

PERCEPTIONS OF PREPAREDNESS OF STUDENT TEACHERS  
TOWARDS INCLUSIVE EDUCATION

by

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This thesis is submitted in partial fulfillment of the requirements  
for the degree of

Master of Curriculum and Instruction in Special Education

Ferris State University

School of Education

College of Education and Human Services

March, 2014

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## ACKNOWLEDGEMENTS

First, to my wife and children whom I love dearly. I hope this will open a future of success and happiness for us all.

Next, to my parents: thank you for always believing in me and giving me the genetic material possible to complete something like this paper. Without both of you, I would never have dreamed this could become a reality.

Last, to Dr. Christine Conley-Sowels; I appreciate the time and concern you put into me to ensure my success as a student and a teacher. You have mentored and helped me through my education more than you will ever know.

## ABSTRACT

This paper presents the perceptions of student teachers towards their preparedness to handle inclusive educational settings. The research, done with a survey given to the students at the beginning and end of their student teaching assignments, will try to identify whether or not general education student teachers feel prepared to handle inclusion and students with special needs being in their general education classrooms. As of now, most schools of education in the United States offer either certification in general education or special education. This paper will also try to point out the strengths of having a dual certification program for prospective teachers in hopes that they will become better prepared to handle inclusion as they will receive both a general education certification and a special education certification upon completion of their degrees.

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## **CHAPTER 1**

### **INTRODUCTION**

Over the past decade with the passage of the No Child Left Behind Act (NCLB) and the reinvention of the Individuals with Disabilities Education Improvement Act (IDEA) in 2004, inclusive classrooms became a normalcy in public education. Both of these legislative actions have not only ensured integration of students with special needs into general education classrooms, but have made the measure a legal paradigm as well. Because of the passage and/or reissuance of both, schools are legally bound to guarantee general education inclusion for students struggling with documented disabilities. This also has become a major issue in the preparedness question for teachers who were entering classrooms for the first time and who may be underprepared to handle the stresses of inclusive policy.

According to the language of IDEA, all students are to be given an equal and appropriate education. This includes the inclusion of students with special needs because the standards for both general and special education are the same. The idea of equal education is pulled from the fact that we are assimilating students with special needs into normal

society and allowing them to become social with general education students. Since this has become the case, the mantra of special education being the room at the end of the hall was over and students with special needs are now becoming mainstays in general education classrooms and were very viewable in normal society.

However, one problem that has arisen from this legislation is the question of preparedness of not only seasoned general education teachers, but student teachers fresh out of teacher education programs. Many published researchers (as seen in the literature review of this study) felt that new teachers are not prepared to handle the stress inclusive policy can have because teacher education programs have not conformed to the new laws NCLB and IDEA had made through congressional legislation. Not only are the teachers unprepared to handle behavioral manifestations of students with special needs, they are unprepared to handle the extra stress individual education programs (IEPs) and accommodations have on normal classroom operations. As Lambe (2007) states:

“Studies of both pre-service and in-service teacher attitudes towards inclusion of pupils with Special Educational Needs (SEN) in mainstream classrooms have also shown that attitudes were affected by the quality of preparation received..., concluding that improving and increasing training provision

at the pre-service phase of teacher education would be the most effective method of promoting better attitudes to inclusion” (p. 4).

Although ideas like universal design for learning have been shown to work in the use of accommodations, there is still the question of educational quality for students who have been resourced out of special education to general education because of inclusion. The problem then laid not with the environment, but the preparedness of teachers to handle students with special needs (Blanton & Pugach, 2007).

Another issue arose with the reissuance of IDEA in 2004. This piece of legislation made environment a legal issue. The idea of environment became an issue because of the least restrictive doctrine that has been written into the Act. Least restrictive ideology means that a student with documented disabilities must be placed in the most appropriate and least restrictive environment possible. According to the IDEA law, this means if the general education classroom, no matter if it is remedial or honors class work, the student must be placed in that situation if the environment is the best situation for the student to be placed in. This idea leaves the general education teacher to handle the stresses of behavioral manifestations and accommodations outlined in the student’s IEP. Because of misconceptions of special education, this became a shocking reality for many new and seasoned teachers. No longer is the

cognitive impairment stereotype of special education seen as prevalent because many students with special needs are smart enough to handle coursework in general education. However, the question of preparedness to teach students with disabilities came back since many of these students were able to handle the work load of general education students, just in different ways; this was then left to the special education teacher and general education teacher to handle behavioral problems and learning differences. From the concept of “just in different ways” comes the problem with preparedness of teachers to handle inclusive policy because the majority of teacher education programs across the country focus either on general education or special education certification depending on the major of the university student.

As seen from Lambe’s (2007) statement on the previous page, more needed to be done at the teacher education level than in the classroom for preparedness; although practical application (being “on the job”) is considered the best teacher, we should not blindside new teachers by the added stress of inclusion without preparing them first at the collegiate level for how a real general education classroom operates under NCLB and IDEA. The education of a teacher lays the foundation from which the teacher gains perception of his/her teaching environment. Because preparation for classroom stresses is essential in teacher education, inclusive education has to be addressed on a much grander scale. The idea that one or two introductory courses to special education

prepares pre-service teachers for inclusive policy must be rethought. This researcher was in agreement with Pugach and Blanton (2009) who said that teacher education programs need to institute dual certification or at least create collaborative programs where teacher education students in both special education programs and general education programs are in constant contact with each other; this would be conducive to special educators and general educators working in collaboration when they receive their first teaching assignments. These types of programs also would ensure all teachers are able and ready to handle the extra stresses inclusive education brings to the classroom.

### **Purpose of Study**

There are three main purposes for the research that was conducted for this paper. The first and main purpose of this research is to find out what the perceptions of general education (both elementary and secondary) student teachers is towards preparedness for inclusive education. This is the main point of the research and will lead to discussion and solutions to problems that have arisen from inclusive education becoming legal paradigm. If we are to have teachers that are able and ready to handle any situation in the classroom, including educating students with special needs in the general education setting, the inclusion of more special education courses in teacher education programs must be undertaken (Blanton & Pugach, 2007).



Another purpose of this research is to find out if student teacher attitudes towards students with special needs has changed from previous research. Many studies have shown perceptions of students with special needs to be positive and the attitudes towards teaching students with disabilities in general education classrooms to be favorable (Tait & Purdie, 2000; Lambe, 2007; Santoli, Sachs, Romey, & McClurg, 2008). However, some of the same research showed perceptions that pre-service teachers did not feel students with disabilities were able to achieve the full value of education in general education (Santoli et. al., 2008). Because teacher education programs and instruction affect the way perspective teachers view educational values (i.e. the need for inclusion) combined with the legal issues brought forth by NCLB and IDEA 2004, inclusive policy education is a must for teacher education programs.

The final purpose of this research is to find quality solutions to the problems towards better preparing our future teachers for inclusive educational classrooms. This research looks to answer whether the idea that one or two preparatory classes in general education teacher programs is enough or if it is an acceptable amount of preparation for today's inclusive general education classrooms. The demand has to be heard that if the positive inclusion of students with disabilities as outlined by NCLB and IDEA 2004 are to ever see full fruition, higher education innovation must take place. The changing of teacher education programs is a necessity to quell the problems of student teacher's and future teacher's

unpreparedness for inclusive education. Teacher education collaboration programs are a good start, but dual certification in both general education and special education should be realized as the best practice in teacher education programs.

### **Rationale of Study**

The first rationale for this research is the fact that inclusive education has become a legal issue. Because of the passage of NCLB in 2001 and the reauthorization of IDEA in 2004, public schools are required to include students with special needs in the general education curriculum and curricular activities. The legislation requires schools to undertake inclusive education (the insertion of students with special needs into general education classrooms), however very little was done in the way of demanding teacher preparation programs undergo rigorous change to prepare future teachers for the institution of new laws. If the United States is ever to fully recognize the importance of and full fruition of inclusive policy, it is assumed that higher education has to be changed to include special education programs for all new teacher candidates.

There is also the question of whether or not general educators are even ready and able to fully understand the idea of IEPs and accommodations. IEPs and accommodations are the two most important outcomes of special education recommendation through IDEA 2004, yet the ideas of both are found to be only fully understood by special education teachers and, in some cases, not followed by general education

teachers (Pugach & Blanton, 2009). Special education teacher programs are an excellent area for all of these possible problems to be remedied which leads back to dual certification. Further, according to Pugach and Blanton (2009), general education teachers have to understand the constructs of IEPs and the accommodations the students with special needs need to ensure successful completion of coursework.

Due to the lack of preparation for IEPs and accommodations, there is glaring evidence from the likes of Pugach and Blanton (2009) that more has to be done to prepare pre-service teachers at the university level to ensure both issues with IEPs and accommodations become non-issues. More has to be done to change perceptions earlier in higher education than when a student teacher has his/her first placement in a full-time teaching position. Teacher education programs are to be the foundation for how future teachers will perceive normal classroom settings and because of NCLB and IDEA 2004, inclusion has become the norm for general education classrooms.

### **Research Questions**

#### **Thesis Questions**

What are the perceptions of student teachers at a central-west Michigan university towards preparedness for inclusive education?

**Question 1.** What are pre-service teachers' attitudes towards special education?

**Question 2.** What are student teachers' perceptions towards preparedness for inclusion?

**Question 3.** What are perceptions of dual certification being required in teacher education programs?

### **Significance of Study**

One of the biggest reasons this research is significant is because more information is needed to find operable and meaningful solutions to the preparedness question. Although studies have been done in the past to find solutions to preparedness problems, the overall conclusion is that more data has to be retrieved to find functional and concrete solutions for the problems with preparation. There have also been solutions proposed, however, the authors of those studies also admitted that more information and research is needed to fully understand the problems inclusive education has added to the profession of teaching and to teacher education programs.

Another line of significance has to do with the United States. From the research that has been done, many of the past studies conducted were from other countries. The United States has a unique educational system and needs to have studies done in the United States to relate the information and findings directly to its educational system. Although the findings of studies in other countries are important and has to be included in the research, findings from the United States becomes imperative to change the fundamental problems with education in the United States.

The last significance deals with the actual outlook of the study. Many of the studies conducted thus far were interested in the attitudes of student teachers towards students with special needs and the findings of the studies are related to that specific subject. However, this research study is interested in finding the perceptions towards preparedness of student teachers for inclusive education. This means the research should show how prepared student teachers feel about handling students with special needs in their general education classrooms. In essence, previous studies showed how student teachers felt towards the students, not towards readiness for teaching the students, which is the main focus of this research study.

### **Key Terms**

**Inclusion**-for the purpose of this project, the act of placing a student with documented disabilities in a general education classroom for any time during a normal school day.

**Student Teacher**-a student enrolled in EDUC 499 for the Fall 2013 semester at the university and other satellite campuses; also must be 16 week placement in a general education classroom, either elementary or secondary.

