitudes in a positive manor is greatly needed.

It is my understanding that all surveys and interviews will be conducted outside of school hours therefore minimizing staff time during instructional hours. School staff will be asked to voluntarily fill out Mr. Walker's survey as well as their willingness to participate in a follow up interview. These activities would take place outside of the normal school hours.

I therefore recommend to the Research Review Board to allow Thomas Walker access to CPS teachers in order to conduct his research and aid in the improvement of our inclusion model of instruction. Should you need any further information, please feel free to contact me at 773-553-1804.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard G. Smith".

Richard G. Smith, Ed. D.
Chief Officer

APPENDIX E
SURVEY INSTRUMENT

The purpose of this survey is to examine the factors that may influence teachers' attitudes toward including students with disabilities. All data collected will be confidential and used for the researcher's dissertation project. Please know that participation is voluntary and there is no penalty for choosing not to participate. The survey will take approximately 25 minutes to complete.

Please circle the response that best describes you.

1. What year did you obtain you teacher certification? _____

2. Which response best identifies the number of years experience you have including students with disabilities in your classroom.

0-1 year 2-3 years 4-5 years 6-10 years More than 10 years

3. Which best describes the amount of pre-service course work you complete that focused on including students with special needs into the general education classroom.

0 courses 1-2 courses 3-4 courses 5 or more courses

4. Which best describes the amount of professional development workshops you completed that focused on including students with special needs into the general education classroom.

0 1-2 3-4 5 or more

STATIC

- 0 Strongly Disagree**
- 1 Disagree**
- 2 Not Sure, But Tend to Disagree**
- 3 Not Sure, But Tend to Agree**
- 4 Agree**
- 5 Strongly Agree**

Please place an X in the appropriate box for your response.

	0	1	2	3	4	5
5. I am confident in my ability to teach children with special needs.						
6. I have been adequately trained to meet the needs of children with disabilities.						
7. I become easily frustrated when teaching students with special needs.						
8. I become anxious when I learn that a student with special needs will be in my classroom.						
9. Although children differ intellectually, physically, and psychologically, I believe that all children can learn in most environments.						
10. I believe that academic progress is possible in children with special needs.						
11. I believe that children with special needs should be placed in special education classes.						
12. I am comfortable teaching a child that is moderately physically disabled.						

13. I have problems teaching a student with cognitive deficits.						
14. I can adequately handle students with mild to moderate behavioral problems.						
15. Students with special needs learn social skills that are modeled by regular education students.						
16. Students with special needs have higher academic achievements when included in the regular education classroom.						
17. It is difficult for children with special needs to make strides in academic achievement in the regular education classroom.						
18. Self-esteem of children with special needs is increased when included in the regular education classroom.						
19. Students with special needs in the regular education classroom hinder the academic progress of the regular education student.						
20. Special in-service training in teaching special needs students should be required for all regular education teachers.						
21. I don't mind making special physical arrangements in my room to meet the needs of students with special needs.						

22. Adaptive materials and equipment are easily acquired for meeting the needs of students with special needs.						
23. My principal is supportive in making needed accommodations for teaching children with special needs.						
24. Students with special needs should be included in regular education classrooms.						

Principal Support

Please indicate to what extent the following statements occur between you and your principal.

Extent: 1 = no extent to 4 = great extent

	1	2	3	4
25. Acts friendly toward me				
26. Is easy to approach				
27. Gives me undivided attention when I am talking				
28. Is honest and straightforward with the staff				
29. Gives me a sense of importance and that I make a difference				
30. Considers my ideas				

31. Allows me input into decisions that affect me				
32. Supports me on decisions				
33. Shows genuine concern for my program and students				
34. Notices what I do				
35. Shows appreciation for my work				
36. Treats me as one of the faculty				
37. Gives clear guidelines regarding job responsibilities				
38. Provides standards for performance				
39. Offers constructive feedback after observing my teaching				
40. Provides frequent feedback about my performance				
41. Helps me evaluate my needs				
42. Trusts my judgment in making classroom decisions				
43. Shows confidence in my actions				

44. Provides helpful information for improving personal coping skills				
45. Provides information on up-to-date instructional techniques				
46. Provides knowledge of current legal policies and administrative regulations				
47. Provides opportunities for me to attend workshops, attend conferences, and take courses				
48. Encourages professional growth				
49. Provides suggestions for me to improve instruction				
50. Identifies resource personnel to contact for specific problems he or she is unable to solve				
51. Assists with proper identification of special education students				
52. Is available to help when needed				
53. Helps me establish my schedule				
54. Helps me solve problems and conflicts that occur				
55. Establishes channels of communication between general and special education teaching and other				

professionals				
56. Helps me with classroom discipline problems				
57. Helps me during parent confrontations. when needed				
58. Provides time for various nonteaching responsibilities (e.g., IEPs, conferences)				
59. Provides adequate planning time				
60. Provides material, space, and resource needs				
61. Participates in child study/eligibility/IEP meetings/parent conferences				
62. Works with me to plan specific goals and objectives for my program and students				
63. Provides extra assistance when I become overloaded				
64. Equally distributes resources and unpopular chores				

APPENDIX F
INTERVIEW PROTOCOL

Interview Protocol

General attitudes:

-What challenges have you encountered in implementing inclusion?

-What are three of the most significant challenges you face in including students with disabilities?

-What is the most important factor you would attribute to the success of the inclusive practices?

-What suggestions do you have to make the inclusive classroom more successful for both the teachers and the students?

Principal/special education support

-How does the principal facilitate professional development?

-How does the principal facilitate opportunities for common meeting time with special education staff?

