

2009

# Attitudes of general education teachers toward including students with special needs

Tracy Lynn Cagney  
*Iowa State University*

Follow this and additional works at: <http://lib.dr.iastate.edu/etd>



Part of the [Curriculum and Instruction Commons](#)

---

## Recommended Citation

Cagney, Tracy Lynn, "Attitudes of general education teachers toward including students with special needs" (2009). *Graduate Theses and Dissertations*. Paper 10817.

This Thesis is brought to you for free and open access by the Graduate College at Digital Repository @ Iowa State University. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Digital Repository @ Iowa State University. For more information, please contact [hinefuku@iastate.edu](mailto:hinefuku@iastate.edu).

**Attitudes of general education teachers toward including students with special needs**

by

**Tracy Lynn Cagney**

A thesis submitted to the graduate faculty  
in partial fulfillment of the requirements for the degree of

**MASTER OF SCIENCE**

Major: Education (Special Education)

Program of Study Committee:  
Patricia M. Carlson, Major Professor  
Linda Lind  
Carl Roberts

Iowa State University

Ames, Iowa

2009

Copyright © Tracy Lynn Cagney, 2009. All rights reserved.

**TABLE OF CONTENTS**

|                                   |     |
|-----------------------------------|-----|
| LIST OF TABLES                    | iii |
| ABSTRACT                          | iv  |
| CHAPTER 1. INTRODUCTION           | 1   |
| CHAPTER 2. REVIEW OF LITERATURE   | 9   |
| CHAPTER 3. METHODS AND PROCEDURES | 27  |
| CHAPTER 4. RESULTS                | 36  |
| CHAPTER 5. SUMMARY AND DISCUSSION | 51  |
| APPENDIX A. SURVEY                | 68  |
| APPENDIX B. INFORMED CONSENT      | 72  |
| APPENDIX C. EMAILS                | 75  |
| BIBLIOGRAPHY                      | 77  |

## LIST OF TABLES

|           |   |    |
|-----------|---|----|
| Table 1.  | Description of School Districts in Study  | 28 |
| Table 2.  | Coding of Positive and Negative Statements  | 34 |
| Table 3.  | Characteristics of Respondents  | 38 |
| Table 4.  | Descriptive Statistics on Survey Statements and Overall Attitude Score  | 39 |
| Table 5.  | t-test Results Between General Education Teachers With and Without Training for Overall Attitude  | 42 |
| Table 6.  | t-test Results Between General Education Teachers With and Without Training for Selected Statements   | 42 |
| Table 7.  | Analysis of Variance – Overall Attitude Score by Years of Teaching Experience   | 43 |
| Table 8.  | Bonferroni Analysis of Variance for Statement 15 – Overall Attitude Score by Years of Teaching Experience   | 44 |
| Table 9.  | Bonferroni Analysis of Variance for Statement 15 – Overall Attitude Score by Years of Teaching Experience Between Groups  | 44 |
| Table 10. | t-test Results Between General Education Teachers with Students with Special Needs in the Classroom and General Education Teachers without for Overall Attitude | 46 |
| Table 11. | t-test Results Between Male and Female General Education Teachers for Overall Attitude  | 46 |
| Table 12. | t-test Results Between Male and Female General Education Teachers for Selected Statements   | 47 |
| Table 13. | Analysis of Variance – Overall Attitude Score by Curricular Area Taught   | 48 |
| Table 14. | t-test Results Between Type of Class Taught for Overall Attitude  | 49 |
| Table 15. | t-test Results Between General Education Teachers Who Teach Required Courses and Those Who Teach Elective Courses for Selected Statements                       | 50 |

## **ABSTRACT**

Due to the recent push towards inclusion, many students with special needs are finding themselves in the general education classroom. Research has shown that students' success in classes is affected by their teachers' attitudes towards having them in there. This study takes a closer look at high school general education teachers' attitudes, in the state of Iowa, towards working with students with special needs in the general education classroom.

## CHAPTER 1. INTRODUCTION

Sec. 300.101 Free appropriate public education (FAPE).

(a) General. A free appropriate public education must be available to all children residing in the State between the ages of 3 and 21, inclusive, including children with disabilities who have been suspended or expelled from school, as provided for in Sec. 300.530(d) (IDEA, 2004).

### Background

Prior to President Ford's signing the Education for All Handicapped Children Act (EAHCA) on November 29, 1975, students with disabilities were frequently excluded from public schools, and/or educated in programs that failed to meet their individual needs. In 1975, Congress estimated approximately 1.75 million students with disabilities were being denied education in public schools, and another 2.2 million students with disabilities were not receiving an education that appropriately met their individual needs (Yell, 2006). These astronomical numbers, along with numerous court cases brought against school districts and states refusing to educate students with disabilities, specifically *Pennsylvania Association for Retarded Citizens v. Pennsylvania* and *Mills v. District of Columbia Board of Education*, caused the government to reexamine the current public education system. The enactment of EAHCA, followed by the amendment to the act in 1990, which renamed EAHCA the Individuals with Disabilities Education Act (IDEA), mandated schools provide all students with disabilities a free and appropriate education (FAPE) in the least restrictive environment (LRE).

According to IDEA, which was again amended in 2004, when it comes to educating students with disabilities in the least restrictive environment (LRE):

(2) Each public agency must ensure that—

- (i) To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are non-disabled and;
- (ii) Special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with use of supplemental aids and services cannot be achieved satisfactorily. (300.114 (a) (2) (i) (ii)) (IDEA, 2004).

This mandate, still a staple in special education law today, does not come without incentive. Government funding for educating students with disabilities is dependent on the compliance of states and school districts to uphold and carry through the substantive and procedural provisions of the act. These provisions can be divided into the eight subcategories that follow: (a) zero reject, (b) identification and evaluation, (c) free and appropriate public education, (d) least restrictive environment, (e) procedural safeguards, (f) technology-related assistance, (g) personnel development, and (h) parental participation (Yell, 2006).

While no subcategory is more important than the other, it is subcategory C (free and appropriate public education) and subcategory D (least restrictive environment) that have come under much scrutiny and have also provided educators and administrators with great challenges. Determining appropriateness and least restrictive environment can often be a difficult challenge, as varying people have varying opinions about what is best for different students. Despite these differing thoughts, the law remains the law.

Against the wishes of some educators, this law opens the door for students with special needs to enter their classroom. While this mandate may provide students with special needs the opportunity to be educated alongside their non-disabled peers, it does not guarantee students with special needs they will be welcomed. Since the enactment of IDEA, and its previously named mandate EACHA, studies have indicated some general education teachers

at the high school level do not possess positive attitudes towards educating students with special needs in their classrooms. Specifically, studies have shown certain qualities, such as gender, years of teaching experience, number of special education training courses taken, and number of students with special needs in the classroom can affect the attitudes general education teachers have towards educating students with special needs in their classrooms. Therefore, the problem not only lies with providing students with special needs a free and appropriate education in the least restrictive environment, but making sure the education students with special needs are receiving is not being negatively impacted by their general education teachers' attitudes.

### **Purpose**

The purpose of this study was to examine high school general education teachers' attitudes about educating students with special needs in their classrooms and ascertain whether those attitudes were impacted by gender, number of years of teaching experience, curricular area taught, type of classes taught (required or elective), if a required course specifically designed for working with students with special needs in college was taken, and the number of students with special needs in the classroom. Specifically, the goal of this study was to determine what, if any, demographic factors impacted general education teachers' attitudes towards educating students with special needs in their classrooms.

For the purpose of this study the operational definition of **attitudes** is the feelings or way of thinking a person has about something or someone, which ultimately affects his/her behavior towards that person or object. In theory, a general education teachers' attitude towards **inclusion** (the integration of special education students into the general education classrooms) would affect the way in which they behave towards students with special needs.



A **general education teacher** is defined as someone who is licensed to teach a specific **curricular area**, such as English, math, science, social studies, and physical education, or **extra curricular area**, such as foreign language, home economics, choir, band, etc., to elementary, middle school, and/or high school students. A **required class** is defined as a class/subject that is mandatory for high school students to take in order to graduate. An **elective class** is defined as a class that is not required for students to take in order to graduate, but is provided as an option for students to take in order to meet the credit requirements of graduation.

A **special education teacher** is defined as someone who is licensed to teach students with special needs at the elementary, middle school, or high school level. A **student with special needs** is defined as an individual between the ages of 5 and 21 who has been identified as having a disability in accordance with IDEA. Students with special needs are also students who have an **Individual Education Plan**, which is an individualized plan developed to meet the individual needs of the student.

### **Research Questions and Hypotheses**

This study was fueled by the over arching question, how do general education teachers feel about having students with special needs in their classrooms? Specifically, the following six research questions guided this study, and the following six hypotheses were tested in this study:

- 1) Is there a difference in general education teachers' attitudes towards having students with special needs in the general education classroom based on those who have taken a college course specifically designed for working with students with special needs

versus those who have not taken a college course specifically designed for working with students with special needs?

***Hypotheses 1:*** General education teachers who have taken a college course specifically designed for working with students with special needs will have more positive attitudes towards working with students with special needs in the general education classroom than general education teachers who have not taken a required course specifically designed for working with students with special needs in college.

- 2) Is there a difference in general education teachers' attitudes towards having students with special needs in the general education classroom based on number of years of teaching experience?

***Hypotheses 2:*** General education teachers with more years of teaching experience will have more negative attitudes towards working with students with special needs in the general education classroom than general education teachers with fewer years of teaching experience.

- 3) Is there a difference in general education teachers' attitudes towards working with students with special needs in the general education classroom based on how many students with special needs general education teachers typically have in a year in their classrooms?

***Hypotheses 3:*** General education teachers who have more students with special needs in their classrooms will have more negative attitudes towards working with students with special needs in the general education classroom than general education teachers who do not frequently have students with special needs in their classrooms.

- 4) Is there a difference between male and female general education teachers' attitudes towards having students with special needs in their classrooms?

**Hypotheses 4:** Male general education teachers will have more negative attitudes towards working with students with special needs in the general education classrooms than female general education teachers.

- 5) Is there a difference in general education teachers' attitudes towards working with students with special needs based on their curricular area taught (i.e. Math, English, Social Studies, Science, Physical Education, and Other)?

**Hypotheses 5:** General education teachers who teach Social Studies and Science will have more negative attitudes towards educating students with special needs in the general education classroom than general education teachers who teach Math, English, and Physical Education.

- 6) Is there a difference in general education teachers' attitudes towards working with students with special needs in the general education classroom based on the type of classes taught (i.e. required courses or electives courses)?

**Hypotheses 6:** General education teachers who teach required classes will have a more negative attitude towards working with students with special needs in the general education classroom than general education teachers who teach elective classes.

### **Rationale**

The main focus of this study was on general education teachers' attitudes towards having students with special needs in the general education classroom. Although we would like to believe all students are thought of equally and favorably, the truth of the matter is they are not. Studies have shown when it comes to educating students in a general education

setting, students with special needs are frequently less favored in the classroom. As it turns out, studies have also shown that general education teachers at all levels, especially those at the secondary level, tend to have more negative attitudes towards working with students with special needs in the general education classroom.

One must look to determine if there is a relationship between general education teachers' attitudes toward working with students with special needs and specific demographic information. The specific demographic information looked at in this study were: gender, years of teaching experience, content area taught, type of class taught (elective vs. required), the completion of a college course specifically designed for working with students with special needs, and the number of students with special needs in a general education teachers' classroom. If there is a relationship between general education teachers' attitudes towards working with students with special needs in the general education classroom and specific demographic information, then one may conclude not all general education teachers feel the same about working with students with special needs in their classrooms, and the placement of these students in specific general education teachers' classrooms may need to be reconsidered.

### **Significance of Study**

The objective of this study is to examine high school general education teachers' attitudes about having students with special needs in their classrooms and whether those attitudes are impacted by gender, number of years of teaching experience, curricular area taught, type of class taught (required or elective), the completion of a college course specifically designed for working with students with special needs, and the number of students with special needs in a general education teachers' classroom.