**Preparedness**-amount of coursework by general education teacher candidates in special education curriculum.

**General Education Student-**for the purpose of this paper, any student who spends 100 per cent of his/her day in the general education curriculum.

**Special Education Student-** for the purpose of this paper, any special education student that is resourced to a general education classroom for any period of time; regardless of percentage of time spent in a resource room or self-contained classroom.

**Dual Certification-**receiving a certificate in general education and special education upon completion of degree requirements from an accredited four-year teacher education program.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **Introduction**

Over 105 days of the semester, student teachers in the College of Education and Human Services at a mid-Western Michigan University had begun their first full time teaching experience. The fifteen week period in which this practice takes place is also the first time these students of education had been in inclusive classroom settings full time. The School of Education and Human Services curricular catalog iterated that there was one mandated class by the university that the students must take during their general education, pre-service, undergraduate work containing any content that explained or taught the students about special education or inclusive education. This quandary had brought into light the important question: What are the attitudes of student teachers in a mid-western university's school of education towards preparedness for inclusive education policy?

One of the key points of what happened in the United States with special education was that the federal government had taken serious steps towards the inclusion of people with disabilities. The most important step

in that process according to Shippen, Crites, Houchins, Ramsey, and Simon (2005) is that inclusion has been inserted into federal law with the Individuals with Disabilities Education Improvement Act 2004 (IDEA, 2004). The act mandates inclusion as legal paradigm which guarantees families and students certain rights when dealing with education. One of those rights is to have access to the most appropriate education available. This means that a student must be placed in the most suitable classroom situation possible with every accommodation and tool (within reason) to succeed.

Since inclusion has become one of the most talked about issues in education, student teacher preparedness for inclusive classrooms is imperative. As Cardona (2009) states, “The policy of ‘inclusive schooling’ is being practiced in various countries all over the world and teaching students with special educational needs (SEN) in regular education classrooms is increasingly being regarded as a beneficial practice” (p. 33). Due to the addition of students with special needs in general education classrooms, the issue of teacher preparedness became essential because many teacher education programs did not merge special education curriculum with general education curriculum. Although these student teachers may have had one basic information course about disability labels and little instruction on the legal issues brought forth by inclusive education, the feeling was that more had to be done to properly prepare teacher education students for inclusion (Blanton & Pugach, 2007). In



1992, Wubbel suggested that “teacher education programs fail to influence student teachers’ preconceptions” (p. 147). This is assumed to mean that education programs have not addressed what a prospective teacher may already think of a classroom and of inclusive education. Wubble’s (1992) research questioned whether basic, factual classes about special educational needs had addressed the most influential information that prospective teachers held towards students with special needs: preconceived notions of what special needs is and who the children are that they will serve.

Lambe (2007) interjects, “if student teachers complete their pre-service education without having developed positive attitudes toward inclusion this will be very difficult to change and may have a negative effect on the inclusion of learners with disabilities” (p. 360). There is evidence that pre-service teachers, when initially beginning their education programs, are in favor of and fully support inclusive classrooms (Tait & Purdie, 2000). However, the trends of educating future teachers in the United States, where teachers receive certification in either special or general education, must be changed according to Blanton and Pugach, (2007). Institutions with teacher education programs should have addressed the changing atmosphere of the classroom and encourage positive attitudes towards the inclusion of students with special needs (Blanton & Pugach, 2007).

### **Legality and Preparedness**

One suggestion to prepare student teachers for inclusive education is to deal with professor's perceptions of temperament, belief and attitudes, personality traits, or observed behaviors from prospective student teachers (Shiveley & Misco, 2010). This presumably allows higher education instructors to better understand how prepared student teachers are for real-life classroom situations. According to Shiveley and Misco (2010), the idea of dispositional assessment of individuals is imperative for testing how well a student teacher will handle their student teaching assignment. This type of extended research may also be used to “weed-out” education students whose personalities are not correct with what skills and dispositions a teacher must possess and thus, may not be prepared enough to handle the stresses of student teaching. A teacher who is not prepared to handle an inclusive classroom where he/she is the most accountable party may also run into legal problems if accommodations are not fully realized (IDEA, 2004). This should be brought as an issue into teacher education programs and the legislation paradigm since schools of education must be accountable for the quality of the teacher it is producing.

One of the underlying perceptions of inclusionary education deals with how the students will handle their new surroundings. Questions were raised about whether or not the general education setting is really the most appropriate place for students with special needs. Because of their

backgrounds, many general education teachers did not feel special education students can fully succeed in inclusive classrooms. As Santoli, et al (2008) noted, most teachers and pre-service teachers feel they are prepared to teach students with disabilities however, “(76%) [of participants in the study] did not believe that most students with disabilities could be educated in regular education classrooms” (p. 1). One of the most important assumptions through this information was teachers felt prepared, but were unsure of the consequences inclusion would have for general and special education students regarding learning together. It is assumed this was concern over whether or not the inclusion of students with special needs will be too much of a hindrance and start to affect the success of general education students as well (Santoli, et al, 2008).

Due to the stringent laws of NCLB 2001 and IDEA 2004, that every student receive a free and appropriate public education, students with disabilities were becoming an integral part of general education society. The attitudes held by student teachers will affect the way they view special education and inclusive education as well. As Brandes and Crowson (2008) point out, “Whether belief systems are grounded in SDO [social dominance orientation], cultural or economic conservatism, pre-service educators may benefit by learning to recognize the values and beliefs that influence their personal perceptions of others” (p. 286). According to Brandes and Crowson (2008), if a student teacher held ill feelings towards students with disabilities for any reason (whether

socioeconomic, conservative viewpoints, or just plain ignorance) that student teacher was not fully prepared to be in an inclusive classroom. One of the most effective ways of combating preconceived notions of students with special needs was to debunk perceptions of those students and change the attitudes of student teachers towards special education in teacher education program curriculum. Pearson (2009) reaffirms, “all prospective teachers need some knowledge of systems and procedures but these need to be located within the context of understanding the role of attitudes and beliefs, and ways to develop and contribute to an inclusive curriculum” (p. 567). Further, according to Pearson (2009) teacher education students who hold negative images of students with special needs would not have positive feelings towards inclusive education or the inclusion of student with special needs.

Another postulation pertaining to the idea of attitudes towards others, especially those with disabilities is that perceptions changed over the course of learning. It is assumed we must take into account the possibility that student teachers may have changed their attitudes towards students with disabilities and inclusive teaching over the life of their adventure through their teacher education program and student teaching experience. As Mintz (2007) states, “The research reported indicates that student attitudes towards SEN [special educational needs] inclusion were generally positive, but that such views are fluid and subject to change during the course of training” (p. 7). This further validated Pearson’s

(2009) finding that attitudes must be addressed quickly and molded to fit the ideas of inclusive education. One way of doing this was to train teachers in both general and special education according to Pugach and Blanton (2009).

The problem with changing attitudes also posed a potential risk for the research being conducted in this study because this research is trying to measure preconceived notions of preparedness and since these student teachers have already been through their programs, their ideology towards special education may have already changed. This was somewhat remedied for this paper by the research of others that made apparent the need for information and discussion of inclusion and inclusive policy early in teacher education programs. This research problem was addressed by Mintz (2007): "...students who have not been exposed to discussion of the current issues around inclusion education may not be consciously aware of the underlying factors that influence their attitude to inclusion and special educational needs" (p. 7). This research showed that there are ways to modify and change preconceptions of students with special needs and perception of inclusive education. The most predominant solution is to add discussion of special educational needs and deliberation of inclusive classrooms into every aspect of teacher education programs. Another remedy to this problem is to put students in general education teacher programs into special education rooms and help serve those children/adolescents with their special needs; this would add the important

element of turning discussion into practice and will also allow teacher education students to be privy to the potential stresses inclusive education will add to their future classrooms (Blanton & Pugach, 2007).

### **Views on preparedness**

There has been a growing concern over the preparedness of general education student teachers towards inclusive settings and special education. As Pugach and Blanton (2009) state, “This [collaboration between higher education general and special education programs] is a particularly important area of concern because, in contrast to the situation in several other countries, in the United States there is a strong tradition of having teachers earn an initial teaching license in either special or general education alone” (p. 575). Because of the structure of the laws that govern education in the United States (NCLB and IDEA), the relevance of collaboration between general and special education programs has become much more apparent. Due to the diminishing distinction between inclusion and typical general education, a change needs to be brought forth in schools of education nationwide that include general and special education curriculum for all education students. This did not simply mean putting low-level vocabulary and special education legal classes into the general education curriculum, but completely changing the face of general and special education programs in the United States. This also implies that teacher education students only interested in achieving special education certification will be required to take classes in general education

curriculum; thus comes the collaboration between general and special education teaching (Pugach & Blanton, 2009). Hopefully, this will allow the teachers of the future to be more apt to work together and partner with each other. Further, students with special needs will not just be a part of a special educators case load, but will be fully accepted as students in general education classrooms.

This change has to become imminent because it cannot be ignored. Inclusive classrooms have become the norm in many school districts and now must be discussed in circles of higher education for ways to better prepare their students for inclusive classrooms. There are many different ways of doing this and one is through the teaching of differentiated instruction (Forlin, Loreman, Sharma, & Earle, 2009). Although differentiation does cover the idea of diverse learning styles and treating each student as an individual part of a classroom dynamic, it fails to address other problems that can and will arise due to inclusion such as behavior. This research believes schools of teacher education must do a better job of teaching pre-service teachers how to handle situations that may come forth due to manifestations of disabilities.

Blanton and Pugach (2007) proposed that there be a merged curriculum where pre-service teachers work towards both certification in general education and special education. This idea makes sense because the curriculum will begin to address all of the questions many post-student teachers have towards special education. Because the idea promotes full

understanding in special and general education, programs that are structured this way will better prepare student teachers for what they will come in contact with in reality. The process of education, according to Blanton and Pugach (2007), needs to come from collaboration between special education instructors and general education instructors. This will also quell legal issues that have become apparent because general educators fail to provide services outlined in IEPs, which are legally binding documents.

There is also a push for better mentoring of student teachers since those who have been in the field should have a handle on inclusive education and the stipulations it adds to the classroom dynamic. The idea of peer-mentoring is not new, however it is underutilized (Lu, 2009). Learning from those with first-hand experience in inclusive settings is a wonderful way to allow student teachers many different learning opportunities. If inclusion is to be fully understood by general education student teachers, collaboration with a special education teacher is essential to the attitudes student teachers accumulate about inclusive policy (Mintz, 2007). Further, student teachers will also be able to find out which students under their charge have IEPs and what the accommodations on those IEPs are (Blanton & Pugach, 2007). In some cases, the lack of communication between general education student teachers and special educators can and will lead to legal issues for not conforming to the accommodations on individual students' IEPs.