-Describe the support you receive from your principal regarding including students with disabilities.

-How does the special education staff support you in your everyday instruction?

-Briefly describe any additional supports and the level of support that you believe is important for inclusion to be successful?

Professional development

-What type of professional development or training did you receive prior to being in an inclusive classroom?

-How did professional training help you better prepare to work with students with disabilities in your classroom?

-Have there been any strategies that you found to be especially ineffective? Why?

-What teaching/instructional strategies have you used that you've found to be particularly effective in the inclusive classroom? Why?

-What professional development methods or activities did you find most helpful regarding including students with disabilities?

-What knowledge and skills do you feel you need to be more effective in inclusion teaching?

APPENDIX G

LETTER OF INFORMED CONSENT FOR SURVEY

LETTER OF CONSENT TO SCHOOL TEACHERS

Project Title: Attitudes and Inclusion: An Examination of Teachers' Attitudes
Toward Including Students with Disabilities

Researcher: Thomas Walker
Loyola University

Faculty sponsor: Dr. Michael Boyle
Assistant Director of the Center for Catholic School Effectiveness
Loyola University

Purpose:

The purpose of this study is to examine the factors that may influence teachers' attitudes toward including students with disabilities.

Introduction:

You are being asked to take part in a research study being conducted by Thomas Walker for a dissertation project under the supervision of Dr. Michael Boyle at Loyola University Chicago.

You are being asked to participate by completing a survey regarding teachers' attitudes toward including students with disabilities and administrative support. The survey will take approximately 25 minutes to complete. A follow up voluntary interview lasting approximately 30 minutes may also be conducted at the teachers' convenience.

Please read this form carefully and ask any questions of the researcher before agreeing to participate in the study. You may also contact the researcher at 773-814-7893.

Procedures:

If you agree to participate in this study, the following will occur:

- Complete the attached survey.
- If you wish to volunteer for a short follow up interview, complete the identifying information at the end of the survey
- Randomly selected teachers who volunteered will be contacted to set up their interview at their convenience.

Voluntary Participation:

Participation in this study is voluntary. At any time during your participation, you may withdraw.

Confidentiality:

All data will be numerically coded. No other form of identification will be utilized. Access to the data will be accessed by this researcher only.

Risk/Benefits:

There are no risks beyond those associated with every day life by participating in this research. Participants will be numerically coded to ensure confidentiality. There are no direct benefits from participation but the results will help better inform the educational field as to the factors that may influence teachers' attitudes toward including students with disabilities.

Contacts and Questions:

If you have any questions about this research, please feel free to contact:

Thomas Walker at tjw1128@hotmail.com

Dr. Michael Boyle at mboyle3@luc.edu

If you have any questions about your rights as a research participant, you may contact the Loyola University's Office of Research Services at 773-508-2689.

I **consent** to participate in the above research project:

Print name

Signature

APPENDIX H

LETTER OF INFORMED CONSENT FOR INTERVIEW

LETTER OF CONSENT- INTERVIEW

Project Title: Attitudes and Inclusion: An Examination of Teachers' Attitudes
Toward Including Students with Disabilities

Researcher: Thomas Walker
Loyola University

Faculty sponsor: Dr. Michael Boyle
Assistant Director of the Center for Catholic School Effectiveness
Loyola University

Purpose:

The purpose of this study is to examine the factors that may influence teachers' attitudes toward including students with disabilities.

Introduction:

You are being asked to take part in a research study being conducted by Thomas Walker for a dissertation project under the supervision of Dr. Michael Boyle at Loyola University Chicago.

You are being asked to participate in an interview regarding teachers' attitudes toward including students with disabilities and administrative support. This voluntary interview will last approximately 30 minutes and will be conducted at the teachers' convenience. Only six teachers will be selected; three with less than five years of experience and three with five or more years of experience.

Please read this form carefully and ask any questions of the researcher before agreeing to participate in the study. You may also contact the researcher at 773-814-7893.

Procedures:

If you agree to participate in this study, the following will occur:

- An interview date, time and location will be scheduled at your convenience.
- The interview will be conducted by the researcher and will last approximately 30 minutes.

Voluntary Participation:

Participation in this study is voluntary. At any time during your participation, you may withdraw.

Confidentiality:

Recorded interviews will be transcribed by the researcher and each participant will be assigned a numerical name (Teacher 1, Teacher 2, etc.) to ensure confidentiality. Access to the data will be accessed by this researcher only.

Risk/Benefits:

There are no risks beyond those associated with every day life by participating in this research. Participants will be numerically coded to ensure confidentiality. There are no direct benefits from participation but the results will help better inform the educational field as to the factors that may influence teachers' attitudes toward including students with disabilities.

Contacts and Questions:

If you have any questions about this research, please feel free to contact:

Thomas Walker at tjw1128@hotmail.com

Dr. Michael Boyle at mboyle3@luc.edu

If you have any questions about your rights as a research participant, you may contact the Loyola University's Office of Research Services at 773-508-2689.

I **consent** to participate in the above research project:

Print name

Signature

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VITA

Presently, Thomas J. Walker is the acting assistant principal, case manager, and resource special education teacher within the Chicago Public School system. He received a Bachelor of Science degree from Central Michigan University and a Master's degree in special education from St. Xavier University. Thomas has dedicated his life working with individuals with disabilities. He began his career working in residential programs before transitioning to the school setting. Thomas has taught in a wide range of educational settings including therapeutic day schools, self-contained classrooms, resource, and inclusion classrooms.

DISSERTATION COMMITTEE

The Dissertation submitted by Thomas J. Walker has been read and approved by the following committee:

Michael Boyle, Ph.D., Director
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