This study is significant because the knowledge gained provides insight into the current attitudes of general education teachers concerning the inclusion of students with disabilities. The knowledge also provides for possible reasons for general education teachers' attitudes and ascertains whether special attributes (gender, number of years of teaching experience, curricular area taught, type of class taught, the completion of a college course specifically designed for working with students with special needs, and the number of students with special needs in a general education teachers' classroom) impact attitudes. In addition, the results of this study can help educators address the reasons or issues identified, in order to better serve general education teachers and students with special needs.

## CHAPTER 2. LITERATURE REVIEW

The desire for all students to be educationally successful is by no means a recent concept. It is, however, a recent legislative mandate. No Child Left Behind (NCLB), initially implemented in 2001 by former President George W. Bush, was established as a means

to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments.  
(Section.1001.Statement of Purpose) (IDEA, 2004).

The “all” mentioned in the afore quoted subpart of NCLB is inclusive to every student, regardless of race, gender, social economic status, and intellectual ability. This inclusive “all” has come a long way since President Ford’s signing of the Education for All Handicapped Children Act (EAHCA) in 1975. Prior to the implementation of EAHCA, now renamed the Individuals with Disabilities Education Act (IDEA), individuals with special needs were frequently excluded from public schools and/or educated in programs that failed to meet their needs.

These injustices prompted many families of students with special needs, and agencies who worked with individuals with special needs, to seek legal action. Most famously, the *Pennsylvania Association for Retarded Citizens (PARC) v. Pennsylvania* and the *Mills v. District of Columbia Board of Education* court cases prompted the federal government to take a closer look at the services provided to individuals with special needs. The federal government’s investigation of the educational treatment of students with special needs as a whole resulted in the demand for schools to fully educate EVERY student in the least restrictive environment in return for federal funding.

According to the law established in IDEA, when it comes to educating students with special needs in the least restrictive environment (LRE):

(2) Each public agency must ensure that—

(i) To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are non-disabled and;

(ii) Special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with use of supplemental aids and services cannot be achieved satisfactorily. (300.114 (a) (2) (i) (ii)) (IDEA, 2004).

In accordance with the law, students with special needs are not only being educated in the public schools, but are being educated in general education classrooms beside their non-disabled peers. This integration of students with special needs into general education classrooms has come to be known as inclusion, a term and movement that has many general education teachers and parents questioning its benefits and affect on *all* students. While inclusion may not be the best fit for every student with special needs, if well planned it can provide some gains, both developmentally and socially, for those students included in the general education classroom (Etscheidt, 2006). This being said, it is important for educators and parents to consider each individual student, and his/her special needs (both academically and socially), before deciding to integrate him/her into the general education classroom. For some students with special needs, inclusion may not be the best fit, as more specific skills are necessary for the student to be successful in post secondary living, learning, and working. These skills, such as life skills (i.e. cooking, cleaning, grocery shopping, etc.) cannot always be taught in the general education setting.

For other students with special needs, inclusion may not be an appropriate placement due to behaviors or disabilities that “inhibit the education of others” (Hastings & Oakford,

2003, p. 88). It is not ironic then, it is these students who are more often viewed less positively by general education teachers as welcomed guests in their classrooms (Hastings & Oakford, 2003; Johnson, 2001). In fact, it is the students who are seen as being less demanding, or are believed to have less severe needs, that general education teachers prefer to have in their classrooms (Hastings & Oakford, 2003). In particular, it is students who are classified as being mentally retarded and emotionally disturbed that general education teachers feel should be segregated into their own classrooms (Johnson, 2001).

Students who have been identified as being learning disabled, educable mentally retarded, and emotionally disturbed, are those typically shown to significantly benefit from inclusion (Johnson, 2001). Unfortunately, the amount of success students with special needs can have from inclusion heavily relies on general education teachers' attitudes towards them (Weisel & Tur-Kaspa, 2002). Not only do general education teachers' attitudes affect the success of students with special needs, but "research is available which implies that teachers' attitudes can have a detrimental effect on handicapped students' psychological and educational adjustment to the regular classroom" (Johnson, 2001, p. 230).

Teachers' attitudes can be made apparent to all students through their actions and interactions with individuals in the classroom. Typically, teachers tend to provide more positive feedback to higher achieving students and also tend to have higher expectations for these students as well. Students who are considered lower achieving tend to have less contact with the general education teachers all together, and what little contact they do have is usually not positive (Johnson, 2001).



## **Research Question/Hypotheses 1 - Training**

In comparison to elementary teachers, who have more positive attitudes towards inclusion, high school teachers tend to have a more negative attitude towards including students with special needs into their classrooms. A study conducted by Zigmond, Levin, and Laurie (1985), which consisted partially of a survey of attitudes of mainstream high school teachers, indicated secondary teachers were tolerant of the thought of placing students with special needs in their classrooms, but ultimately would prefer not to include them. This preference is due in large part to the set up of high schools in general, which normally consists of a large number of students within teachers' classrooms.

Unlike elementary teachers, high school teachers work with a large number of students in multiple classes throughout the day. They also teach in a didactic manner, which is directed to a large group, rather than to individual students (Van Reusen, Soho, & Barker, 2001). Students with special needs frequently require individual instructional contact time, a need that cannot always be met in the general education setting due not only to a large number of students present, but to general education teachers general lack of knowledge in regard to educating students with special needs.

General education teachers are trained as content area specialists, equipped with knowledge about their area of expertise. What not all general education teachers are equipped with, are the skills and strategies to be sure ALL students grasp the knowledge they provide. Specifically, general education teachers are not trained in how to make appropriate modifications and accommodations to meet the individual needs of students with special needs. Without this training, general education teachers doubt their ability to educate and meet the needs of students with special needs in their classroom. This doubt in ability affects

general education teachers' attitudes towards educating students with special needs in their classrooms.

Training in special education for general education teachers is more of a recent phenomenon. Within the last twelve years a college course on educating students with special needs has become a requirement for earning a teaching degree. This requirement leaves some of our current educators unfamiliar and untrained on how to successfully educate students with special needs. Specifically, general education teachers struggle greatly with making and implementing meaningful and purposeful accommodations and modifications for students with special needs. Research conducted by Bender, Vail, and Scott (1995) indicated general education teachers are not implementing modified instruction that would benefit students with learning disabilities in their classrooms.

Another study, conducted by Leyser and Tappendorf (2001), focused primarily on the types of accommodations and modifications general education teachers reported using in their classrooms to meet the needs of students with special needs. Like Bender, Vail, and Scott(1995), Lesyer and Tappendorf (2001) also found the types of strategies that would benefit students with special needs, such as adaptations to tests and assignments, cooperative learning groups, and alternative teaching strategies, were the strategies teachers reported using least often. If teachers are not using strategies that benefit students with special needs, then no doubt these students will not be successful in the general education classroom. If success is not evident, it is no wonder many general education teachers question the presence of these students in their classrooms.

In the same study by Lesyer and Tappendorf (2001) mentioned above, general education teachers reported using very often and quite often, strategies that allowed them to

remain in control of the class and hold students self-accountable. Neither of these strategies are known to be successful with educating students with special needs, and one might wonder if these strategies are successful with educating most students.

If all general education teachers were trained on how to educate students with special needs, and implemented the training they were given, then they would be providing students with special needs the opportunity to thrive in the general education setting. If adequate training were provided, then general education teachers would have the ability to teach a wide range of ability levels in their classrooms. Unfortunately, this is not the case, as many high school teachers teach to students who are in the middle (Van Reusen, Soho, & Barker, 2001). By teaching to the middle, general education teachers are excluding those students who are often thought of as talent and gifted, and those who are normally classified as having special needs.

General education teachers' lack of training in working with students with special needs is not only a disadvantage to these students in the sense they are not given the opportunity to demonstrate their full potential, but it is also a disadvantage to them in the sense the amount of training a general education teacher has, has been linked to general education teachers' overall attitudes towards working with students with special needs. As mentioned above, general education teachers' attitudes have been shown to have an effect on students' with special needs success in general education classrooms.

In a study conducted by Van Reusen, Soho, and Barker (2001), results indicated that teachers' attitudes about inclusion were related to their special education training and their experience with working with students with special needs. In this study, over half of the teachers surveyed obtained negative scores about educating students with special needs in

their classrooms. Specifically, the teachers with the most negative attitudes were the ones who had the least amount of training and experience with working with students with special needs. The teachers with more negative attitudes expressed their concern with the impact students with special needs would have on their classroom environment, their ability to instruct, and the overall quality of learning.

A similar study, conducted by Bender, Vail, and Scott (1995), mentioned earlier, had similar findings to Van Reusen, Soho, and Barker's (2001) study, in that general education teachers' attitudes towards mainstreaming correlated with the number of courses taken on working with students with special needs. Specifically, they found the more courses teachers had on working with students with special needs, the more positive their attitudes (Bender, Vail, & Scott, 1995).

Leyser and Tappendorf's (2001) study took a closer look at teachers' attitudes towards inclusion based on numbers of classes taken. Specifically, Leyser and Tappendorf looked at teachers' attitudes who had taken 3-6 courses, 1-2 courses, and no courses. The results of their study indicated it was those teachers who had taken 3-6 (or more) courses that had significantly more positive attitudes than those who had taken 1-2 (or no) courses. Surprisingly, their study also indicated there was no significant difference in attitudes between those who had taken 1-2 courses and no courses. If these results are applicable, then "it seems that completing a requirement to enroll mainly in one course on exceptional children which generally covers introductory content (e.g. characteristics, some assessment, teaching strategies, and the law), does not prepare participants and develop the necessary mainstreaming instructional skills" (p. 758). If one course does not provide teachers with the

necessary skills, then the trend requiring a single college course on working with students with special needs is virtually useless.

An additional study conducted by Pernell, McIntyre, and Bader (2001) had somewhat similar findings. In this particular study, the focus was on how teachers' attitudes towards inclusion progressed through the completion of a course on working with students with special needs. The study looked at general education teachers' attitudes towards inclusion at various points throughout the course. As expected, general education teachers' initial attitudes towards inclusion ranged from negative to neutral. Some teachers with negative attitudes had feelings that the special education teachers wanted them to share in their trouble, which is why they felt students with special needs were in their classrooms. As the training course progressed, teachers' attitudes towards including students with special needs in their classrooms became more positive.

Based on the literature, one could hypothesize general education teachers with training specific to teaching students with disabilities would have more positive attitudes towards having these students included in their classrooms. While Leyser and Tappendorf (2001) found there was no significant difference in attitudes between teachers who had taken one or two courses related to special education and those who had taken no course, other researchers found training in and experience with working with students in need of special education services impacted the attitudes of general education teachers (Bender, Vail, & Scott, 1995; Pernell, McIntyre, & Baker, 2001; Van Reusen, Soho, & Barker, 2001).

## **Research Question/Hypotheses 2 - Years of Teaching Experience**

Similar to training, teachers' attitudes towards working with students with special needs have been shown to correlate with the amount of teaching experience a teacher has. In some sense, years of experience can be linked to training. As mentioned earlier, only one course on educating students with special needs is required in college to obtain a teaching license. Because this requirement is only 12-15 years old, teachers who have taught less than 15 years have been exposed to such courses. This makes those educators who have been in the teaching field longer less likely to have taken any courses on working with students with special needs. Therefore, those with more teaching experience and less training are those who are more likely to have negative attitudes towards working with students with special needs. A study conducted by Hastings and Oakford (2003) revealed that teachers with more teaching experience did in fact have more negative attitudes towards inclusion than those who had less teaching experience. While there is not a great deal of literature that indicates general education teachers with more teaching experience have more negative attitudes about having students with special needs included in their classroom, the literature reviewed here allows one to hypothesize this statement would be true.

## **Research Question/Hypotheses 3 - Number of Students with Special Needs in the General Education Classroom**

Lack of training and experience may affect teachers' beliefs about their ability to educate students with special needs in the general education classroom. In fact, many general education teachers question their ability to teach students with special needs while at the same time teaching general education students (Pernell, McIntyre, & Bader, 2001). The fear of being able to educate the two groups of students at the same time may only be half the

problem, as general education teachers are also trying to teach their content area to their students, while also meeting the other pressures and demands placed on them by society, the school, and the state.