Furthermore, one of the major problems with attitudes of student teachers brought forth by Wiebe-Berry (2008) is that there is a question about accommodations and how fair classrooms have become for everyone. Many of the study participants from the Wiebe-Berry (2008) study felt that every student should be given the same tools to function on an even playing field. Unfortunately, giving every student accommodations really is not fair. What fair means, in this case, is that every student has an equal opportunity to achieve at the same level of competence. However, because some students (students with disabilities) are getting extra help or reduced expectations, many teachers feel general education students are not given the same opportunities that children with disabilities are given.

This shows the inequity brought forth by education and raised questions of equality and equity in inclusive education. Along the same lines, in a study from 1990 by Hoy and Woolfolk, it was concluded that student teachers perceptions of self-efficacy towards handling “troubled” youth suffered greatly when the student teachers found they were unable to control much of the environmental situations students faced at home. One of the hardest issues general educators dealt with was one of the foreboding consequences of having to send students with special needs back to environments that undermined the progress achieved at school; the largest regression in achievement being creating normalcy and structure in the students’ lives (Hoy & Woolfolk, 1990).

Another growing trend of belief is the idea that student teachers need to be allowed to question and develop as an individual. After all, the person doing the student teaching is the most important person to the development of his/her ideology and perceptions of special education and inclusion. Although student teachers commonly accept that they should take the advice of mentor teachers at face value and not question the validity of the advice, this new idea states just the opposite. This idea was crucial to the growth of the student teacher because, “The concept of pre-service teachers as inquirers recognizes pre-service teachers as active participants in their own professional growth, knowledge constructors, and agents of change” (Mule, 2006, p. 205). This was also pointed out in Furlong and Maynard’s (1995) book, *Mentoring Student Teachers: The Growth of Professional Knowledge*, where the authors put much importance on the issue of practical application and mentorship being a key component to developing successful new teachers. The authors wrote that student teachers need guidance and direction and a chance to inquire about their surroundings to become better prepared for any situation that may face them in the classroom. This idea internalizes the efforts that will be made by the student teacher to really “learn the ropes” and become comfortable in inclusive classrooms. This early study from Furlong and Maynard (1995) also reaffirms Lu (2010) and Mintzs’ (2007) affirmations that first, student teachers must be allowed to become familiarized with their surroundings through questioning and observation and second, that

student teachers need to be mentored to successfully be “schooled” in education topics that will influence their perceptions of reality in the general education, inclusive classroom. Further, the topic of professional inquiry also should be taught to students so they will know they can question ideology and also ask questions of their mentor teachers to clarify special education law (reason for a special education mentor), classroom management, accommodations, and a slew of other problems that may occur. Student teachers should not be blind-sided by inclusive policy or students with special needs and should also know which students under their charge have documented disabilities (Furlong & Maynard, 1995, Lu, 2010, Mintz, 2007).

Another closely related method of student-as-inquirer comes from Campbell, Gilmore, and Cuskelly (2003). These three women conducted a study of preconceived notions of teacher education students that forced the students to conduct interviews about Down Syndrome with people they would meet in everyday, normal social situations. The study included a pre and post survey and showed that the students held negative preconceptions about cognitive impairment and dealing with people with disabilities. However, after having social interactions in public situations about Down Syndrome and inclusive education, the students became much more comfortable and felt their ability to handle students with special needs was much better. The researchers concluded that not only practical experience with disability had garnered more positive feelings towards

inclusion, but just being comfortable talking with people about disability helped students to be more positive about serving students with disabilities in inclusive settings. Also, the idea of using inquiry techniques can increase the self-efficacy of prospective teachers and their feelings towards people with special needs become more positive as they question people about their own feelings on people with special needs.

Taken from the idea of the student teacher as inquirer, Campbell, et al, (2003) iterated that pre-service teachers should be given a list of questions from the school of education that must be asked of the mentor teacher. This includes questions about the guiding school's policy on special education and inclusion and, more succinctly, which students they will come into contact with that have special needs.

**Review of Thirteen Teacher Education Programs and Michigan Department of Education Requirements for General Education Teacher Education Programs**

*What the Michigan Department of Education (MDE) Requires Towards Inserting Special Education in General Education Teacher Education Programs*

The MDE hosted a booklet from 2008 that included the skills and knowledge a teacher should possess once the host university graduated the student. The booklet was titled, "Professional Standards for Michigan Teachers" and consisted of seven different categories future teachers must be fluent in upon completion of an accredited university's education

program. The list of seven included many differing standards, but for the purpose of this research, the focus will be the standards related to special education.

The reason it is essential to review these standards is because these are the benchmarks universities use to create their teacher education programs and to modify coursework when necessary. The introduction to the booklet stated:

“Upon entry into an approved teacher preparation program in Michigan, teacher candidates experience ongoing professional development as reflected in the standards listed below. These research-based standards provide a framework of rigorous subject matter knowledge from general and liberal education, relevant pedagogical knowledge for optimal student learning, achievement, and participation in a global society.

A certified teacher within the State of Michigan must initially possess and be able to demonstrate continued growth in:...[this is where the list starts]” (“Upon entry into”, p. 2).

Moving forward to the parts of the booklet that have pertinence to the requirement of special education coursework in general education teacher programs are first: number two, section b which asserted teachers must be able to, “Assess learning and differentiate instruction to maximize student achievement and to accommodate differences in backgrounds, learning modes, disabilities, aptitudes, interests, and levels of maturity;...” (“Assess learning and”, p. 3). The inclusion of “disabilities” implied that a future teacher must be informed in how to assess students with disabilities in their general education classrooms. This gives credence to the reason teacher education programs have included coursework in special education and inclusive classrooms into general education teacher programs.

Furthermore, under the same number (two), sections e. and g. both alluded to the ability of future teachers being able to “differentiate” instructional methods and to “design, and implement” different testing techniques to include a variety of individuals including the “abilities, and needs” of individual students (“Assess learning and”, p. 3). This gave more credibility to the assumption that teacher education programs need to include some sort of education in special needs because these standards address the teacher being able to adapt his/her teaching and assessment methods to fit the individual needs of students in his/her classrooms. Giving insight into diverse needs in an inclusive classroom is much of what an individualized education plan (IEP) outlines meaning a future teacher should know how to utilize this tool (the IEP) and then teach to a

variety of needs and ability levels. This assumption was reinforced within section j where there is an assertion that future teachers need to be able to use a slew of devices and methods to ensure “accommodations” are being met that will boost the success and internalization of content of each individual student in the classroom.

Also in the booklet of teacher expectations listed in number four (using the physical environment and management skills) section b., stated that a future teacher needs to be able to use the environment of the classroom to ensure constructive student centered interactions and to build “positive self-esteem, to ensure each student is a valued participant in an inclusive learning environment;” (“Structure the classroom”, p.4). This is assumed to mean that teachers need to have the skills necessary to include all students, whether disabled or not, in the classroom dynamic to ensure that there was a feeling of attachment to the learning community. This section is assumed to be included to make sure teachers have the ability to bolster the self-efficacy of every individual in their classrooms and to not alienate anyone based on the differences each student brings to a classroom, including disabilities.

Included in the fourth list of standards was section d. which elaborated the need to exhibit a strong ability to offer behavioral supports to children within the classroom. Section d. of the fourth standard states that a graduated teacher must be able to, “Design and implement a classroom management plan that utilizes respectful disciplinary techniques

to ensure a safe and orderly learning environment...which is conducive to learning and takes into account diverse needs of individual students;” (“Design and implement”, p. 5). Again, this was presumed to iterate the idea of each child being an individual with his/her own perceptions and differences. Further, it was assumed that these differences come from the inclusion of students with special needs in general education classrooms. This specific standard shows the need for deeper education in special needs during teacher education programs towards the behavioral aspects that are presumed to be manifested due to the inclusion of students with special needs.

The next listing that supported the assumptions that general education teacher programs need instruction in special needs was section e. of standard four. This standard states how important the legal and ethical aspects of education are for teachers to understand. A graduated teacher, according to this standard, must be aware of the legal and ethical ramifications of his/her own behaviors within the classroom. This is presumed to mean that accommodations on IEPs must be followed or there were certain legal and ethical issues that arise from denying students their rights to a free and appropriate education. If general education teachers were meant to know this information it should be assumed the most obvious and acceptable place to introduce them to this type of legal paradigm is during their university education program.



Finally, and assumedly the most poignant issue related to special education coursework in general education teacher programs comes in standard five, section h. This section states that prepared teachers were to be ready and able to, “Participate in the development of individualized plans for students with disabilities (Individual Education Plans (IEP))” (“Participate in the”, p. 6). Once again, this brings forth the assumption that students in general education teacher programs need to have practical experience and knowledge of issues and documents that are usually reserved for special education teachers. If general education teachers are educated in these types of skills, it was presumed that problems will not come forth later once the graduate has started teaching in the field.

*Breakdown of Thirteen Public Universities in Michigan Towards Special Needs Coursework in General Education Curriculum*

This section explores the catalog listings of the thirteen public universities in Michigan that offer teacher education programs. This includes the descriptions of course work pertaining to special education (if any exist) that the universities requires of their general education teacher students. The thirteen universities included are Michigan State University, University of Michigan, Wayne State University, Ferris State University, Central Michigan University, Northern Michigan University, Lake Superior State University, Saginaw Valley State University, Grand Valley State University, Western Michigan University, Michigan Technical University, Eastern Michigan University, and Oakland University.

*Michigan State University (MSU)*

MSU, according to the list of courses in the catalog required to complete the teacher education program at the university does not contain a class explicitly in the study of students with special needs or inclusive educational issues. However, the classes with the prefix “TE” (most likely “Teacher Education”) are all titled with the use of “diverse students” indicating that the content of the course will contain information pertaining to each subject (science, math, etc...) with the idea of real classrooms containing students that learn in different ways. This does not, however express that any content pertaining to students with special needs, special education classifications, or inclusive education will be covered in the curriculum of the required coursework.

*University of Michigan (UM)*

EDUC 490-xxx is the only listing for the class of special education at the University of Michigan. There was no course description available online.

*Wayne State University (WSU)*

The class offered by WSU is “SED 5010” and, even though it is numbered as a master’s level course, it is a requirement of undergraduates to take the class as part of the core curriculum. The class is titled “Inclusive Education” and the description of the curriculum offered in the course is as follows:

“The focus of this course is to provide information regarding the characteristics and needs of students in the general education classroom. Current legislation, No Child Left Behind, Response to Intervention, and Highly Qualified Teacher will be examined as they relate to the integration of special needs students within the general education environment. Research based teaching, practical strategies, and accommodations will be presented” (“The focus of”).

*Ferris State University (FSU)*

FSU offers “EDUC 415” as its one required course that general education teacher students must take in order to graduate from its teacher education program. “EDUC 415,” as described on FSUs online course catalog, “...will introduce pre-service teachers to strategies and accommodate the needs of exceptional and diverse learners in K-12 classrooms. Also included will be a brief historical perspective of the field of special education, particularly as it relates to K-12 education, including legislation and litigation, causes of disabilities, academic and social characteristics, basic assessment and intervention procedures, special education services/programming, the role of the family and community, and accommodating gifted and talented students” (“This course will”).