High school general education teachers are faced with the everyday pressures of educating students. Specifically, high school teachers are expected to “provide quality learning opportunities and instruction sufficient to enable all students to learn advanced or complex curricula as well as to demonstrate ‘academic excellence’ as delineated in national, state, and district goals measured by student performance on standardized tests” (Van Reusen, Soho & Barker, 2001, p. 8). This is no easy task, as even without students with special needs in their classrooms, general education teachers are already faced with a wide range of learning levels among their students.

More recently, teachers are being faced with meeting the expectations set out by No Child Left Behind (NCLB), which mandates all children will be proficient in the areas of Reading, Math, and Science by the year 2011. Proficiency is determined by standardized tests, something to which teachers are discouraged to teach to. The pressure to meet the expectations set by NCLB is extremely high, as teachers are presented with the possibility of school closures and potential loss of jobs. Not that proficiency is unattainable for students with special needs, but as mentioned before, general education teachers are not trained on how to best educate these students, and therefore, may not want to be held responsible for their test scores.

On top of meeting state and national expectations, high school teachers are also expected to “prepare all students to meet graduation requirements and to acquire the necessary academic, cognitive, social, and technological skills required for successful and

productive independent living along with entry into colleges, universities, or the work force” (Van Reusen, Soho, & Barker, 2001, p. 8). Like everything else mentioned, this task is made additionally taxing with more students and wider learning ranges. Lastly, high school teachers also are responsible for preparing students to be contributing citizens and active members of society. This task in itself is no easy feat, as society is ever changing. Teachers need to continuously re-vamp and re-create lessons and activities to prepare students with 21<sup>st</sup> century skills.

The mounting pressures general education teachers’ face in their everyday lives may lessen their likelihood of wanting to take on the additional task of educating students with special needs. If including students with special needs in the general education setting is seen as additional work and pressure, then why would general education teachers want to be bothered with taking on more? With all that is already on high school teachers’ plates, many high school teachers do not want to add the additional responsibility of educating students with special needs in their classrooms. Simply planning for educating students with special needs takes a lot of time, time many general education teachers simply do not feel like they have.

Many general teachers fear they will not be given enough time to plan, or not be given the necessary support or resources to ensure inclusion is successful (Van Reusen, Soho, & Barker, 2001). In order to successfully implement full inclusion, teachers feel they need at least an hour per day for planning, on-going in-service training, and access to personal and material resources (Van Reusen, Soho, & Barker, 2001). These needs are not unjustified. The additional work educating students with special needs in the general education classrooms includes, among other things, pre, during, and post testing to determine



current academic ability, finding additional and/or supplementary materials, modifying and accommodating instruction and assignments, determining the best teaching style and technique to meet the students individualized education plan (IEP) and behavior intervention plan (BIP), and collaboratively working with special education teachers and paraprofessionals (Johnson, 2001).

In a study conducted by Zigmond, Levin, and Laurie (1985) on general education teachers' attitudes towards inclusion, over sixty percent of the surveyed teachers indicated having students with learning disabilities in their classrooms added additional demands on them. Specifically, they felt students with learning disabilities required more attention, more extensive lesson preparation, more time for contact with the special education resource staff, and more adjustments in the grading policy.

Teachers who have multiple numbers of students with special needs in their classroom, with a range of disabilities, will require more additional planning than those teachers who have fewer numbers of students with special needs in their classrooms. While the study conducted by Zigmond, Levin, and Laurie (1985) reflects general education teachers' feelings about the amount of extra work students who are classified as being learning disabled (LD) cause them, it does not reflect general education teachers' feelings about the additional planning that would be needed to educate students who are classified as mentally retarded (MR), behavior disordered (BD) and emotionally disturbed (ED). The uniqueness and individuality of each student with special needs, will affect the amount of time and planning general education teachers will need to successfully educate the students in their classroom. It will also dictate the amount of time needed for general education teachers to collaborate with special education teachers.

While not all students are classified with “labels” or diagnoses, such as LD, BD, ED, or MR, many teachers have preconceived notions and perceptions about ALL students with special needs. To some general education teachers, the classification of special needs is enough to turn them off to the idea of educating these students in their classrooms. What teachers with preconceived notions about students with special needs fail to realize, is the student is a person regardless of his/her diagnosis.

As diagnostic labels “currently exist, they describe only negative aspects of the person’s life and do not elucidate human strength or the process of human change” (Lopez, Edwards, Pedrotti, Prosser, LaRue, Spalitto, & Ulven, 2006, p. 260). Diagnostic labels focus solely on “that which is not working in a person’s life” (p. 259). There is little focus, if any, on the strengths of the student; rather the focus is on his/her limitations. By focusing on the limitations, the child becomes his or her disability. He/she is viewed as having multiple limitations, when in reality their disability does not define him/her.

Teachers who are negatively influenced by labels focus on what they believe the label will limit students from doing and what additional work having that student in class will do to them (the teacher). What these teachers are not focusing on is what these students can do and what means the teachers needs to take in order to help the students be successful.

Much literature has been written on the negative effect of labeling students with special needs, and much of that literature focuses on the labels’ ability to influence general education teachers’ attitudes about the students prior to even having them in class. A study, conducted by Weisel and Tur-Kaspa (2002), produced findings which indicate teachers’ knowledge of students’ labels prior to having them in class affects their attitudes.

It is important to note not all general education teachers have, or will have, personal experience working with students with special needs in their classrooms. It is also important to note attitudes can still be formed regardless of direct and personal contact to these students. Weisel and Tur-Kaspa (2002) did find in their study that attitudes did in fact vary between those teachers who had direct contact with students with special needs and those teachers who did not. Surprisingly, Weisel and Tur-Kaspa's findings indicated teachers without contact with students with special needs had more positive attitudes than those who were in direct contact with them. Weisel and Tur-Kaspa do make note "direct contact may have either positive or negative effects on teachers' attitudes toward their students, depending on its structure, quality, intensity, and the degree of reality of prior beliefs" (p. 8). For many teachers, beliefs and attitudes about students with special needs are based on fallacies rather than facts and a general misunderstanding of what it means to have special needs.

Secondary general education teachers are feeling added pressure under No Child Left Behind to make students proficient as assessed by standardized tests. The literature shows teachers feel students with special needs or have labels take more time to plan for and to teach (Zigmond, Levin, & Laurie, 1985; Weisel & Tur-Kaspa, 2002; Lopez, Edwards, Pedrotti, Prosser, LaRue, Spalitto, & Ulven, 2006). In addition, general education teachers do not believe they will be given additional time or resources to plan for or teach these students effectively (Van Reusen, Soho, & Barker, 2001). This literature supports the hypothesis general education teachers who have more students with special needs in their classroom will have more negative attitudes towards those students.

## **Research Question/Hypotheses 4 - Gender**

As seen above, much research has been done regarding general education teachers' attitudes and their relation to training, experience, and contact with students with special needs. Little research has been done, however, regarding general education teachers' attitudes in relation to gender. However, one study, conducted by Leyser and Tappendorf (2001) on teachers' attitudes towards inclusion, did reveal female teachers had significantly higher scores than males on what was referred to as "The Social Growth Factor", indicating a more positive attitude toward the social aspects of inclusion. Female teachers who participated in Lesyer and Tappendorf's study also appeared to make more modifications and accommodations for students with special needs than the male teachers who participated in the study. Because of these results, "there is some indirect support available for this finding suggesting that female teachers are more supportive of mainstreaming than male teachers" (p.758). Again, while there is not a great deal of literature in this area, based on Lesyer and Tappendorf's study, one could hypothesize general education teachers who are male would have more negative attitudes about having students with special needs in their classroom.

## **Research Questions/Hypotheses 5 and 6 - Curricular Area Taught and Type of Class Taught**

Currently, there is no research on general education teachers' attitudes towards inclusion based on the curricular area taught and the type of class taught (required verses elective). Because of this lack in the literature, the experience of special education teachers was used to form the hypotheses for these two questions.

Because Social Studies and Science require students to read and write well, it would stand to reason educators who teach Social Studies or Science will have more negative

attitudes towards students with special needs than those who teach Math, English, or Physical Education, which are skill based and can be broken down into ‘skill sets’ if a student is experiencing problems. Students take elective classes based on their interests or passions. In addition, the students may have knowledge about and/or skills in the content of the elective class. However, students have no choice but to take the ‘required’ courses, which may be viewed as boring or uninteresting. It would then follow, general education teachers who teach the required courses would have more negative attitudes towards working with students with special needs than those who teach elective classes.

### **Summary**

There is a large amount of literature on general education teachers’ attitudes towards working with students with special needs. This review of literature focused on several areas. The first area was an overview of the laws and court cases that led up to, or actually mandated the inclusion of students with special needs in the general education classroom. Specifically, the overview reviewed sections of No Child Left Behind (NCLB), the Education for All Handicapped Children Act (EAHCA), the Individuals with Disabilities Education Act (IDEA), and the *Pennsylvania Association for Retarded Citizens (PARC) v. Pennsylvania* and the *Mills v. District of Columbia Board of Education* court cases. The literature focused on the role each played in the inclusion of students with special needs in the general education classroom.

The second part of this literature review examined current studies on general education teachers’ attitudes towards inclusion. Specifically, the studies mentioned in the literature review focused on general education teachers’ attitudes about working with students with special needs in the general education classroom, as it correlated with their

college special education training, years of teaching experience, the number of students with special needs with whom they work, and gender. The studies presented in the literature review indicated there is correlation between general education teachers' attitudes toward inclusion and the number of courses they have had in college on working with students with special needs, their years of teaching experience, the number of students with special needs with whom they work, and their gender.

More specifically, the literature regarding general education teachers' attitudes towards inclusion and their training indicated more special education training seemed to correlate with more positive attitudes towards inclusion (Bender, Vail and Scott (1995), Hasting and Oakford (2003), Lesyer and Tappendorf (2001), Pernell, McIntyre and Bader (2001), and Van Reusen, Soho, and Barker (2001)). These studies also supported the idea that the amount of training general education teachers have about working with students with special needs correlates with general education teachers' attitudes about working with them in the general education classroom.

In regard to general education teachers' attitudes towards inclusion and years of teaching experience, the literature mentioned indicated more years of teaching experience correlates with more negative attitudes towards inclusion. Thus, fewer years of teaching experience correlates with less negative attitudes towards inclusion.

Not surprisingly, the literature made note teachers who have less contact with students with special needs tend to have more positive attitudes about them. In contrast, those teachers who have more direct contact with students with special needs have more negative attitudes towards them. What the research does not show is whether teachers' attitudes were affected by more direct contact **time** with students with special needs, or by more direct

contact with **many** students with special needs. The question then lies in whether general education teachers' attitudes correlate with the number of students with special needs with whom they work, or the amount of time these teachers have to work with them.

As seen in the literature review, there is little data on gender and its correlation to general education teachers' attitudes about inclusion. What data was found suggests gender does correlate with teachers' attitudes, and female teachers have more positive attitudes towards inclusion than male teachers. Research still needs to be conducted on general education teachers' attitudes and how they correlate with the curricular area in which they teach.

## CHAPTER 3. METHODS AND PROCEDURES

### Introduction

The purpose of this study was to examine high school general education teachers' attitudes about educating students with special needs in their classrooms and ascertain whether those attitudes were impacted by gender, number of years of teaching experience, curricular area taught, type of classes taught (required or elective), number of students with special needs in the classroom, and if a required course specifically designed for working with students with special needs in college was taken. A new survey instrument titled *General Education Teachers' Perceptions of Teaching Students with Disabilities*, was used to determine general education teachers' attitudes towards having students with special needs in the general education classroom. The survey can be found in Appendix A.