*Central Michigan University (CMU)*

CMU offers “SPE 126” as the special education requirement for their undergraduate general teacher education program. The description is short and poignant: “Education of students who deviate significantly from

the norm intellectually, physically, emotionally, socially, or educationally” (Education of students”).

*Michigan Technical University (MTU)*

MTU is the only university that does not require a course specifically designed for the general education curriculum that involves students with special needs, special education categorization, or inclusive education. One class eludes to helping teach students that have problems with reading and reading comprehension, but there is no direct mention to special education or students with special needs.

*Northern Michigan University (NMU)*

NMU offers a course titled “Special Education and the General Classroom Teacher” and is numbered “ED 361.” Taken from NMU’s online catalog, the description of the course reads, “An introductory course covering the range of handicapping conditions, designed for the elementary or secondary teacher to develop awareness of the emotional, educational, and social implications of handicaps and to formulate practical applications when working with students with exceptionalities in the general classroom” (“An introductory course”).

*Lake Superior State University (LSSU)*

“EDUC 250: Student Diversity and Schools” is the offering for teaching in a diverse educational environment. The description of the course shows the curriculum as “...a study of the forms of diversity found among students and how these differences affect students’ participation in

school. History and philosophy of American schools are also studied as are the legal responsibilities and rights of teachers and schools. Students study cooperative learning, questioning techniques, make school visits and plan and teach a short, engaging lesson. Fieldwork required” (“This course is”).

*Saginaw Valley State University (SVSU)*

SVSU offers the class “TE 344: Differentiation and Diversity” as their offering for learning about students with special needs and the way they contribute to the general education classroom. The description reads, “This course will provide an opportunity for pre-service teachers to become knowledgeable in working with students in inclusive and resource K-8 settings using differentiated instructional strategies. Categorical eligibilities will be addressed. Programs for the gifted and talented will also be considered. Current legal issues and developments in the field of special education will be an integral part of this course content. Fieldwork is required” (“This course will”).

*Grand Valley State University (GVSU)*

GVSU has two offerings for courses pertaining to students with special needs in the general education setting, however, the two offerings are elementary or secondary specific and course content is only changed slightly from what is pertinent to elementary general education teachers to what is pertinent to secondary general education teachers. “EDS 378/EDS 379” are the offerings, respectively and the description reads: “Universal

Design for Learning (UDL) is a means of improving students with special needs access to the general-education curriculum. Candidates will learn universal design principles regarding multiple means of: representation, engagement and expression and instructional practices specifically designed for elementary of secondary classrooms” (Universal Design for”).

*Western Michigan University (WMU)*

WMU requires “SPED 4290: Learners with Disabilities in Secondary Education” for their pre-service general education program. The description is straight to the point and short: “This course is designed for prospective and practicing secondary education teachers. Emphasis is placed on meeting the needs of learners with disabilities in general education secondary programs. Required curriculum adaptation and modification as well as identification and development of resources and services for these learners are stressed” (“This course is”)

*Eastern Michigan University (EMU)*

EMU also requires its pre-service teacher students to take a course related to the field of special education. “SPGN 251: Education of Students with Exceptionalities” is an “...introductory course [that] provides a framework for understanding how legislative and social changes in the U.S. have modified the ways in which diversity issues related to student learning characteristics have impacted equity in education. This course includes the historical, philosophical, and

organizational factors leading to the enactment of federal and state laws, rules, and regulations governing special education. Characteristics, educational considerations, and implications of all areas of exceptionality are addressed” (“This introductory course”).

*Oakland University (OU)*

According to the online listing of this course, during a general education teacher student’s senior year at OU, he/she is required to take the course “SE 401: Introduction to Students with Special Needs” which teaches an “Introduction to special education, atypical children, individual differences, learner environment and instructional adaptations” (“Introduction to special”). Along with the class meetings and course content, during the semester the students take “SE 401” they must also complete 30 hours of practical experience. There is no mention of what type of classroom the practicum takes place in, however.

## **CHAPTER 3**

### **METHODOLOGY**

#### **Description of Subjects**

The human subjects used in this research study were student teachers who were enrolled in EDUC 499 for the Fall 2013 semester at a west-central Michigan university. Some of the student teachers were students who had completed the teacher education program coming straight from high school to a four year degree program at the university. Others were professional students who have returned to higher education to gain certification in teaching for the first time. Still others were first time higher education students who were completing the program after working or taking on other endeavors after high school. All of the student teachers were to be of general education background only and were to have taken one course for special education preparedness required by this specific university.

The reason these student teachers were used was quite simple: they have completed the necessary program at the university to take the general education student teaching experience and have been through the one required class for study in special education. Because of the experiences in



the school of education at this university, these student teachers were to have the required expertise in the areas of knowing whether or not they feel prepared to handle inclusive education. Since this was the area the research was concerned with, the subjects were perfect candidates to answer the research question: What are the attitudes of student teachers at a west-central Michigan university towards preparedness for inclusive classroom settings?

The reasoning behind having used only general education student teachers was that they were to be directly affected by inclusion and were to have limited course work in special education. The exclusion of student teachers for special education was due to the fact that those students have had the background necessary to handle situations that arise from behavioral manifestations and learning differences of students with special needs. Also, the main topic of the research was to find perceptions of preparedness to handle inclusive classroom settings, not resource or self-contained special education classrooms. So, the major difference between special education student teachers and general education student teachers was the idea of inclusion. Inclusion means that students with special needs were placed in general education classrooms, which it is assumed will have had an effect on the perceptions of preparedness for inclusion towards general education student teachers. The perception of special education student teachers towards inclusion was, therefore, unimportant to the research question.

## **Design of Study**

The research for this study was conducted on the main campus of a Midwestern Michigan university and at all satellite campus' that supported a student teacher and the accompanying seminar class requirement. The researcher was present as a non-participant observer at the main campus location and all other satellite locations of the university during the first and last seminar meetings. The main campus seminar meeting was in a conference room of a given building on the campus of the university. The other, satellite meetings of the seminar were held in middle to large metropolitan areas of the state and were conducted in conference style or higher education style classrooms.

The data was collected only from those student teachers who were enrolled in the general education, EDUC 499 classes for the Fall semester of the year 2013. The data collection method used was a Likert-like scale pre and post survey which consisted of ten statements in which the student teachers circled the correlating number of which they feel. The scale was from one to four and set in this arrangement: 1-strongly disagree; 2-disagree; 3-agree; 4-strongly agree. Also contained on the survey were three open ended qualitative questions which asked the student teachers to write a little of what they felt about preparedness towards inclusive classrooms and their feelings towards dual certification.

Further, the conditions under which the data was collected was a seminar style class where the student teachers convened and talked about

their experiences and learned what was expected of them during their adventure into education. There were four locations across the state of Michigan where the seminars were held. There were two administrations of the survey during the entirety of the student teaching experience since the survey was set to seek understanding of the perception of attitudes towards inclusive education and the second administration of the survey is to measure whether or not attitudes towards preparedness, students with special needs, and dual certification changed over the practicum experience of the student teachers. The survey of the student teachers was during the first and last seminar meeting and in the setting described above.

The primary classification for this research study was a survey format. The survey came in the form of the Likert scale survey to be administered during the first seminar classes of the Fall 2013 semester. The Likert scale survey was sectioned in the following ways: items one through three contained statements having to do with attitudes towards inclusive policy; items four through eight contained statements having to do with attitudes towards preparedness for inclusive policy; and items nine and ten had to do with attitudes towards dual certification. Further, the qualitative information for this study was garnered from the three questions at the end of the survey. The first question was designed to inform on the preconceived notions and feelings of having to teach students with special needs in inclusive educational settings. The second

qualitative question dealt with the idea of dual certification. Further it delved into how this group of student teachers felt towards having one class in special education curriculum as opposed to being forced into becoming dually certified in both general and special education. The third qualitative question posed to the student teachers whether or not they felt they would have been better prepared with coursework ending in dual certification. The question's main purpose was to gather information on feelings of preparation towards inclusive classrooms by asking the student teachers whether or not dual coursework in special education and general education would have been more conducive to their insertions into inclusive setting classrooms.

Given time and willingness of student teachers to follow up with the researcher, there were five to ten interviews which contained five qualitative questions. The data collection method for the interview format was using a recording device and then transcription of the recording done by the researcher within a week of the interview commencing. The interviews took place within a week of the initial pre-survey, so as not to taint the results with student teachers having too much experience in the classroom as a full time teacher. More succinctly, the discrepancies between the pre-survey and the interview answers were not too drastic as to discount the validity and outcome of the pre-surveys.

## **Procedures**

The procedures of the primary research were the administration of the ten Likert-like scale items and the open form questions at the end of the survey. The Likert-like scale survey items were closed form since the answers were already laid out for the student teachers to choose from (the one to four scale). The open form of the questions at the end of the survey were written in a way to have conjured written explanations of feelings student teachers held towards certain ideas; mainly attitudes towards inclusion and attitudes surrounding dual certification.

The procedures for the interviews had been conducted using both semi-structured and unstructured questions so the researcher was able to gain knowledge of layered feelings of the student teachers towards preparedness towards inclusive education. The semi-structured questions were used to discover clarity upon examination of the perceptions of students teachers towards inclusive education and the unstructured questions were used as an open format that gained a deeper understanding and more candid perceptions toward preparedness of general education towards inclusive education.

Procedures for data collection took place immediately following the application of the survey and questions for that portion of the research. No names had been used in the survey portion of the research so anonymity of the human subjects was of no consequence to the collection or analysis of the research.

### **Instrumentation**

The instrument used in the research, as stated previously, was a Likert-like scale survey with ten different statements that the student teachers rated on a scale from one to four. The statements followed this format:

#### 1. STATEMENT

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

All ten of the statements followed this format to make the survey easy and quick and only took between ten and fifteen minutes to complete. The survey was concluded with three open ended qualitative questions. Also contained on the survey sheets was a page that gave demographic information pertaining to the student teachers field of study and what type of educational level the student teachers were going to be teaching (elementary or secondary). Three other demographic informational areas were provided by the student teachers that included location of seminar course, age and gender. Also included on the demographics page was a voluntary area to include a telephone number if the student teacher was interested in aiding with over-the-phone interviews (texting was another possibility given in lieu or the direct phone conversation style interviews).

### **Location**

The survey took place on the main campus in Midwestern Michigan and at all satellite campus' that hosted a student teacher seminar class. The main campus survey was administered on a Friday afternoon during one of the student teacher seminar course meetings that was held in an average sized conference room of a campus community center that was located on the main campus of the university. This was a closed forum seminar meeting which did not include the public or anyone not affiliated with the student teachers or the education department at the main campus. The rest of the satellite seminars were structured in the same fashion and the variances were not large enough to effect the outcome of the surveys being conducted.

### **Data Collection and Analysis**

The data collection was taken immediately after the surveys were finished for the assessment portion of the research and the three open ended qualitative questions contained on the survey sheet. The analysis of this data took place within one week of the collection.

The interviews were conducted over the phone or by text and included five to seven subjects that were interviewed separately and anonymously.

The analysis of the survey questions was simply done by totaling the variety of numbers circled and using averages to figure out what the most common trends of attitude were towards preparedness for inclusive

policy. The results were used to figure the conclusions of the study which were to show whether or not student teachers feel prepared for inclusive policy when they undertake their first full time teaching assignments.

All of this was done with the approval of the Human Subject Research Committee, and the letter from the board chair of the university is in Appendix A.



## **CHAPTER 4**

### **RESEARCH RESULTS**

#### **Introduction**

This portion of the thesis marked the results of the research that was conducted. Again, the thesis was involved with finding out what the perceptions of student teachers was towards their preparedness for inclusive education. To arrive at an answer, student teachers from four different campuses of the same university were given a pre and post-survey to complete. There were a total of 55 research subjects from four different campuses of the same university. Throughout the rest of the paper, these different locations will be denoted as: Campus A, Campus B, Campus C, and Campus D. A ten item survey was used to examine the perceptions of preparation towards inclusive classrooms. The Likert-like survey used a scale from one to four and contained three qualitative questions at the end of the survey to gain further insight into the student's feelings of preparation for inclusive classrooms.

The questions/item statements on the survey were setup to answer one of the three sub-questions in the first chapter of this paper. The first sub-question, "What are pre-service teachers' attitudes towards special

education?” was addressed by items one through three of the survey. The second sub-question, “What are student teachers’ perceptions towards preparedness for inclusion?” was answered by items four through eight on the survey. Finally, the third sub-question of the overall thesis, “What are perceptions of dual certification being required in teacher education programs?” was investigated by items nine and ten on the survey which will then assumedly have answered the thesis question, “What are the perceptions of student teachers at a west-central Michigan university towards preparedness for inclusive education?”.

Also, for the tables showing results in this paper, the term Strongly Disagree was denoted as SD, the term Disagree was denoted as a D, the term Agree was denoted as an A, and the term Strongly Agree was denoted as an SA. The entire survey can be seen in Appendix B.

The Likert portion of the survey was followed by a section of three qualitative questions that were open-ended in nature and further explored the three sub-questions of the thesis listed above. The first question, “In one word, please describe your immediate feeling on having students with special needs in your student teaching classroom with the education you have received for handling inclusive classrooms. Why did you choose that word?” was made to add more insight into the first sub-question of the thesis. The second qualitative question, “Do you feel one class about general special education information fully prepared you to handle the current general education classroom that will be inclusive?” was

conducted to gather more information about the second sub-question of the thesis. The final qualitative question on the survey, “Do you feel you would have been better prepared with a dual certification program? Why or why not?” was asked to produce more evidence about the third sub-question of the thesis. These three sub-questions were asked with the assumption that they would produce more information about the feelings of preparedness of the student teachers and have provided further information about the main thesis question.

### **Overall Results of the Pre-survey**

All of the students were enrolled in the student teaching portion of their bachelor’s degree in either secondary or elementary. Of the 55 subjects, 38 of the subjects were in the elementary program and 17 were in the secondary education program. There were 37 females and 18 males surveyed.

Breaking down the 55 subjects into curriculum groups, 15 of the student teachers had chosen mathematics as a major/minor (major in secondary education/minor in elementary), 15 of the subjects had chosen language arts as their teaching certification area, 11 chose science, ten had made social studies their endorsement area, three had chosen career technical education (two cosmetology and one automotive), and one individual had chosen physical education for his/her degree.

The other two demographic areas this study was concerned with were campus and age group. The campuses, as stated earlier, were broken

down into Campus A, Campus B, Campus C, and Campus D. The reason for the ambiguity in the naming of the campuses was due to the condition of anonymity for the research subjects. At Campus A, 24 subjects were surveyed. Campus B contained 20 individuals, and Campus' C and D held nine and two, respectively. This accounted for a total of 55 individual research subjects.

As for age groups, the age range groups were broken down into 20 to 25 years of age, 26 to 30 years of age, and over 31 years of age. The breakdown of respondents was as follows: there were 32 individual's ages 20 to 25, nine ages 26 to 30, and 14 of were 31 or older.

Located in Appendix C, Table 1.1 shows the complete group of 55 and were the results of the Likert portion of the survey. As seen in the table, the responses to the first item on the Likert portion, "Students with special needs can learn in a general education classroom," were overwhelmingly in the agreement areas of the survey. Ninety-four and a half percent of the surveyed individuals circled either "agree" or "strongly agree" in answering this item. On the second item, "Students with special needs should only be taught by special education teachers," the positivity continued and 48 of the 55 (87%) respondents circled "disagree" or "strongly disagree" as a response. Item three on the survey, "My overall perception of students with special needs is positive," was heavily favorable of "agree" or "strongly agree" as 54 of the 55 (98%) subjects circled these responses. Also, item four of the survey, "Inclusive education

is good for education,” was again heavily affirmative towards the “agree” or “strongly agree” marks with 45 of the 55 (81%) student teachers having marked those answers.

Item five of the survey, “After my educational experience, I am confident in my abilities to handle situations brought on by inclusive education,” had a little more negativity in responses given as 36.4% of the student teachers answered with either “strongly disagree” or “disagree”. However, there was still a majority of positivity with item five as 63% of the student teachers decided on “agree” or “strongly agree”. Item six, “I have been given the knowledge and skills necessary to teach students with special needs in the general education classroom,” had the most split decision of the student teacher pool with 49% of the respondents circling either “strongly disagree” or “disagree” as an answer whereas 51% of the student teachers circled “agree” or “strongly agree” as a response. Item seven, “I will be able to ensure accommodations for students with special needs as outlined on their IEPs,” was again heavily favorable to “agree” or “strongly agree” as 50 of the 55 respondents (91%) circled those responses.

Item eight, “I am able to handle behavioral manifestations of students with special needs in my classroom,” was a little contentious with 31% of the student teachers answering either “strongly disagree” or “disagree” and the other 69% answering they agreed or strongly agreed

they would be able to handle behavioral manifestations of students with special needs in general education.

Item nine, which dealt with whether or not all teacher education programs should institute dual certification due to legislation surrounding inclusive education answered with an affirmative stance with 75% of student teachers having agreed. Eighty-nine percent of the subjects agreed with the assertion of item ten, which asked whether or not the student teachers would have been better prepared if they had to receive dual certification for degree completion. This showed the majority of the individuals agreed that a dual certification program would have better prepared them (item ten) and would be a better practice of preparation due to the legal paradigm created by inclusive education (item nine).

### **Pre-Survey Elementary and Secondary Education Results**

The results of the Elementary survey are as follows: item one went along the same lines as the overall results with 36 of the 38 (95%) elementary education student teachers agreeing or strongly agreeing with, “Students with special needs can learn in a general education classroom.” The second item resulted in much of the same as well with 32 of the 38 (84%) strongly disagreeing or disagreeing with, “Students with special needs should only be taught by special education teachers.” The results for item number three, “My overall perception of students with special needs is positive,” were met with strong agreement with 37 of the 38 (97%) elementary education student teachers circling “agree” or “strongly

agree.” Only 6 of the 38 (16%) elementary education student disagreed with, “Inclusive education is good for education” while 32 of the 38 (94%) individuals agreed or strongly agreed with the assertion.

Item five was answered with a little more contention than the first four items as the results were 34% disagreeing with, “After my educational experience, I am confident in my abilities to handle situations brought on by inclusive education,” while 66% agreed; this indicates that most of the student teachers are confident in their abilities, but some of the student teachers are not confident. The sixth item on the survey was split down the middle with 19 of the 38 (50%) student teachers having disagreed and the other 19 of the 38 (50%) student teachers having agreed with the statement, “I have been given the knowledge and skills necessary to teach students with special needs in the general education classroom.” A return to a majority on the agreement side was seen in the seventh item. Thirty-five of the 38 (92%) student teachers agreed with, “I will be able to ensure accommodations for students with special needs as outlined on their IEPs.” Number eight of the survey, “I am able to handle behavioral manifestations of students with special needs in my classroom,” also gathered that most of the student teachers agreed with the assumption. Twenty-eight of the 38 (74%) subjects agreed while ten disagreed (26%). See Table 1.2 for result items five through eight of the elementary results

which shows female student teachers held positive views of their preparedness for inclusive education.

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>5</b>	1	12	22	3
<b>6</b>	2	17	16	3
<b>7</b>	0	3	25	10
<b>8</b>	1	9	24	4

Table 1.2: Pre-survey Elementary Results Items 5-8

Thirty of 38 (79%) of the subjects agreed with item nine, that indicated because of IDEA 2004, dual certification should have been made the norm for students entering teacher education programs. Much of the same came with the answers to item ten which iterated that the student teachers felt they would have been better prepared with a dual certification program due to inclusive education. Thirty-one of 38 (82%) student teachers indicated they would have been better prepared to handle inclusive education if they had been put through a dual certification program. See Appendix D for the complete table of results for elementary educators.

Overall, there were 17 individuals out of the whole field that took the route to secondary education certification. As for the results for secondary educators, item one of the survey, “Students with special needs can learn in a general education classroom,” 16 of the 17 (94%) secondary student teachers agreed with the assumption that students with special needs can learn in an inclusive general education classroom. Along the same positive attitude, on item two, “Students with special needs should



only be taught by special education teachers,” 16 of the 17 (94%) student teachers disagreed that students with special needs should only be taught by a special education teacher outside of general education. On item three, “My overall perception of students with special needs is positive,” 100% of the seventeen research subjects agree with the assertion that their personal view of students with special needs was positive. For the fourth question, “Inclusive education is good for education,” 4 of the 17 subjects disagreed that inclusion was good for education overall while 13 of 17 (76%) student teachers agreed that inclusion is good for education. See Table 1.3 for the results of items one through four of the secondary education student teachers. This shows that most of the secondary education teachers held positive perceptions of students with special needs.

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>1</b>	0	1	11	5
<b>2</b>	3	13	0	1
<b>3</b>	0	0	9	8
<b>4</b>	0	4	10	3

Table 1.3: Pre-survey Secondary Results Items 1-4

With item five, “After my educational experience, I am confident in my abilities to handle situations brought on by inclusive education,” almost half (seven) of the volunteers circled that they disagreed about being confident to handle inclusion after going through the education program and 10 of the 17 (59%) agreed that they felt assured of their abilities after going through the education program. The results of item six, “I have been given the knowledge and skills necessary to teach

students with special needs in the general education classroom,” were mixed with eight of seventeen (47%) having disagreed with possessing either the skills or knowledge to handle inclusive education and nine of seventeen (53%) having agreed that they had been given the necessary tools to handle inclusive education. Item seven, “I will be able to ensure accommodations for students with special needs as outlined on their IEPs,” saw a return to a majority feeling with 15 of 17 (88%) individuals having agreed with the assumption that they are able to ensure accommodations for students with IEPs. Again, with item eight, “I am able to handle behavioral manifestations of students with special needs in my classroom,” there was more of a split, however mostly positive with 40% (six of fifteen) of the student teachers having disagreed that they would be able to handle behavioral manifestations of student with special needs and 60% (nine of fifteen) having agreed that they would be able to do the same.