### Participants

The population of interest in this research study was high school general education teachers at a random selection of nine participating school districts throughout the state of Iowa. The nine participating high schools were randomly selected using a random numbers table that included all 333 school districts in the state of Iowa that served students in grades 9-12. Schools districts were located using data sources from the Iowa Department of Education's website. Each school district was provided with a number code and those that did not have grades 9-12 were excluded. In total, there were 333 school districts included in the random selection. Based on a random numbers table, nine school districts were selected for use in this study. Staff information was obtained from each individual school's website,



and only staff members who taught general education classes were included as participants for this study.

The nine participating school districts were spread out across the state of Iowa. Each school varied in the number of students in grades 9-12 and general education staff who met the criteria of the study. Table 1 shows the general location of the school, the number of students in grades 9-12 (range from 355 to 4355), and the number of general education teachers who were invited to participate in the study (range from 12 to 74). The total number of participants was 248.

**Table 1. Description of School Districts in Study**

| School | Location in Iowa | Enrollment in Grades 9-12 | # of General Education Teachers |
|--------|------------------|---------------------------|---------------------------------|
| 1      | Northwest        | 2108                      | 38                              |
| 2      | Northwest        | 488                       | 16                              |
| 3      | Northwest        | 969                       | 20                              |
| 4      | Northwest        | 583                       | 20                              |
| 5      | West             | 470                       | 19                              |
| 6      | Southwest        | 2125                      | 31                              |
| 7      | Central          | 552                       | 18                              |
| 8      | East             | 355                       | 12                              |
| 9      | Southeast        | 4355                      | 74                              |
| TOTAL  |                  | 12005                     | 248                             |

There were a combined total of 248 general education teachers at the nine participating school districts; however, due to email complications with eight teachers' emails at school number seven, only 240 were asked to participate. Out of all 240 general

education teachers asked to participate, 64 surveys were returned for a response rate of 26%. This low response rate is not unexpected due to several factors: unknown sender, work email/filtration, and demands of workday. Each participant was sent an email to his or her work provided school email address by my Iowa State University provided email address. Due to being an unknown sender, the teacher who received the email may have disregarded the email as SPAM, or the schools' junk email filtration system may have done so on its own. Those who accessed the email may not have responded to the survey due to the already existing demands of the teaching workday, which includes teaching, planning, and grading, along with many other things.

### **Human Subjects Procedures**

Approval was obtained from the Human Subjects Research Office at Iowa State University prior to conducting this survey (Appendix B). Each general education teacher at the participating school districts was invited to participate in this study via an email sent to his/her work provided school email address. Embedded in each email was an outline of the study, followed by an informed consent document, and a link that led the participant to the survey. Participants were made aware that their completion of the survey indicated that they voluntarily agreed to participate in this study, that the study had been explained to them, that they had been given the time to read the document and that their questions had been satisfactorily answered.

Participants in this study were made aware that their participation in this study was completely voluntary and that they could refuse to participate or leave the study at any time. Participants were also informed that they could skip any question that they did not wish to

answer or that made them feel uncomfortable. Participants were provided with contact information to allow for questions and concerns to be asked.

Hesitation to participate, due to concerns about being identified, was recognized as a potential risk. In order to ensure confidentiality to the extent permitted by law, the following measures were taken: participants were not asked to provide their name, their school district, or any other easily identifiable data. All participants were coded by number, and the surveys were erased after the completion of the study. Participants were coded in the manner their survey was submitted online. Example: the first person to submit his/her survey was coded 1 and the last participant to submit his/her survey was 64. In order to protect participant privacy, no electronic identifiers, such as IP addresses or cookies, were collected or retained with the data. Participants were instructed to close their internet browser and/or clear the cache after completing this survey.

The results of the survey were kept on a password-protected computer, and no identifying information was shared in any written document that came out of this study. The only persons who had access to this data were the Principal Investigator and my major professor.

## **Instrumentation**

### **Survey Instrument**

A survey, *General Education Teachers' Perceptions of Teaching Students with Disabilities*, was designed for use in this study. A survey was created instead of using an already existing one to allow for specific questions to be asked and specific demographic information to be obtained. The survey had two parts. The first part asked the participants to respond to statements concerning their perceptions about students with special needs being

taught in their classrooms. A six-point Likert scale was used to measure the extent of agreement they had to each of the statements (see Appendix A). The second part of the survey asked participants for specific demographic information about themselves.

### ***Validity***

The statements used in this survey were based on the literature. In order to address validity, draft statements for use on the survey were presented to three faculty members knowledgeable about special education or survey design. Changes were made to the statements and to the demographic part of the survey using their initial feedback. It was then field tested using seven high school teachers, both general education and special education. These teachers were asked to comment on the survey statements, to check for clarity and personal biases by the researcher, and to comment on the format. Changes were again made to the survey based on these teachers' feedback. Lastly, the survey was again presented to the three faculty members for final approval. One faculty member helped with the formatting and sequencing of the statements.

### ***Reliability***

When studying perceptions, it is common to rely on self-report. Perceptions are personal, hard to measure, and cannot be coded as right or wrong. However, it is important to address reliability of any survey instrument. The Spearman-Brown formula was used to test reliability. The coefficient was .714 (N=64), which is considered acceptable. The Spearman-Brown measures internal consistency by estimating the "full-length test reliability using all questions on the instrument" (Creswell, 2002, p. 182). Other split half tests rely on

information from half the test. Since the survey used in this study consisted of only twenty-three statements, it was decided the Spearman-Brown was more appropriate.

### **Procedures**

An initial email inviting participants to participate in this study was sent during the first week of April 2009. The initial email sent to all participants provided an introduction to the principle investigator and the purpose for contact. An overview of the study, as well as informed consent and a link to the survey were also provided. Two weeks later a reminder email was sent to all participants reminding them about the study and re-inviting them to participate if they had not done so already. Informed consent, along with a link to the study, was provided in this email as well. Two weeks later a third email was sent to all participants thanking them for their participation and informing them of the survey closing date, which was Sunday, May 12, 2009. Once again, a link to the survey, as well as informed consent, were also provided in the email. A copy of all three emails sent can be found in Appendix C.

Individuals who chose to participate in this study were prompted to access a link provided in each of the emails. This link gave each participant access to the study's survey, which was created using an online survey instrument website called Qualtrics. As mentioned above, informed consent was assumed when participants accessed the website and the survey was completed after each participant submitted their surveys online.

### **Data Analysis**

Data were analyzed using the computer software program SPSS. Frequencies and percentages were calculated on the demographics of the respondents. Frequencies, means, and standard deviations were calculated for each of the statements.

Because the research questions focused on the attitudes on general education teachers, an overall attitude score was calculated for each participant by adding together response to each of the statements (S) and dividing by the total number of statements ( $S1 + S2 + S3 + S4 + S5 + S6 + S7 + S8 + S9 + S10 + S11 + S12 + S13 + S14 + S15 + S16 + S17 + S18 + S19 + S20 + S21 + S22 + S23 / 23 = \text{Overall Attitude}$ ). Individuals with overall attitude scores that ranged from 1-2 were considered to have negative attitudes towards inclusion, those who had scores ranging from 3-4 were considered to have neutral attitudes towards inclusion, and those who had scores ranging from 5-6 were considered to have positive attitudes towards inclusion. The overall attitude score was used when completing the statistical analyses for each research question. The statistical analyses used to answer the research questions were dependent on the question.

## **Coding**

The survey consisted of twenty-three statements, fifteen of which were phrased positively (S1, S2, S3, S4, S6, S10, S11, S12, S13, S18, S19, S20, S21, S22, and S23) and eight that were phrased negatively (S5, S7, S8, S9, S14, S15, S16, S17). Respondents were asked to rate each of the items on a six point Likert-scale ranging from strongly disagree to strongly agree. The choices for the Likert-scale options for each of the statements were strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree. Table 2 shows the coding used to enter the data to address the positive and negative statements. The coding in Table 2 was only used for the purpose of calculating scale scores. Scores on all other statements retained their original values when statistics were run on them.

**Table 2. Coding of Positive and Negative Statements**

|                     | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree |
|---------------------|-------------------|----------|-------------------|----------------|-------|----------------|
| Positive Statements | 1                 | 2        | 3                 | 4              | 5     | 6              |
| Negative Statements | 6                 | 5        | 4                 | 3              | 2     | 1              |

Mean scores between 4.4 and 6 on positively stated statements and mean scores between 1 and 2.6 on negatively stated statements were considered to show positive attitudes towards those statements. Mean scores between 2.7 to 4.3 on positively-stated statements and mean scores between 2.7 to 4.3 on negatively-stated statements were considered to show neutral attitudes. Finally, mean scores between 1 to 2.6 on positively-stated statements and 4.4 to 6 on negatively-scored statements were considered to show negative attitudes towards those statements.

### **Research Questions: 1 - Training, 3 – Number of Students with Special Needs, 4 – Gender, and 6 – Type of Class**

A t-test was run comparing general education teachers' overall attitude based on whether or not a college course was taken specifically designed around working with students with special needs, whether they currently had or had ever had students with disabilities in their classroom, the number of students with special needs in their classroom during the year, gender, and the type of class taught (required or elective). A t-test was also used to analyze differences in each of the above areas on individual statements. Only those differences considered statistically significant are reported for the individual statements. If a p-value was below .05 for these t-tests, it was considered significant.

## **Research Questions: 2 – Years of Teaching Experience and 5 – Curricular Area Taught**

The data analysis used to answer research questions two and six was an analysis of variance (ANOVA). A Bonferroni ANOVA was then conducted on the individual statements. This type of ANOVA was used at the suggestion of a faculty member in special education because of the multiple contrasts being done (seven and six respectively). Any  $p$ -value below .025 was considered significant.



## CHAPTER 4. RESULTS

The purpose of this study was to examine high school general education teachers' attitudes about educating students with special needs in their classrooms and to ascertain whether those attitudes were impacted by gender, number of years of teaching experience, curricular area taught, type of classes taught (required or elective), if a required course specifically designed for working with students with special needs in college was taken, and the number of students with special needs in the classroom. Specifically, the goal of this study was to determine what, if any, demographic factors impacted general education teachers' attitudes towards educating students with special needs in their classrooms.

The data analyses were guided by the research questions posed. This study used a two-part survey, *General Education Teachers' Perceptions of Teaching Students with Disabilities*, to provide answers to the questions. Each research question will be answered in this chapter. A description of the data used and the analyses done will be given. The results of the analyses will then be presented.

### Characteristics of Respondents

Table 3 summarizes the demographics of the respondents. The *typical* respondent to this survey was female, has taught either a required English or Math class for between 16 and 20 years, may or may not have had a course in special education, and typically has more than one student with special needs in her classroom.

Of the 64 general education teachers who responded, 27 (42.2%) were males and 37 (57.8%) were female. Thirty respondents (46.9%) had between 11 and 25 years of teaching experience. Twenty respondents (31.2%) had between 0 and 10 years experience, while the remaining respondents (n=14, 21.9%) had 26 or more years of experience.

The vast majority (n=42, 65.5%) of the respondents taught courses required for high school graduation (math, social studies, science, or English). The remaining respondents (n=22, 34.4%) taught elective courses. Twenty-two (34.4%) of the respondents taught courses that were classified as *other*. Examples of these “elective” courses include Technology, Pre-Engineering, Music, Business, Family and Consumer Science, Industrial Arts, and Speech. Twelve (18.7%) respondents taught Math and twelve (18.7%) taught English. Only three (4.7%) taught Physical Education.

The respondents were almost evenly split concerning specific college training related to working with students with special needs. Thirty-one (49.2%) had taken a course in college related to special education, and thirty-two (50.8%) had not taken such a course. One of the respondents did not indicate whether or not he/she had taken such a course.

Only one person out of the 64 who responded (1.6%) has never had a student with special needs in his/her classroom. All the other respondents (n=63, 98.4%), have had students with special needs in their classrooms. Currently, one of the respondents has no students with special needs in his/her classroom and four have only one student in their classroom (n=5, 7.8%); the other 58 (92.2%) have more than one in their classroom.

## **Data Analysis**

The statistical analyses used to answer the research questions were dependent on the question. This section will present descriptive statistics for each survey statement and each research question.

### **Descriptive Statistics**

Descriptive statistics for each of the survey statements and the overall attitude score can be found in Table 4. Mean scores ranged from 2.01 to 5.19. General education teachers,

**Table 3. Characteristics of Respondents**

| Characteristic                                   | N  | Percentage | (n) |
|--|----|------------|-----|
| Gender   | 64 |            |     |
| Male   |    | 42.2       | 27  |
| Female   |    | 57.8       | 37  |
| Years of Teaching Experience                     | 64 |            |     |
| 0-5 years  |    | 14.1       | 9   |
| 6-10 years                                       |    | 17.2       | 11  |
| 11-15 years                                      |    | 12.5       | 8   |
| 16-20 years                                      |    | 21.9       | 14  |
| 21-25 years                                      |    | 12.5       | 8   |
| 26-30 years                                      |    | 10.9       | 7   |
| 31 + years                                       |    | 10.9       | 7   |
| Type of Class                                    | 64 |            |     |
| Required   |    | 65.5       | 42  |
| Elective   |    | 34.4       | 22  |
| Curricular Area                                  | 64 |            |     |
| Math   |    | 18.7       | 12  |
| Social Studies                                   |    | 9.4        | 6   |
| English  |    | 18.7       | 12  |
| Science  |    | 14.1       | 9   |
| Physical Education                               |    | 4.7        | 3   |
| Other  |    | 34.4       | 22  |
| College Course in Special Education              | 63 |            |     |
| Yes  |    | 49.2       | 31  |
| No   |    | 50.8       | 32  |
| Students w/ Special Needs in Classroom           | 64 |            |     |
| Yes  |    | 98.4       | 63  |
| No   |    | 1.6        | 1   |
| Number of Students w/ Special Needs in Classroom | 64 |            |     |
| 0-1  |    | 7.8        | 5   |
| More than 1                                      |    | 92.2       | 58  |

**Table 4. Descriptive Statistics on Survey Statements and Overall Attitude Score (N=64)**

| Statement  | Mean | SD   |
|--|------|------|
| S4. Students with special needs can succeed in my classroom.   | 5.19 | .94  |
| S2. Students with special needs feel comfortable in my classroom.  | 5.02 | .79  |
| S13. Special education serves an important purpose for the students who are classified as needing those services.  | 5.00 | 1.07 |
| S11. I am willing to modify assignments, lessons, and tests to accommodate students with special needs.  | 4.80 | 1.21 |
| S1. I am familiar with the Individuals with Disabilities Act.  | 4.77 | 1.00 |
| S19. I have a positive attitude about working with students with special needs.  | 4.70 | .90  |
| S10. Students with special needs need special accommodations and modifications.  | 4.64 | 1.17 |
| S12. In my school, teachers always provide students with special needs the required accommodations and modifications needed, as indicated in the students IEP. | 4.44 | 1.18 |
| S22. I understand the law on what is required of me, as a general education teacher, in educating students with special needs.                                 | 4.44 | 1.10 |
| S6. I enjoy working with students with special needs.  | 4.30 | 1.06 |
| S5R. Students with special needs are a challenge to work with.   | 4.27 | 1.09 |
| S20. I am knowledgeable about how to appropriately educate students with special needs in my classroom.  | 3.95 | 1.19 |
| S23. I am a supporter of full inclusion.   | 3.92 | 1.45 |
| Overall Attitude Score *   | 3.84 | .41  |
| S18. My administration does a good job communicating with me about who will be in my classroom.  | 3.81 | 1.55 |
| S21. I have had sufficient training to educate students with special needs in my classroom.  | 3.61 | 1.34 |
| S7R. Students with special needs should be required to do the same amount of work (assignments and tests) as the general education students do.                | 3.22 | 1.21 |
| S3. Students with special needs feel comfortable in all general education classrooms.  | 3.25 | 1.10 |

**Table 4. Descriptive Statistics on Survey Statements and Overall Attitude Score (N=64) continued**

| Statement   | Mean | SD   |
|---|------|------|
| S9R. Students with special needs should be required to do their work in the same classroom as the general education students do.      | 2.94 | 1.19 |
| S14R. Many of my classroom management issues are caused by students with special needs.   | 2.70 | 1.37 |
| S15R. Many of my classroom management issues could be reduced if I did not have students with special needs in my classroom.          | 2.48 | 1.22 |
| S16R. I am sometimes caught off-guard when I discover students with special needs are enrolled in my classes.                         | 2.45 | 1.32 |
| S8R. Students with special needs should be required to do their work in the same amount of time as the general education students do. | 2.36 | .98  |
| S17R. I sometimes feel angry when I see students with special needs are enrolled in my classes.                                       | 2.02 | 1.09 |

\* Overall Attitude Score = Sum of S1 through S23 / 23

R - reversed

as a whole, agreed ( $M > 4.3$  or  $M < 2.6$ ) they were not only familiar with IDEA (S1), they understood their responsibilities as general education teachers under that law (S22). As a whole, the respondents also agreed special education served an important purpose (S13). They also agreed students with special needs could be successful in their classrooms (S4) and these students felt comfortable (S2). Respondents agreed students with special needs require accommodations and modifications (S10) and they, as the general education teacher, are willing to make those accommodations and modification (S11). They agreed students with special needs may need additional time to complete their work (S8R). They also agreed their colleagues in their school were willing to make needed accommodations and modifications for these students (S12). Respondents agreed classroom management issues would not be

reduced if these students were excluded from the classroom (S15R). The general education teachers in this study also agreed they are not caught off-guard when they find out students with special needs are in their classroom (S16R), nor were they angry when these students were placed in their classroom (S17R). Finally, they agreed they had positive attitudes about working with students with special needs (S19).

### **Research Question 1 - Training**

This research question asked, “Is there a difference in general education teachers’ attitudes towards having students with special needs in the general education classroom based on those who have taken a college course specifically designed for working with students with special needs versus those who have not taken a college course specifically designed for working with students with special needs?” A t-test (see Table 5) comparing the mean overall attitude scores of general education teachers who had taken a college course specific to special education and those teachers who had not taken such a course was done. According to this test there is no statistically significant difference between the attitudes of general education teachers who had taken a college course concerning teaching students with special needs and those who had not taken such a course.

A t-test comparing the overall attitude mean scores of general education teachers towards individual statements based on whether or not he/she had taken a college course specifically designed for working with students with special needs indicated there was a statistically significant difference on three of the statements (see Table 6). On all three statements, general education teachers who had had a college course related to teaching students with special needs had higher mean scores (agreeing more) on statements about their

knowledge to work with students with special needs, their training, and their understanding of what the law requires of them as general education teachers.

**Table 5. t-test Results Between General Education Teachers With and Without Training for Overall Attitude**

|                  | N  | M    | SD  | t    | df | p    |
|------------------|----|------|-----|------|----|------|
| With Training    | 31 | 3.89 | .35 | 1.01 | 61 | .118 |
| Without Training | 32 | 3.79 | .46 |      |    |      |

While there were significant differences found on three specific statements, there was no statistically significant difference between the overall attitudes. Therefore, the hypothesis

**Table 6. t-test Results Between General Education Teachers With and Without Training for Selected Statements**

| Statement   | Training |      |      | No Training |      |      | t    | df | p      |
|---|----------|------|------|-------------|------|------|------|----|--------|
|   | N        | M    | SD   | N           | M    | SD   |      |    |        |
| S20. I am knowledgeable about how to appropriately educate students with special needs in my classroom. | 31       | 4.32 | 1.17 | 32          | 3.63 | 1.13 | 2.41 | 61 | .019 * |
| S21. I have had sufficient training to educate students with special needs in my classroom.             | 31       | 4.10 | 1.30 | 32          | 3.16 | 1.25 | 2.93 | 61 | .005 * |
| S22. I understand the law on what is required of me as a general education teacher.                     | 31       | 4.74 | .93  | 32          | 4.13 | 1.18 | 2.30 | 61 | .025 * |

\* p<.05

that general education teachers who had taken a college course related to working with students with special needs would have a more positive overall attitude towards working with these students was not supported.

## **Research Question 2 - Years of Teaching Experience**

This research question asked, “Is there a difference in general education teachers’ attitudes towards having students with special needs in the general education classroom based on number of years of teaching experience?” An analysis of variance (ANOVA) comparing the mean overall attitude score of general education teachers to the number of years teaching experience they had was conducted. There was no statistically significant difference (see Table 7).

**Table 7. Analysis of Variance – Overall Attitude Score by Years of Teaching Experience**

|                | Sum of Squares | df | Mean Square | F   | p   |
|----------------|----------------|----|-------------|-----|-----|
| Between Groups | .66            | 6  | .11         | .64 | .70 |
| Within Groups  | 9.76           | 57 | .17         |     |     |
| Total          | 10.42          | 63 |             |     |     |

A Bonferroni ANOVA test comparing the mean scores of general education teachers’ attitudes on individual statements, based on their years of teaching experience indicated there was a statistically significant difference on statement S15R - reduction of classroom management issues (see Table 8). The differences were between teachers who had taught 16-20 years and 11-15 years and between teachers who had taught 16-20 years and 21-25 years



(see Table 9). Even though there were those differences, the hypothesis that general education teachers with more years of teaching experience would have more negative attitudes towards working with students with special needs was not supported.

**Table 8. Bonferroni Analysis of Variance for Statement 15 – Overall Attitude Score by Years of Teaching Experience**

|                | Sum of Squares | df | Mean Square | F    | p     |
|----------------|----------------|----|-------------|------|-------|
| Between Groups | 33.35          | 6  | 5.56        | 5.23 | .00 * |
| Within Groups  | 60.64          | 57 | 1.06        |      |       |
| Total          | 93.99          | 63 |             |      |       |

\* p<.05

**Table 9. Bonferroni Analysis of Variance for Statement 15 – Overall Attitude Score by Years of Teaching Experience Between Groups**

| (I) Experience (Mean) | (J) Experience (Mean)   | Mean Difference | Standard Error | p   |
|-----------------------|-------------------------|-----------------|----------------|-----|
| 16-20 years<br>(3.57) | 0-5 years<br>(2.44)     | 1.13            | .44            | .28 |
|                       | 6-10 years<br>(2.27)    | 1.30            | .42            | .06 |
|                       | 11-15 years<br>(1.38)   | 2.20 *          | .46            | .00 |
|                       | 21-25 years<br>(1.75)   | 1.82 *          | .46            | .00 |
|                       | 26-30 years<br>(3.00)   | .57             | .48            | 1.0 |
|                       | 31 plus years<br>(2.29) | 1.29            | .48            | .20 |

\* p<.25

### **Research Question 3 - Number of Students with Special Needs in the General Education Classroom**

This research question asked, “Is there a difference in general education teachers’ attitudes towards working with students with special needs in the general education classroom based on how many students with special needs general education teachers typically have in a year in their classrooms?” Respondents were to indicate two things: whether or not they had students with special needs in their classroom and how many students with special needs were in their classroom. The first question was simply answered yes or no. The second question asked respondents to indicate if they had no such students, one such student, or more than one such student in their classroom. Teachers were provided with the opportunity to indicate how many students with special needs they had in their classroom; however, not all teachers chose to do so. Due to the low number of respondents in two of the subgroups (no students with special needs in their classroom and one student with special needs in their classroom), it was decided to focus on the data pertaining to whether or not general education teachers had students with special needs in their classrooms. It is important to note even in this set of data, only one general education teacher indicated not having students with special needs in their classroom.

A t-test comparing the overall attitude mean scores of general education teacher with and without students with special needs in their classroom indicated there is no statistically significant difference between general education teachers’ attitudes on working with students with special needs, based on whether or not they have students with special needs in their classroom (see Table 10). Therefore, the hypothesis that general education teachers who have

students with special needs in their classroom will have more negative attitudes towards those students was not supported.