Item nine, “Due to legislation like the Individuals with Disabilities Education Improvement Act of 2004, teacher education programs need to institute dual certification into coursework,” was another mix of 40% of student teachers feeling that dual certification was not necessary to feeling better prepared to handle inclusive education, while 60% felt that dual certification coursework would have better prepared them to handle inclusive education. Item ten, “I would have been better prepared for inclusive education if I had been educated in both general education and

special education coursework,” was the second of two 100% in this group with all of the subjects agreeing that coursework in both general education and special education (dual certification) would have better prepared them to handle inclusive education. See Appendix E for the full table of results for secondary educators.

**Pre-Survey Female and Male Results**

Of the field of 55 subjects, 37 of the individuals were women, representing 67.2% of the entire population. On item one, 35 of the 37 (95%) women agreed with the assumption that, “Students with special needs can learn in a general education classroom.” On the contrary, but with the same positivity as item one, 31 of the 37 (84%) women disagreed with item two, “Students with special needs should only be taught by special education teachers.” On item three, “My overall perception of students with special needs is positive,” the female student teachers were in agreement with 31 of the 37 (84%) women surveyed agreeing that their overall thoughts of students with special needs was positive. Item four, “Inclusive education is good for education,” saw much of the same majority of positive responses with 31 of 37 (84%) having affirmed that inclusion was good for education. See Table 1.4 for the results of items

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>1</b>	0	2	26	9
<b>2</b>	5	26	5	1
<b>3</b>	0	0	20	17
<b>4</b>	0	6	25	6

Table 1.4: Pre-survey Female Results Items 1-4

one through four of the female results which shows the female student teachers held very positive attitudes towards students with special needs.

Number five, “After my educational experience, I am confident in my abilities to handle situations brought on by inclusive education,” was the first of the survey to see some split in ideology, with 38% of the women having disagreed that they felt prepared after the education program they had undertaken and 62% having affirmed that they felt prepared after experiencing the education program, which shows that the majority of individuals felt positive about this statement. Item six of the survey, “I have been given the knowledge and skills necessary to teach students with special needs in the general education classroom,” showed more of a split in ideology in the results with 22 (59%) of the individuals disagreeing with the assumption of possessing the skills and knowledge and 15 (41%) of the female student teachers having avowed that they did possess the skills and knowledge to be able to teach students with special needs. Number seven, “I will be able to ensure accommodations for students with special needs as outlined on their IEPs,” 33 of the 37 (89%) respondents agreed with the statement while four disagreed. With item eight, “I am able to handle behavioral manifestations of students with special needs in my classroom,” there was a return to some division of ideals because 12 of the 37 (32%) women disagreed while 25 (78%) of them agreed they would be able to handle behavioral manifestations of student with special needs.

On item nine, “Due to legislation like the Individuals with Disabilities Education Improvement Act of 2004, teacher education programs need to institute dual certification into coursework,” there was a clear majority since 32 of the 37 (86%) women agreed that dual certification should be the norm of education programs. The same went for item ten, “I would have been better prepared for inclusive education if I had been educated in both general education and special education coursework,” with 33 of the 37 (89%) female student teachers agreeing that dual certification would have better prepared them for inclusive education. See Appendix F for a table containing the female results.

Of the 55 individuals surveyed, 18 of them were males. On the first item, “Students with special needs can learn in a general education classroom,” 17 of the 18 (94%) male subjects voted to agree with this assumption. Item two, “Students with special needs should only be taught by special education teachers,” saw an overly positive shift to disagreement with 17 (94%) of the men having circled either a one (strongly disagree) or two (disagree). Only one man agreed with the assumptions of item number two. On the third statement, “My overall perception of students with special needs is positive,” 17 (94%) of the subjects agreed that their overall perception of students with special needs was positive. Item four, “Inclusive education is good for education,” saw little disagreement with only four of the eighteen men having disagreed

and 14 (78%) having agreed that inclusive education was good for education.

The fifth item, “After my educational experience, I am confident in my abilities to handle situations brought on by inclusive education,” of the survey was a little more split since six of the eighteen men voted to disagree with the assumption that their education had not prepared them to handle situations that inclusive education could pose. This was positive since the majority of men (67%) agreed with item five. The sixth item, “I have been given the knowledge and skills necessary to teach students with special needs in the general education classroom,” was much the same as item five’s results with six having disagreed and 12 (67%) having agreed, so the majority of men feel positive about their skills and knowledge dealing with inclusive settings. Item seven, “I will be able to ensure accommodations for students with special needs as outlined on their IEPs,” went back to a majority of the men (13 of 18 or 72%) having agreed with the assertion. The eighth item on the survey, “I am able to handle behavioral manifestations of students with special needs in my classroom,” again had 13 of the 17 (72%) men agree. See Table 1.5 for results of the male student teacher response to items five through eight.

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>5</b>	1	5	11	1
<b>6</b>	1	5	9	3
<b>7</b>	0	1	14	3
<b>8</b>	0	5	12	1

Table 1.5: Pre-survey Male Results Items 5-8

This table (1.5) shows the direct results of the positive feelings the male student teachers held towards their preparedness for inclusive education.

Item nine, “Due to legislation like the Individuals with Disabilities Education Improvement Act of 2004, teacher education programs need to institute dual certification into coursework,” was split with 9 of the 17 (53%) men having disagreed with the assumption and eight (47%) of the men having agreed. Lastly, item ten, “I would have been better prepared for inclusive education if I had been educated in both general education and special education coursework,” saw a return to overwhelming agreement with 16 of the 18 (89%) males having agreed with the idea that dual certification would have better prepared them for inclusive education. See Appendix G for full male results.

### **Pre-survey All Age Group Results**

The next demographic groups that were analyzed were those based on age group affiliation. The three age groups chosen were from 20 to 25 years old, 26 to 30 years old, and over 31 years old. Of the subgroups, there were 32 individuals in the 20 to 25 age range, nine individuals in the 26 to 30 age group, and 14 in the 31 and over grouping.

All of the groups agreed with the first item of the survey. They felt that students with special needs could learn in general education classrooms at rates of: 20 to 25, 78%; 26 to 30, 89%; and 93% for the group of over 31. As for the second item of the survey, the result was overwhelmingly positive in that all age groups felt that students with

special needs should not be taught only by special education teachers. Ninety-one percent of student teachers aged 20 to 25 had not agreed with the second item, 89% of student teachers in the 26 to 30 age range disagreed, and 86% of the over 31 followed the trend of disagreement. The third item was also overwhelmingly positive in agreement amongst the age groups since 31 of the 32 (97%) in the youngest sub group agreed that their perceptions of students with special needs were positive. Following suit were all nine individuals of the 26 to 30 age group, and all (100%) 14 subjects of the 31 and over group agreed as well. Eighty-four percent of the 20 to 25 age group agreed with the fourth item that asserted inclusive education is good for education. The other two groups fell along the same trend with 89% of the subjects in the 26 to 30 age range and 71% of subjects agreed in the over 31 group.

Item five of the survey, that had to do with whether or not the student teachers felt they had been prepared adequately by the education program, saw a small split in the results. Of the 32 individuals in the 20 to 25 age range, 14 (44%) people disagreed. In the 26 to 30 age group the tide shifted as eight of the nine (89%) subjects agreed they had been adequately prepared and nine of the fourteen (64%) student teachers from the over 31 age group agreed. On the sixth item of the survey, there was again a split (this time more definite) with 50% of the student teachers in the 20 to 25 age range having agreed or disagreed with the assumption that they held the knowledge or skills to handle inclusive education. There was



also more of a split on this item with the other groups with four of the nine (44%) members from the 26 to 30 age range having disagreed and eight of the fourteen (57%) over 31 student teachers having disagreed with item six. Further, on item seven, there was a sharp turn back to a majority agreement with the age group 20 to 25 with 25 of the 32 (78%) individuals having agreed with the postulation they would have been able to ensure accommodations as outlined on IEPs. Seven of the nine (78%) individuals from the age group 26 to 30 agreed with assumption as well as 12 of the 14 (86%) subjects from the age group of 31 and over. On item eight, 23 of the 32 (72%) individuals from the 20 to 25 age group felt they would have been able to handle behavioral manifestations that students with special needs may have exhibited. On the same item, seven of the nine (78%) members of the 26 to 30 age group agreed as well as nine of the fourteen (64%) student teachers from the over 31 group. See Table 1.6 for results of items five through eight for ages 20-25. See Table 1.7 for results of ages 26-30 for items five through eight. See Table 1.8 for results of items five through eight for age group over 31. These tables show that most of the student teachers felt confident in their abilities to handle the extra

stress brought on by inclusive education after going through their teacher education program.

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>5</b>	1	12	15	3
<b>6</b>	2	14	12	3
<b>7</b>	2	5	25	0
<b>8</b>	0	9	21	2

Table 1.6: Pre-survey Results for Ages 20-25 Items 5-8

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>5</b>	0	1	8	0
<b>6</b>	0	4	6	0
<b>7</b>	0	1	4	4
<b>8</b>	0	2	5	2

Table 1.7: Pre-survey Results for Ages 26-30 Items 5-8

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>5</b>	1	4	8	1
<b>6</b>	2	6	4	2
<b>7</b>	0	2	9	3
<b>8</b>	0	5	5	4

Table 1.8: Pre-survey Results for Ages 31 and Over Items 5-8

The ninth item dealing with the idea of having forced institution of dual certification programs had strong agreement with 24 of the 32 (75%) individuals from the first age group having agreed with the assertion. Six of the nine (67%) individuals from the age range 26 to 30 agreed with the assumption and 11 of the 14 (79%) individuals from the over 31 age group also agreed. On item ten of the survey, the majority of individuals from all age groups agreed that they felt they would have been better prepared for inclusive education if they had to take an education program with dual certification. In the group of 20 to 25 years old, 30 of the 32 (94%) student

teachers agreed with the assumption, seven of the nine (78%) individuals in the group of twenty-six to thirty agreed with item ten, and 12 of the 14 (86%) people in the group of over 31 agreed as well. See Appendices H, I, and J for all of the age group full results tables.