**Table 10. t-test Results Between General Education Teachers with Students with Special Needs in the Classroom and General Education Teachers without for Overall Attitude**

|                      | N  | M    | SD  | t   | df | p   |
|----------------------|----|------|-----|-----|----|-----|
| Have Students        | 63 | 3.84 | .41 |     |    |     |
|                      |    |      |     | .78 | 62 | .44 |
| Do Not Have Students | 1  | 3.52 | .   |     |    |     |

#### **Research Question 4 - Gender**

This research question asked, “Is there a difference between male and female general education teachers’ attitudes towards having students with special needs in their classrooms?” A t-test (see Table 11) comparing the mean overall attitude scores of general education teachers who are male with those who are female was done. According to this test there is no statistically significant difference between the attitudes related to gender.

**Table 11. t-test Results Between Male and Female General Education Teachers for Overall Attitude**

|        | N  | M    | SD  | t    | df | p   |
|--------|----|------|-----|------|----|-----|
| Male   | 27 | 3.93 | .45 |      |    |     |
|        |    |      |     | 1.50 | 62 | .56 |
| Female | 37 | 3.77 | .36 |      |    |     |

A t-test comparing the overall attitude mean scores of general education teachers' attitudes towards individual statements based on gender indicated there was a statistically significant difference on four statements (see Table 12). In general, the male general education teachers agreed the teachers in their schools always provided students with special needs the required accommodations and modifications (S12) and that their administration does a good job communicating with them (S18). Female general education teachers generally agreed they were familiar with the law (S1) and that students with special needs may need to complete their work in a different room (S9R). While there were differences between male and female

**Table 12. t-test Results Between Male and Female General Education Teachers for Selected Statements**

| Statement   | Male |      |      | Female |      |      | t     | df | p      |
|---|------|------|------|--------|------|------|-------|----|--------|
|   | N    | M    | SD   | N      | M    | SD   |       |    |        |
| S1. I am familiar with the Individuals with Disabilities Education Act (IDEA).  | 27   | 4.41 | 1.19 | 37     | 5.03 | .76  | -2.54 | 62 | .014 * |
| S9R. Students with special needs should be required to do their work in the same classroom as the general education students do.                              | 27   | 3.33 | 1.04 | 37     | 2.65 | 1.11 | 2.35  | 65 | .022 * |
| S12. In my school teachers always provide students with special needs the required accommodations and modifications needed, as indicated on the students IEP. | 27   | 4.89 | 1.05 | 37     | 4.11 | 1.73 | 2.75  | 62 | .008 * |
| S18. My administrations does a good job communicating with me about who will be in my classroom.  | 27   | 4.30 | 1.17 | 37     | 3.46 | 1.71 | 2.19  | 62 | .032*  |

\* p<.05

teachers on four specific statements, there was no statistically significant difference between them on the overall attitude. Therefore, hypothesis that male general education teachers would have more negative attitudes towards working with students with special needs was not supported.

### **Research Questions 5 - Curricular Area Taught**

Research question five asked, “Is there a difference in general education teachers’ attitudes towards working with students with special needs based on their curricular area taught (i.e. Math, English, Social Studies, Science, Physical Education, and Other)?” An analysis of variance (ANOVA) comparing the mean overall attitude score of general education teachers to the curricular areas they taught was conducted. There was no statistically significant difference (see Table 13).

A Bonferroni ANOVA test comparing the mean scores of general education teachers’ attitudes on individual statements, based on the curricular area taught, indicated there was not a statistically significant difference at the .025 level. Therefore, the hypothesis general education teachers who taught Social Studies and Science would have more negative attitudes than those who taught Math, English, or Physical Education was not supported.

**Table 13. Analysis of Variance – Overall Attitude Score by Curricular Area Taught**

|                | Sum of Squares | df | Mean Square | F   | p   |
|----------------|----------------|----|-------------|-----|-----|
| Between Groups | .47            | 5  | .09         | .54 | .74 |
| Within Groups  | 9.95           | 58 | .17         |     |     |
| Total          | 10.41          | 63 |             |     |     |

## Research Questions 6 – Type of Class

Research question six asked, “Is there a difference in general education teachers’ attitudes towards working with students with special needs in the general education classroom based on the type of classes taught (i.e. required courses or elective courses)? A t-test (see Table 14) comparing the mean overall attitude scores of general education teachers who taught required courses with those who taught elective courses was done. According to this test there is no statistically significant difference between attitudes related to the type of class taught.

**Table 14. t-test Results Between Type of Class Taught for Overall Attitude**

|          | N  | M    | SD  | t    | df | p   |
|----------|----|------|-----|------|----|-----|
| Required | 42 | 3.80 | .34 |      |    |     |
|          |    |      |     | -.12 | 62 | .91 |
| Elective | 22 | 3.85 | .52 |      |    |     |

A t-test comparing the mean scores of general education teachers’ overall attitudes towards individual statements based on the type of class they taught (required vs. elective), indicated there was a statistically significant difference at the .05 level between general education teachers’ attitudes who teach required classes and who teach elective classes on statements 9 (work requirements related to classroom) and 18 (administrative communication) (see Table 15). General education teachers who taught required courses agreed students with special needs may not be able to do their work in the same classroom with their peers. General education teachers who taught elective courses agreed their administration does a good job

communicating with them about who will be in their classrooms. Even though there were significant differences on specific statements, there was no significant difference between the two groups based on overall attitude. The hypothesis that general education teachers who taught required courses would have more negative attitudes towards working with students with special needs was not supported.

**Table 15. t-test Results Between General Education Teachers Who Teach Required Courses and Those Who Teach Elective Courses for Selected Statements**

| Statement  | Required |      |      | Elective |      |      | t     | df | p     |
|--|----------|------|------|----------|------|------|-------|----|-------|
|  | N        | M    | SD   | N        | M    | SD   |       |    |       |
| S9R. Students with special needs should be required to do their work in the same classroom as the general education students do. | 42       | 2.71 | 1.24 | 22       | 3.36 | 1.00 | -2.12 | 62 | .04 * |
| S18. My administrations does a good job communicating with me about who will be in my classroom.                                 | 42       | 3.50 | 1.47 | 22       | 4.41 | 1.56 | -2.30 | 62 | .03*  |

R-Reversed  
\* p<.05

## CHAPTER 5. SUMMARY AND DISCUSSION

While there were no statistically significant differences found in general education teachers' overall attitude toward including students with special needs in their classrooms with regard to training, years of teaching experience, whether or not there were students with special needs in the classroom, gender, the curricular area taught, or the type of class taught, this researcher did find some interesting results. As a whole, general education teachers in this study expressed neutral to positive attitudes, as indicated by the mean scores on all 23 statements in the survey. Specifically, the general education teachers in this study expressed positive attitudes towards S1 (familiarity with IDEA) S2 (comfort level), S4 (student success), S8R (requirements related to time), S8R (requirements related to time), S10 (modifications and accommodations), S11 (willingness to modify and accommodate) S13 (purpose of special education), S14R (cause of classroom management issues), S15R (reduction of classroom management issues), S16R (caught off-guard associated with students with special needs), S17R (anger issues), and S19 (positive attitude in regards to students with special needs). What this data means is general education teachers in this study agreed students with special needs feel comfortable and are able to succeed in their classrooms. This positive attitude is necessary for the success of inclusion of students with special needs in the general education class. As the literature indicates, the amount of success students with special needs can have from inclusion heavily relies on general education teachers' attitudes towards having them in the general education classroom (Johnson, 2001; Weisel & Tur-Kaspa, 2002).

Despite the positive attitudes and beliefs about success, general education teachers in this study had a neutral attitude about supporting full inclusion. On average, the general



education teachers in this study slightly disagreed to slightly agreed ( $M=3.92$ ) with the statement: I am a supporter of full inclusion. These findings are similar to those of Zigmond, Levin, and Laurie's 1985 study, in which general education teachers indicated preference to not have students with special needs in their classrooms. While Zigmond, Levin, and Laurie's (1985) study did not specifically focus on whether or not teachers' supported inclusion, their attitudes about including students with special needs in their classroom indicates a similar non-supportive attitude as the teachers in this study.

General education teachers' responses differed regarding their attitudes on special education and accommodations and modifications. General education teachers in this study agreed special education serves an important purpose for the students who are classified as needing those services, yet they only slightly agreed to providing them with modification and accommodations, which is a large part of special education. Even though general education teachers acknowledge special education serves a purpose, they are not 100% willing to provide needed modifications and accommodations in their own classrooms. These findings are somewhat similar to the findings of Bender, Vail, and Scott, who in their 1995 study obtained data that indicated general education teachers are not implementing modified instruction that would benefit students with learning disabilities in their classrooms. It should be noted Bender, Vail, and Scott (1995) focused on the type of accommodations and modifications provided (which could be none), whereas this study focused on whether or not any accommodations and modifications were provided.

Specifically, when presented with statements regarding modifications and accommodations of assignments, tests, and lessons, the general education teachers in this study only slightly agreed students with special needs need specific accommodations and

modifications, and only slightly agreed they were willing, as well as teachers in their schools were willing, to modify assignments, lessons, and tests to accommodate these students. One general education teacher in this study expressed his/her frustration with modifying and accommodating assignments, in he/she felt “with 30 students in a classroom, having special needs students just adds to the work load--especially when some of the modifications require different tests, different assignments, and so on. Some things can't be modified--when we do Romeo and Juliet, how does one modify Shakespeare? Have them watch West Side Story? It's just not the same thing.” This person’s response reflects the fact having students with special needs in the general education classroom does require additional work, which some teachers may not be willing, or may not know how, to do. It is possible, the amount of work it takes to include students with special needs in the general education classroom affects the frequency with which general education teachers modify and accommodate. While no study specifically indicates this, the study conducted by Zigmond, Levin, and Laurie (1985) did obtain data that indicates general education teachers feel including students with special needs in their classroom adds additional demands on them, especially in area of lesson preparation. Lesson preparation takes time, which as noted above in the literature review, many teachers fear they will not get enough of to successfully include students with special needs in their classrooms (Van Reusen, Soho, & Barker, 2001).

In general, general education teachers in this study did disagree with the idea students with special needs should be required to do their work in the same amount of time and in the same classroom as the general education students. This disagreement indicates there may be some understanding of the necessity for modifications and accommodations for students with special needs, but possibly not a strong understanding of the requirements of the law

regarding students with special needs (general education teachers in this study only slightly agreed with understanding what is required of them by law as general education teachers educating students with special needs). This disagreement may also indicate there is a lack of overall training in working with students with special needs in the general education classroom (general education teachers in this study slightly disagreed with having had sufficient training to educate students with special needs in their classrooms). One general education teacher, in particular, did feel training affected his/her ability to accommodate, and he/she indicated by stating “not being trained in special education, it is hard at times to know how to accommodate.”

General education teachers are trained as content area specialists and are often not trained how to educate students with special needs in the classroom. While some teachers may have some training in the area of special education, it was not until recently a course on special education was required for teacher licensure. As seen in the literature review, there is some literature that supports the correlation between training and general education teachers' attitudes towards inclusion. Specifically, studies conducted by Lesyer and Tappendorf (2001), Pernell, McIntyre and Bader (2001), Hasting and Oakford (2003), Bender, Vail and Scott (1995), and Van Reusen, Soho, and Barker (2001) all indicate general education teachers with less special education training have more negative attitudes towards inclusion. When asked about having sufficient training to educate students with special needs in their classrooms, the general education teachers in this study slightly disagreed they had this training. Even though general education teachers in this study slightly disagreed to slightly agreed ( $M=3.61$ ) on average they had had sufficient training to educate these students, their

response to this statement indicates they did, in fact, feel they had some training; however, the amount is unclear.

Leyser and Tappendorf's (2001) study indicates the actual number of courses general education teachers take towards working with students with special needs correlates directly with their attitudes toward students with special needs. Specifically, their study indicates it was those general education teachers who had 3-6 or more courses on working with students with special needs who had positive attitudes, and those who had 1-2 had similar attitudes as those who had none (Leyser & Tappendorf, 2001). In this study, general education teachers were not asked how many classes they had taken, just simply whether or not one had been taken. It is also important to note because general education teachers did not take a college course on working with students with special needs (indicating a *no* response) does not necessarily mean they have not had training through professional development or in-service opportunities. One teacher in this study felt "most general education teachers do not have enough training in instructing students with special needs. This is why some courses need to be team taught, if possible."

Despite 63 of the 64 general education teachers in this study acknowledging having had students with special needs in their classrooms, the general education teacher did not agree that they felt caught off guard or angry at the sight of students with special needs enrolled in their classes. This positive attitude could be in large part related to the familiarity of having students with special needs in their classrooms, as full inclusion continues to be a large presence in high schools today.

The literature above makes mention of the fact students "who inhibit the education of others" are not always wanted in the general education classroom (Hastings & Oakford,

2003, p. 88). It is ironic then, the teachers in this study did not feel the students with special needs were causing classroom management issues, nor did they feel their classroom management issues could be reduced if students with special needs were not in their classroom.

## **Training**

Van Reusen, Soho, and Barker (2001), Bender, Vail, and Scott (1995), and Leyer and Tappendorf (2001), found general education teachers with training on working with students with special needs had more positive attitudes towards working with these students than those who did not have training. This study found there was no significant difference in the overall attitude between teachers with and without training, which is contrary to the literature. This finding might be explained because 36 (56%) of the 64 respondents had over 16 years of experience (see Table 3). Teacher education programs began requiring a course specific to working with students with disabilities only 10 to 12 years ago. It is important to note the number of courses taken was not asked in this survey. If it had been asked, it may have produced different findings. Leyer and Tappendorf's study indicated general education teachers who had only 1-2 courses had similar attitudes towards inclusion as those who had no training (2001). It is possible the general education teachers in this study who indicated having had training, may only have had 1 course, which according to Leyer and Tappendorf (2001) would explain why they had similar attitudes toward inclusion as those general education teachers who had no training.

There was a statistically significant difference between the attitudes of general education teachers who had taken a college course and those who had not on S20 – knowledgeable about working with these students, S21 – have had training, and S22 – know

what the law requires of me as a general education teacher. Not surprisingly, these statements all involved areas of special needs training. In general, general education teachers who had taken a college course in special education agreed they were knowledgeable about working with students with special needs, and they knew what the law requires of them, as general education teachers, concerning these students. Since a course in special education would include 'how to' strategies and would cover the law (IDEA), it would make sense they would feel knowledgeable. They also agreed they felt they had training to work with these students. Again, it makes sense since the question on the survey specifically asks if they had taken a college class and taking such a class would indicate 'training'. It should be noted we cannot assume all of the respondents who indicated they had taken a college course strongly agreed or slightly agreed with S21. It should also be noted those who had taken a college course specifically designed for working with students with special needs only slightly agreed they had sufficient training to educate students with special needs in their classrooms. This may indicate that even though some teachers had had training, it may not have been enough.

General education teachers' (with and without training) attitudes towards statements 20, 21, and 22 does support the hypotheses that general education teachers with training do have more positive attitudes than those without training; however, this is only significant on statements 20, 21, and 22. On all other statements there was no statistically significant difference, indicating general education teachers' attitudes, with and without training, were not, in fact, statistically different from one another.

### **Years of Teaching Experience**

This study indicated the attitudes of general education teachers do not differ in terms of the years of teaching experience. The general education teachers in this study expressed

neutral attitudes towards working with students with special needs in the general education classroom. This data is different from previous studies, such as Hastings and Oakford's (2003), which revealed teachers with more years of experience had more negative attitudes. The principle investigator for this study cannot explain the difference between the results of this study and that of Hastings and Oakford. Each possible category (0-5, 6-10, etc.) had a minimum of seven respondents. When coupled with the low response rate, there may have been a difference, but there was not enough power to detect that difference.

There was a statistically significant difference between how general education teachers who taught for 16-20 years felt on S15R, compared to those who taught for 11-15 and 21-25 years. General education teachers who had 16-20 years of teaching experience slightly disagreed many of their classroom management issues could be reduced if they did not have students with special needs in their classrooms, while those who taught for 11-15 and 21-25 years strongly disagreed. There are several possibilities for the statistical difference in general education teachers' attitudes between these categories of teaching experience. It is possible the general education teachers who have 16-20 years of teaching experience have or have had more students with special needs in their classroom who have had significant behavior issues. The general education teachers with 11-15 and 21-25 years may have had fewer or no students with special needs who have had significant behavior issues, or have had general education students who have caused the majority of their classroom management issues. The teachers who have taught for 16-20 years may have had more students with special needs in their classrooms at the time they completed the survey than those in the other two categories. Another explanation could be this group of respondents has hit their "teaching midlife crisis." While the number of students with

disabilities and the needs these students have may contribute to this crisis, there could be other things impacting these teachers. The requirements put upon them by No Child Left Behind may have an impact here; 33 of the respondents taught Math, English or Science (see Table 3). ALL students are to become proficient in these three areas by 2014. Another possibility for a teaching midlife crisis in this group of teachers could be the current economy and how it is impacting schools, especially small school districts. This data does not support the hypothesis, which suggested that general education teachers with fewer years of teaching experience would have more positive attitudes than those with more years of teaching experience. As a whole, general education teachers with all years of teaching experience levels gave similar responses.

### **Students with Special Needs in Class**

This study indicated the number of students with special needs in the general education classroom did not impact the attitude among general education teachers. General education teachers who indicated they had students with special needs in their classroom indicated a neutral attitude similar to those who indicated they did not have students with special needs in their classroom. Similarly, the specific number of students with special needs in the classroom (none, one, more than one) did not produce a significant difference in attitudes, as all general education teachers in these groups indicated having a neutral attitude towards working with students with special needs in the general education classroom. The reason for this finding may be because there were a total of five respondents who indicated they had no or one student with special needs in their classroom (see Table 3). In addition, only one respondent indicated he/she had never had and/or currently did not have students with special needs in the classroom. This data does not coincide with the previous study



conducted by Weisel and Tur-Kaspa (2002), which found teachers without contact with students with special needs had more positive attitudes than those who were in direct contact with them. These results do not support the hypothesis general education teachers who have more students with special needs in their classrooms will have more negative attitudes towards working with students with special needs in the general education.

## **Gender**

This study indicated there was no statistically significant difference between the overall attitude of female general education teachers and male general education teachers. The reason there was no difference may be related to the sample size. It could also be that the male respondents may be different than those who participated in previous studies on one or more demographics. This finding does not agree with previous studies; such as the study conducted by Lesyer and Tappendorf (2001), which indicated female general education teachers had a more positive attitude than male general education teachers towards the social aspects of full inclusion.

There were statistically significant differences in the ways females and males felt towards S1 (familiarity of IDEA), S9R (work requirements related to classroom), S12 (modifications and accommodations), and S18 (administrative communication). Females agreed, while males only slightly agreed, they were familiar with the Individuals with Disabilities Education Act (S1). Females disagreed students with special needs should be required to do their work in the same classroom as the general education students, while males only slightly disagreed with this statement (S9R). Both males and females slightly agreed in their school teachers always provide students with special needs the required accommodations and modifications needed, as indicated in the students' IEP (S12).

However, males had a slightly higher mean score (closer to agree) than females did. Males slightly agreed their administration does a good job communicating with them about who will be in their classroom (S18), while females slightly disagreed.

As a whole, the difference between male and female general education teachers' may be a result of compassion. Typically, females are more compassionate and caring than males, therefore, they would be more willing to provide students with their required needs (S9R), especially those required of them by law. It is further possible female general education teachers' compassion may be the reason why they familiarize themselves with law (S1), to be sure they are, in fact, doing what is considered best for each student. Being familiar with the law, female general education teachers would be able to better judge whether or not other teachers are, in fact, meeting the needs of these students, as required of them by law (S12). In terms of the statistically significant difference between male and female general education teachers' attitudes about administrative communication (S18), it is possible male and females have a different view on what acceptable communication is. Female teachers may consider acceptable communication to be in writing, more formal and/or in advance, whereas male general education teachers may consider more informal communication acceptable. The gender of the administrator may also have played a role. If most or all of the administrators in the buildings of the respondents were male, the male teachers may have felt comfortable with the type of communication used, whereas the female teachers may not have felt it was adequate.

This data does not support the hypotheses that male general education teachers would have more negative attitudes towards working with students with special needs in the general education classrooms than female general education teachers. The fact male general

education teachers agreed more than female general education teachers on two specific statements contradict the hypotheses entirely.

### **Curricular Area Taught**

There was no statistically significant difference between the attitudes of any curricular area teachers on any statement. The overall attitudes of general education teachers in this study, based on the curricular area taught (Math, Social Studies, English, Science, PE, Other), indicated a neutral attitude towards working with students with special needs in their classrooms. The reason for this finding may be because there is no difference. Regardless of the curriculum area, these teachers are required to know their content area and to ensure all students meet the standards and benchmarks found in the district's curriculum. Since, according to the respondents in this study, students with special needs are found or may be found in all classes, the teachers know No Child Left Behind requires ALL students are to learn.

Based on mean scores alone, PE teachers indicated more agreement (yet still neutral) towards working with students with special needs in their classrooms. The general education teachers who taught Social Studies had the second highest positive score, followed by Other, Math, Science, and then English. The finding that PE teachers had slightly more agreement may be because the amount of differentiation, and number accommodations and modifications necessary for teaching students with special needs in PE are tremendously less than those needed for teaching English, or other classes that rely heavily on reading and writing. These findings do not support the hypotheses that general education teachers who teach Social Studies and Science will have more negative attitudes towards educating students with special needs in the general education classroom than general education

teachers who teach Math, English, and Physical Education, as there was no statistically significant difference in general education teachers' attitudes despite what curricular area they taught.

### **Type of Class Taught**

This study also indicated there was no significant difference between general education teachers who taught required courses, such as Math, Social Studies, English, Science and PE, and those who taught elective courses, such as Technology, Physics, Pre-Engineering, Music, Business, Family and Consumer Science, Health, Industrial Arts, Talented and Gifted, Speech, and Foreign Languages. This finding is not necessarily surprising looking at the complexity of some of the electives courses participants indicated teaching. The complexity of a class can affect the number of accommodations and modifications needed for students with special needs to succeed. In that sense, it may be equally as difficult to include students with special needs in an elective course, such as Physics and Pre-Engineering.

There was a statistically significant difference between general education teachers' attitudes who teach required classes, and those who teach elective classes, on S9R (work requirements related to classroom) and S18 (administrative communication). The general education teachers who taught required classes disagreed that students with special needs should be required to do their work in the same classroom as the general education students do, while the general education teachers who taught elective classes only slightly disagreed. This may be because of the types of assignments, projects, and tests given in required courses versus elective courses. It is possible elective course provide more hands-on assignments and projects, which may lead teachers who teach those classes to feel removal from the general

education classroom is not necessarily needed. In terms of communication with administration about who would be enrolled in their classes, general education teachers who taught elective classes slightly agreed their administration did a good job of communicating with them, while those who taught required classes slightly disagreed their administration did a good. Due to the large number of students with special needs being placed in required courses because of graduation requirements, it may be more difficult for administrative communication with those teachers. The number of students with special needs in elective course will vary, and often may be none in courses such as Pre-Engineering, Foreign Language, Physics, and Talented and Gifted, allowing administrative communication to be faster and easier. Teachers who teach the elective courses may not have as many problems working with these students because those students “elect” to be in the course. The students, therefore, may have an interest, knowledge, and experience with the content of the elective course, which may make it easier for the general education teacher.

While the finding on the two individual statements do support the hypotheses that general education teachers’ who teach required courses will have a more negative attitude towards working with students with special needs in the general education classroom, the difference between the two groups of teachers’ overall attitudes were not statistically significant and the hypothesis was not supported.

### **Summary Comments**

In response to the research questions asked, this study indicated there was, in fact, no statistically significant difference between general education teachers attitudes based on gender, years of teaching experience, curricular area taught, whether or not a college course specifically designed for working with students with special needs was taken, the number of

students with special needs in a classroom, and the type of class of taught. Overall, the general education teachers in this study had a neutral attitude towards working with students with special needs in the general education classroom.