**Pre-Survey All Campus Results**

Of all four of the campuses used for the survey, Campus A had the most participants with 24 subjects for the pre-survey. Overwhelmingly, on item one of the survey, “Students with special needs can learn in a general education classroom,” the majority of student teachers agreed with the statement (23 of the 24 or 96%). On item two, there was another positive outcome since 20 of the 24 (83%) subjects disagreed that students with special needs should only be taught by special education teachers. Another shift took place on item three, “My overall perception of students with special needs is positive,” with 23 of the 24 (96%) individuals having implied that their overall idea of students with special needs was positive. Item four of the survey saw more of the same as item three with 20 of the 24 (83%) student teachers having agreed that inclusive education was good for education. See Table 1.9 for the results of items one through four for the subjects of Campus A. This table shows that the overall feelings of

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>1</b>	0	1	20	3
<b>2</b>	4	16	4	0
<b>3</b>	0	1	8	15
<b>4</b>	2	2	18	2

Table 1.9: Pre-survey Results Campus A Items 1-4

the student teachers from Campus A held rather positive feelings towards students with special needs.

On the fifth statement of the survey, “After my educational experience, I am confident in my abilities to handle situations brought on by inclusive education,” there was some another majority of agreement, with only nine (38%) of the subjects having disagreed and 15 (62%) of the subjects having agreed with the assumption. Item six saw more of a split in ideology, with the majority (13 of the 24 or 54%) of research subjects having disagreed with the assumption that they possessed the knowledge and skills to handle all facets of inclusive education. A shift back to the norm of majority agreement came on number seven, “I will be able to ensure accommodations for students with special needs as outlined on their IEPs,” with 21 (88%) of the subject having agreed with the assertion. Item eight on the survey, “I am able to handle behavioral manifestations of students with special needs in my classroom,” 16 of the 24 (67%) individuals agreed while eight (33%) of the subjects disagreed with the assumption.

The ninth item on the survey, “Due to legislation like the Individuals with Disabilities Education Improvement Act of 2004, teacher education programs need to institute dual certification into coursework,” saw a return to a majority in agreement with 18 of the 24 (75%) individuals having agreed with the idea. Survey item ten, “I would have been better prepared for inclusive education if I had been educated in both

general education and special education coursework,” was also an affirmation of the attitude that most (21 of the 24 or 88%) individuals from Campus A felt dual certification programs would have better prepared them for inclusive education. See Appendix G for the table containing full results of Campus A.

Campus B held the second most survey subjects with 20 individuals participating. Much along the lines of Campus A, the subjects from Campus B overwhelmingly agreed with the first item of the survey, “Students with special needs can learn in a general education classroom,” with nineteen of the twenty subjects having agreed with the assumption. As for item two of the survey, the student teachers from Campus B followed suit with Campus A and overwhelmingly rejected the idea that students with special needs should only learn from special education teachers (only 2 of the twenty or 8% agreed with this assumption). On the third item, “My overall perception of students with special needs is positive,” 100% of the student teachers agreed with the assertion. Item four, dealing with rather or not inclusive education is good for education, saw the same majority of agreement as 16 of the 20 (80%) individuals agreed that inclusion is good for education.

Item five was the first number to see some ideology differences amongst the student teachers as eight of the twenty (40%) student teachers did not feel they possessed the knowledge or skills necessary to handle all

facets of inclusion and 12 of the 20 (60%) agreed. Item six was split in belief more than other items on the survey as 13 of the 20 (65%) student teachers agreed that the education program prepared them adequately for inclusive education classrooms. However, the result was still positive. The seventh item on the survey saw a return to a majority (18 of 20 or 90%) of the individuals having agreed with the idea that they felt they could ensure accommodations for students with special needs in inclusive classrooms. Item eight of the survey, “I am able to handle behavioral manifestations of students with special needs in my classroom,” was also saw 65% agreement since 13 of the 20 individuals agreed they could handle behavioral manifestations of students with special needs while seven disagreed with the assumption. See Table 1.10 for the results of items five through eight for the subjects of Campus B. This table shows that the majority of the student teachers from Campus B felt confident in their

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>5</b>	1	7	10	2
<b>6</b>	1	6	12	1
<b>7</b>	0	2	14	4
<b>8</b>	0	7	10	3

Table 1.10: Pre-survey Campus B Items 5-8

abilities to instruct students with special needs.

Item nine on the survey dealt with dual certification being the norm for college teacher education programs, was agreed upon by 14 of the 20 (70%) student teachers while six decidedly disagreed with the assumption. Along the same lines, item ten dealt with whether or not dual certification programs would have better prepared them, the student

teachers overwhelmingly agreed with 19 of the 20 (95%) having circled three or four on the survey.

Campus C was the third largest group of student teachers, with nine individuals having participated with the research. The majority of student teachers from Campus C affirmed that they felt students with special needs can learn in general education classrooms as eight of the nine (89%) agreed with the assumption. The same positivity followed on item two as the same number (eight or 89%) of student teachers felt that special education teachers should not be the sole educators of students with special needs. 100% of the volunteers agreed with item three as they felt their overall perceptions of students with needs was positive. Item five had two decenters, however the rest of them (seven or 78%) agreed with the statement, "Inclusive education is good for education." 33% of the student teachers from Campus C disagreed with item five while 67% of them agreed that they were confident in their abilities to handle inclusion with the knowledge and skills they were taught. However, 67% felt the education program did not adequately prepare them for all facets of inclusive education while 33% felt they had could handle any situation brought forth by inclusion. For results of items one through eight for Campus C participants, see Table 1.11. This table shows that the student teachers from Campus C felt positive towards both students with special

needs and their abilities to handle the extra stresses inclusive education could bring.

Question/Response	SD 1	D 2	A 3	SA 4
1	0	1	5	3
2	1	7	1	0
3	0	0	5	4
4	0	2	5	2
5	0	3	6	0
6	0	6	1	2
7	0	0	7	2
8	0	2	5	2

Table 1.11: Pre-survey Results Campus C Items 5-8

Item seven saw a return to student teachers having 100% agreed with the assumption, “I will be able to ensure accommodations for students with special needs as outlined on their IEPs.” Item eight, “I am able to handle behavioral manifestations of students with special needs in my classroom,” was agreed to by seven of the nine (78%) surveyed. Further, items nine and ten held the same results with seven of the nine (78%) having agreed that teacher education programs should institute dual certification programs (item nine) and that dual certification programs would have better prepared them for inclusive education (item ten).

Campus D was the smallest of the four campus’s with two participants. The participants on item one both agreed with the assumption that students with special needs can learn in the general education classroom. Item two went along the same norms as the rest of the fifty-five participants with both of the participants having disagreed that students with special needs should only be taught by special education



teachers. The third item on the survey, “My overall perception of students with special needs is positive,” was also 100% with both student teachers having agreed. Item four also had both individuals in agreement with the statement that encompassed inclusion as being good for education.

The fifth item on the survey also saw both of the subjects had agreed with the assumption that they possessed the skills necessary to handle students with special needs in inclusive classroom, however, on the sixth item, there was disagreement as one of the student teachers disagreed he/she could handle all aspects of inclusive education and the other strongly agreed with the assumption. Item seven returned to the same 100% agreement with the idea that the student teachers would be able to ensure accommodations of the students with special needs in their classrooms. Item eight also held both of the student teachers agreeing that they could handle behavioral manifestations that occurred with students with special needs in their inclusive classrooms.

Item nine saw a split in ideas again with one of the individuals having disagreed with the assertion that dual certification should be the norm of teacher education programs and the other person having agreed with the idea. The final item, ten, had both of the student teachers in agreement with the assumption that they would have been better prepared if they had been made to undertake dual certification as a degree course. See Appendices K (Campus A), L (Campus B), M (Campus D), and N (Campus E) for the overall table results.

Combining the results of all of the campuses, no campus stood out as going against the norm the other campuses set. Item one went along the same norm as the other results with the majority of all student teachers, no matter the campus, having agreed that students with special needs are able to learn from general education teachers. The same went for item two, just with the majority of student teachers from all campus' having disagreed that students with special needs should only be taught by special education teachers. The overall majority of student teachers from all campuses agreed they held positive perceptions of students with special needs. Also, with item four of the survey, the common assumption was to agree that inclusion is good for education.

Item five, dealing with having the knowledge and skills to teach students with special needs, was where there started to be a disagreement in thought from the campuses agreement. Campuses A and B held thirty-nine percent of the student teachers disagreeing while only twenty-seven percent of Campuses C and D disagreed they had been adequately taught what was necessary to teach students with special needs. Item six saw much of the same disagreement as with other groupings in this study with the exception to the norm being Campus C. Campus C had six of the nine individuals disagree that they were taught the content necessary to successfully teach students with special needs. The majority of the student teachers from all campuses also agreed with the assumptions of items seven and eight with very little discrepancy in the results. Items nine and

ten were agreed to by the vast majority of student teachers spanning across all campus data. On item nine, Campus A saw a 75% agreement, 70% of Campus B agreed, 78% of Campus C agreed with the assumption, and one of the two student teachers from Campus D agreed. The trend of agreement was also prevalent on item ten from all of the campuses.

### **Pre-survey Results by Subject Major**

The breakdown of individual student teachers by subject matter is as follows: Mathematics-16; Language Arts-14; Science-11; Social Studies-10; and Career Technical Education (CTE)-3. On item one of the survey, Mathematics, Science, and CTE all had 100% agreement and Social Studies (90% agreement) and Language Arts (86% agreement) had very minimal disagreement with the assumption that students with special needs would be able to learn in general education classrooms. On item two, only Mathematics and CTE had 100% agreement that students with special needs should only be taught by special education teachers while student teachers majoring in Language Arts (71% agreed), Science (82% agreed), and Social Studies (90% agreed) had small patterns of agreement with the same assumption. Item three came with a pattern of four of the five subject majors in 100% agreement with the assumption that they held positive overall views of students with special needs with Language Arts (93% agreed) being the only major with one student teacher disagreeing. Next, on item four, only CTE majors had 100% agreement (3 of 3 research subjects) that inclusion is good for education. The other disciplines of

study had small amounts of disagreement with Mathematics seeing 14 of 16 (88%) having been in agreement, Language Arts with 11 of 14 (79%) having agreed, Science having eight of ten (80%) agree, and Social Studies with seven of ten (70%) having agreed.