### **Limitations**

One major limitation of this study was the response rate of participants. Out of the 240 general education teachers who were asked to participate, only 64 general education teachers responded to the survey, for a response rate of 26%. As a consequence, the participants in this study are not a representative sample of the larger population. Therefore, the principle investigator is not able to generalize these results to the state of Iowa and other schools in the United States. The small initial sample size, in addition to the low response rate, makes it difficult for this study to be representative of the attitudes of general education teachers in the state of Iowa or the United States. The rural mono-cultural aspect of the state of Iowa is also not representative of other states across the nation.

Among the individuals who did respond, there were not a large number of general education teachers in each category. Specifically, only one general education teacher who participated in this survey indicated not having any students with special needs in his/her classroom, so the attitudes of general education teachers with no students with special needs in their classrooms was solely represented by one teacher. Similarly, only four general education teachers indicated they had only one student with special needs in their classroom, so the attitudes of general education teachers with only one student with special needs in their classroom was represented by 6.2% of this study. If I were to do this study again, I would have provided participants with broader options for responses when indicating how many students with special needs they had in their classroom. In particular I would have

provided general education teachers with the following options: 0-5 students with special needs in their classroom, 6-10 students with special needs in their classroom, 11-15 student with special needs in their classroom, and 16 or more students with special needs in their classroom. This would have widened the range of options and would have allowed me to have more respondents in each category.

A possible last limitation of this study would be general education teachers' understanding of the term "students with special needs". All teachers have various ideas of what that term means to them (physically handicapped, mentally retarded, learning disabled, Autistic, and/or behaviorally or emotionally disturbed), which can affect the way they respond to statements. While all the above labels are considered special needs, how a general education teacher feels about including a student with a physical handicap vs. a student who has a behavior disorder in their classroom may be very different.

### **Future Studies**

A suggestion for future studies would be to focus of general education teachers' attitudes about working with students with special needs and how they correlate with their gender and their curricular area taught. As it currently stands, there is little literature that focuses on these areas.

Another suggestion for future studies would be to look at what other factors affect general education teachers' attitudes towards inclusion, as this study indicates gender, years of teaching experience, curricular area taught, training, number of students with special needs in the class room, and type of class taught, do not necessarily influence attitudes. Duplicating this study with a larger number of participants would also be suggested, as more participants would provide more significant data.

One last suggestion for future studies would be to look at how general education teachers feel about educating students with various disabilities in their classrooms. Do general education teachers' attitudes about inclusion vary regarding a student with a physical handicap as opposed to a student with Autism or with a learning disability?



## APPENDIX A: SURVEY

### General Education Teacher's Perceptions of Teaching Students with Disabilities

**Directions:** Read each of the following statements carefully and circle the number indicating the extent to which you disagree or agree with each:

|   | 1<br>Strongly<br>Disagree | 2<br>Disagree | 3<br>Slightly<br>Disagree | 4<br>Slightly<br>Agree | 5<br>Agree | 6<br>Strongly<br>Agree |
|---|---------------------------|---------------|---------------------------|------------------------|------------|------------------------|
| 1) I am familiar with the Individuals with Disabilities Act (IDEA).   | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 2) Students with special needs feel comfortable in my classroom.  | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 3) Students with special needs feel comfortable in all general education classrooms.  | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 4) Students with special needs can succeed in my classroom.   | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 5) Students with special needs are a challenge to work with.  | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 6) I enjoy working with students with special needs.  | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 7) Students with special needs should be required to do the same work (assignments and tests) as the general education students do. | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 8) Students with special needs should be required to do their work in the same amount of time as the general education students do. | 1                         | 2             | 3                         | 4                      | 5          | 6                      |
| 9) Students with special needs should be required to do their work in the same classroom as the general education                   | 1                         | 2             | 3                         | 4                      | 5          | 6                      |

students do.

- |  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 10) Students with special needs need special accommodations and modifications.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 11) I am willing to modify assignments lessons, and tests to accommodate students with special needs.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 12) In my school teachers always provide students with special needs the required accommodations and modification needed, as indicated on the students' IEP. | 1 | 2 | 3 | 4 | 5 | 6 |
| 13) Special education serves an important purpose for the students classified as needing those services.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 14) Many of my classroom management issues are caused by students with special needs.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 15) Many of my classroom management issues could be reduced if I did not have students with special needs in my classroom.                                   | 1 | 2 | 3 | 4 | 5 | 6 |
| 16) I am sometimes caught off-guard when I discover students with special needs are enrolled in my classes.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 17) I sometimes feel angry when I see students with special needs are enrolled in my classes.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 18) My administration does a good job communicating with me about who will be in my classroom.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 19) I have a positive attitude about   | 1 | 2 | 3 | 4 | 5 | 6 |

working with students with special needs.

20) I am knowledgeable about how to appropriately educate students with special needs in my classroom.      1      2      3      4      5      6

21) I have had sufficient training to educate students with special needs in my classroom.      1      2      3      4      5      6

22) I understand the law on what is required of me, as a general education teacher, in educating students with special needs.      1      2      3      4      5      6

23) I am a supporter of full inclusion      1      2      3      4      5      6

24) Please add any additional comments you would like to share:

Gender:

Male

Female

Years of Teaching Experience:

0-5

6-10

11-15

16-20

21-25

26-30

31 +

Current Curricular Area:

(Please check all that apply)

Math

Social Studies

English

Science

Physical Education

OTHER (PLEASE SPECIFY) \_\_\_\_\_

Did you take a college course, specifically designed for working with students with special needs?

Yes

No

Do you currently have, or have you ever had, students with special needs in your classroom?

Yes

No

In a typical year, about how many students with special needs would you have in any of your classes?

None

One

More than one. Please indicate how many \_\_\_\_\_.

Thank you for taking the time to complete this survey. Your participation is greatly appreciated.



taught) impact the attitudes. In addition, the results of this study may help educators address the reasons or issues identified in order to better serve teachers and students with disabilities.

### **COSTS AND COMPENSATION**

You will not have any costs from participating in this study, nor will you be compensated for participating in this study.

### **PARTICIPANT RIGHTS**

**Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled.**

### **CONFIDENTIALITY**

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies, auditing departments of Iowa State University, and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: participants will not be asked to provide their name, their school district, or any other easily identifiable questions. All participants will be coded by number, and the surveys will be erased after the completion of the study. The results of the survey will be kept on a password protected computer, and no identifying information will be shared in any written document that comes out of this study. The only persons who will have access to this data will be the PI and her major professor. The data will be retained until August 31, 2009. If the results are published, your identity will remain confidential.

In order to protect your privacy, no electronic identifiers, such as IP addresses or cookies, will be collected or retained with the data. You should close your internet browser and/or clear the cache after completing this survey.

### **QUESTIONS OR PROBLEMS**

You are encouraged to ask questions at any time during this study.

- For further information about the study contact Tracy Cagney at 630-885-8619 or [tcagney@iastate.edu](mailto:tcagney@iastate.edu) or Dr. Pat Carlson at 515-294-8514 or [pcarlson@iastate.edu](mailto:pcarlson@iastate.edu).
- If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator, (515) 294-4566, [IRB@iastate.edu](mailto:IRB@iastate.edu), or

Director, (515) 294-3115, Office of Research Assurances, Iowa State University,  
Ames, Iowa 50011.

\*\*\*\*\*

**PARTICIPANT SIGNATURE**

Your completion of the survey indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered. **Please print a copy of this e-mail explaining informed consent for your files.**

**INVESTIGATOR STATEMENT**

Upon notice that the online survey has been completed, I certify the participant has been given adequate time to read and learn about the study and all of his/her questions have been answered. It is my opinion the participant understands the purpose, risks, benefits and the procedures to be followed in this study and has voluntarily agreed to participate.

## **APPENDIX C. EMAILS TO PARTICIPANTS**

### **Email 1**

Colleagues,

My name is Tracy Cagney and I am currently a graduate student at Iowa State University. I am in the process of working on my thesis on how general education teachers feel about having students who receive special education services in their classrooms. In order to complete my thesis I am asking for your perceptions and requesting that you complete a brief survey attached to the link below.

[http://qtrial.qualtrics.com/SE?SID=SV\\_1NEHiGeIwnu4xxO&SVID=Prod](http://qtrial.qualtrics.com/SE?SID=SV_1NEHiGeIwnu4xxO&SVID=Prod)

Below you will find an explanation of the study in which you are being invited to participate. Please read it carefully and if you have questions, please feel free to contact me. The survey should take about 10-15 minutes to complete. Thank you for your time!

Tracy Cagney

### **Email 2**

Colleagues,

My name is Tracy Cagney and I am currently a graduate student at Iowa State University. About two weeks ago I sent you an email requesting your participation in a brief online survey for my thesis on how general education teachers feel about having students who receive special education services in their classrooms. For those of you who have already taken the survey, your participation is greatly appreciated. For those of you who have not taken the survey, but are willing to do so, I am requesting that you complete a brief survey attached to the link below.

[http://qtrial.qualtrics.com/SE?SID=SV\\_1NEHiGeIwnu4xxO&SVID=Prod](http://qtrial.qualtrics.com/SE?SID=SV_1NEHiGeIwnu4xxO&SVID=Prod)

Below you will find an explanation of the study in which you are being invited to participate. Please read it carefully and if you have questions, please feel free to contact me. The survey should take about 10-15 minutes to complete.

Thank you for your time!

Tracy Cagney



APPENDIX A (Informed consent followed)

**Email 3**

Colleagues:

I would like to take this time to thank all of you who have taken the time to participate in my study. Your participation is greatly appreciated. For those of you who would still like to participate, you may do so by clicking on the link attached below. The survey will be available for your participation until Sunday, May 3rd, 2009.

[http://qtrial.qualtrics.com/SE?SID=SV\\_1NEHiGeIwnu4xxO&SVID=Prod](http://qtrial.qualtrics.com/SE?SID=SV_1NEHiGeIwnu4xxO&SVID=Prod)

Thanks again,

Tracy Cagney

APPENDIX A (Informed consent followed)

## BIBLIOGRAPHY

- Bender, W., Vail, C., & Scott, K. (1995). Teachers' attitudes toward increased mainstreaming: Implementing effective instruction for students with learning disabilities. *Journal of Learning Disabilities, 28*(2), 87-94.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education.
- Etscheidt, S. (2006). Least restrictive and natural environments for young children with disabilities: A legal analysis of issues. *Topics in Early Childhood Special Education, 26*(3), 167-178.
- Hasting, R. & Oakford, S. (2003). Student teachers' attitudes towards the inclusion of children with special needs. *Educational Psychology, 23*(1), 87-94.
- Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. §1400 *et seq.* (2004) (reauthorization of the Individuals with Disabilities Education Act of 1990).
- Johnson, A. (2001). Attitudes towards mainstreaming: Implications for inservice training and teaching the handicapped. *Education, 107*, 229-233.
- Lopez, S., Edwards, L. M., Pedrotti, J. T., Prosser, E. C., LaRue, S., Spalitto, S. V., & Ulven, J. C. (2006). Beyond the DSM-IV: Assumptions, alternatives, and alterations. *Journal of Counseling and Development, 84*(3), 259-267.
- Leyser, Y. & Tappendorf, K. (2001). Are attitudes and practices regarding mainstreaming changing? A case of teachers in two rural school districts. *Education, 121*, 751-760.
- Pernell, E., McIntyre, L., & Bader, L. (2001). Mainstreaming: A continuing concern for teacher. *Education, 106*, 131-137.

Van Reusen, A., Soho, A., & Barker, K. (2001). High school teacher attitudes toward inclusion. *High School Journal*, 84(2), 7-21.

Weisel, A., & Tur-Kaspa, H. (2002). Effects of labels and personal contact on teachers' attitudes toward students with special needs. *Exceptionality*, 10(1), 1-10.

Yell, M.L. (2006). *The law and special education* (2<sup>nd</sup> Ed.). Upper Saddle River, NJ: Pearson.

Zigmond, N., Levin, E., & Laurie, T. (1985). Managing the mainstream: An analysis of teacher attitudes and student performance in mainstream high school programs. *Journal of Learning Disabilities*, 18(9), 535-541.