Starting with number five of the survey was where the survey started to see a division of disagreement within most of the major subjects. For Mathematics, 10 of 16 (63%) subjects disagreed with the assumption that they felt adequately prepared by the academic program given to them to be able to handle students with special needs in their classrooms. Language Arts had a smaller number of individuals in disagreement with 11 of 14 (79%) having agreed. However, Science followed along the pattern set by Mathematics with five of eleven (45%) having disagreed with the assertion. Social Studies student teachers followed the pattern of Language Arts with only two of ten (20%) subjects having disagreed and CTE had one of three (33%) subjects having disagreed with item five. Along the same design set by item five, item six saw even more division with the subjects having disagreed that they had been given the knowledge and skills to teach students with special needs in their classrooms. Mathematics had nine of sixteen (56%) in disagreement, Language Arts had six of fourteen (43%) in disagreement, seven of eleven (64%) Science subjects disagreed, four of ten (40%) Social Studies student teachers disagreed, and one of three (33%) CTE majors disagreed. The consensus on item seven was that the majority of student teachers from all disciplines

agreed that they would be able to assure students with special needs would be given the accommodations outlined on their IEPs. The subjects from Mathematics, Science, and Social Studies followed along the same split in ideology seen in items five and six; seven of sixteen (44%) Mathematics student teachers disagreed, five of eleven (45%) Science student teachers disagreed, and four of ten (40%) Social Studies subjects disagreed. Language Arts student teachers agreed at a rate of 93% with item eight and CTE student teachers agreed at a rate of 100%. See Tables 1.12 (Math), 1.13 (Language Arts-LA), 1.14 (Social Studies-SS), and 1.15 (Science) for results to items one through eight. These tables below show that student teachers felt positive toward students with special needs and how prepared they are to handle inclusive classrooms.

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	10	6
2	4	12	0	0
3	0	0	9	7
4	0	2	11	3
5	1	9	6	0
6	1	8	6	1
7	0	1	14	1
8	0	7	9	0

Table 1.12: Pre-survey Results for Math Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	2	10	2
2	0	10	4	0
3	0	1	5	8
4	1	2	11	0
5	1	2	10	1
6	1	5	8	0
7	0	1	8	5
8	1	0	10	3

Table 1.13: Pre-survey Results for LA Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	1	6	3
2	3	6	0	1
3	0	0	6	4
4	0	3	5	2
5	1	1	6	2
6	1	3	3	3
7	0	1	6	3
8	0	4	4	2

Table 1.14: Pre-survey Results for SS Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	8	3
2	1	8	2	0
3	0	0	5	6
4	1	1	6	3
5	0	5	5	1
6	0	7	2	1
7	0	2	6	3
8	0	5	5	1

Table 1.15: Pre-survey Results for Science Items 1-8

Items nine and ten of the survey dealt with how the student teachers felt towards dual certification and how well they would have been prepared if they had been made to take a course program geared towards finishing with both special education and general education endorsement. For the majority of subjects, there was a lot of agreement that dual certification would have been better to prepare them for inclusion and that the likelihood of them all choosing a line of coursework that would have led to dual certification was highly probable. See Appendices O (Mathematics), P (Language Arts), Q (Social Studies), R (Science), and S (Career Technical Education) for full table results.

**Overall Post-Survey Results**

<b>Question/Response</b>	<b>SD 1</b>	<b>D 2</b>	<b>A 3</b>	<b>SA 4</b>
<b>1</b>	0	0	32	14
<b>2</b>	10	30	6	0
<b>3</b>	0	0	22	24
<b>4</b>	0	5	32	9
<b>5</b>	0	5	32	9
<b>6</b>	0	14	25	7
<b>7</b>	0	2	29	15
<b>8</b>	0	8	25	13
<b>9</b>	0	14	25	7
<b>10</b>	1	3	26	16

Table 2.1: Overall Results of Post Survey

Forty-six of the original 55 (84%) subjects were available to take the post-survey (see Table 2.1 for the overall post-survey results). The researcher found that two of the subjects were not required to attend the last seminar meeting for Campus C and one other subject from that campus dropped the course. The other six subjects were not present at the

final class meeting and were unable to take part in the final survey. These subjects have been accounted for as subject mortality, which was one of the foreseeable problems with this research project. These six were spread across Campuses A and B with Campus B losing four subjects and the other two having dropped from the pool of subjects from Campus A.

See Table 2.1 for the overall results of the post survey. On item one of the survey, the overall consensus was that the student teachers were 100% in agreement with the assumption that students with special needs would be able to learn in general education classrooms. Item two had a had much of the same positivity since 40 of the 46 (87%) student teachers disagreed that students with special needs needed to be taught by special education teachers. Item three again had 100% of the student teachers having agreed that their overall perception of students with special needs was positive. Item four again had a majority of student teachers (41 of 46 or 89%) having agreed that inclusive education is good for education. Number five on the post survey had much of the same agreement amongst the individuals with 41 of the 46 (89%) subjects having agreed with the assumption that they were confident in their abilities to handle inclusive education in their general education classrooms. Six was the first item on the post survey to see any sort of division in feelings with 14 of the 46 (30% disagreed while 70% agreed) student teachers having disagreed with the assumption they were given the appropriate skills and knowledge from the education program they had finished. Number seven had a return to the

normal pattern of a large majority of the student teachers having agreed (96% agreed) that they could assure accommodations set forth by students' IEPs. Similarly, item eight of the survey saw a majority of agreement from the student teachers with 38 of the 46 (83%) subjects having agreed with the assertion they were able to handle behavioral manifestations of students with special needs.

Fourteen of the 46 (30% disagreed while 70% agreed) subjects disagreed that dual certification should be the only way to establish better teacher preparation programs. On item ten, 42 of the 46 (91%) student teachers felt a dual certification program would have better prepared them for inclusive education. There were no major shifts in attitude patterns from the overall results of the pre-survey juxtaposed with the post-survey results.

### **Post Survey Elementary and Secondary Education Results**

In the post-survey group, there were 33 elementary education student teachers and 13 secondary education student teachers. On item one, 100% of both groups agreed that students with special needs were able to learn in general education. The majority of elementary student teachers (27 of 33 or 81%) disagreed that students with special needs would be better taught by special education teachers and 100% of secondary student teachers felt the same way. There was one-hundred percent agreement again with elementary and secondary student teachers on the third item of the post-survey. Only five of the 33 elementary (28 of



33 or 85% agreed) student teachers disagreed with item four (inclusion being good for education) and 100% of secondary educators agreed that inclusion was good for education. See Tables 2.2 and 2.3 for elementary and secondary educator results for items one through four. These tables show that both elementary and secondary education student teachers held high positive feelings towards students with special needs.

<b>Question/Response</b>	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1</b>	0	0	22	11
<b>2</b>	8	19	6	0
<b>3</b>	0	0	15	18
<b>4</b>	0	5	20	8

Table 2.2: Post Survey Elementary Results  
Items 1-4

<b>Question/Response</b>	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1</b>	0	0	10	3
<b>2</b>	2	11	0	0
<b>3</b>	0	0	7	6
<b>4</b>	0	0	12	1

Table 2.3: Post Survey Secondary Results  
Items 1-4

Number five, about confidence in their own ability to handle inclusion, had a majority of elementary and secondary student teachers having agreed with they had enough confidence with 94% of elementary student teachers having affirmed and 77% of secondary student teachers having felt the same. Number six of the post-survey had limited ideological differences with 24% of elementary educators having disagreed and 46% of secondary educators having disagreed that they had been given the skills and knowledge to handle inclusive education. Item seven of the post-survey saw almost 100% of elementary and secondary student teachers having agreed that they were able to ensure accommodations of IEPs with only one secondary educator having dissented (92% of secondary educators agreed). There was again very little indecision between elementary and secondary educators on item

eight with 28 of the 33 (85%) elementary student teachers having agreed and 10 of the 13 (77%) secondary student teachers having disagreed that they were able to handle behavioral manifestations of students with special needs. See Appendix U for full post survey elementary results.

On numbers nine and ten of the survey, there was a little more of a split in ideology, but only from the group as a whole. The question of dual certification being the best way to run teacher preparation programs (item nine) had support from 76% of elementary student teachers having agreed with the assumption and 62% of secondary student teachers having agreed with the assertion. On item ten, whether or not the student teachers felt they would have been better prepared for inclusion if they had gained dual certification, 30 of the 33 (91%) elementary student teachers agreed and 12 of the 13 (92%) secondary student teachers agreed with the assumption. See Appendix V for full secondary results.

### **Post Survey Female and Male Results**

Of the entire group, 31 (67%) of the subjects were women and 15 (33%) of the subjects were male. Following along with much of the same pattern of other demographic groupings, 100% of both males and females agreed that students with special needs were able to learn in general education classrooms (item one). On item two, the majority of both groups felt students with special needs should be included in general education classrooms with 84% of women having disagreed that only special education teachers should teach students with special needs and 93% of

men having felt the same. The third item came with more positivity towards students with special needs as 100% of both women and men agreed that their perceptions of students with special needs were positive. Number four of the post-survey had very little disagreement with 87% of women having agreed and 93% of men having agreed that inclusive education is good for education. See Appendices W (Female) and X (Male) for full table results.

The exact same result from number four translated to number five on the post-survey with 87% of women having agreed and 93% of men having agreed that they possess the confidence necessary to teach both general education students and students with special needs in inclusive classrooms. Number six of the post-survey had the largest split in ideology when dealing with the results from the women. 39% (61% agreed) of the female subjects disagreed that they were given the knowledge and skills in the educational program they undertook. However, 87% of male subjects felt they had been given the knowledge and skills necessary to handle inclusive education. Only one female subject of all of the subjects (women and men) felt she would not be able to ensure accommodations to students with special needs as outlined on IEPs (number seven on the survey; 100% of males agreed and 97% of females agreed with item seven). Number eight, whether or not the student teachers felt they were able to handle behavioral manifestations of students with special needs was disagreed upon by a small number of females (8 of the 33 or 24%) and 100% of

males felt they were able to handle behavioral manifestations of students with special needs in their inclusive classrooms. See Tables 2.4 and 2.5 for the male and female results of items five through eight. These tables juxtapose the results for males and females showing there was little difference in their agreement about their positive feelings towards being prepared to handle inclusive education.

Question/Response	SD 1	D 2	A 3	SA 4
5	0	4	20	7
6	0	12	13	6
7	0	1	20	10
8	0	8	14	9

Table 2.4: Post Survey Male Results Items 5-8

Question/Response	SD 1	D 2	A 3	SA 4
5	0	1	12	2
6	0	2	12	1
7	0	0	10	5
8	0	0	11	4

Table 2.5: Post Survey Female Results Items 5-8

A majority of males disagreed with number nine, (forced dual certification programs for teacher preparation) with nine of the fifteen (60%) men having disagreed it was good for teacher education programs. Only four of the 31 (13%) female subjects disagreed with the assumption. On item ten, 90% of women felt dual certification programs would have better prepared them to handle inclusive education while 14 of 15 (93%) men felt the same way.

**Post Survey Results for All Age Groups**

Of the remaining 46 student teachers for the post-survey, there were still three age subgroups. There were 28 student teachers in the 20 to 25 age group, nine individuals in the 26 to 30 age grouping, and nine student teachers in the over 31 age group. The two groups that had a decline in number were the ages of 20 to 25 (lost four) and the over 31

group lost five which accounted for all nine of the subjects that were lost from the group as a whole.

On item one of the post-survey, the 20 to 25 group held 100% agreement that students with special needs would be able to learn in general education as did the age group of 26 to 30 and the over 31 age group. The group of 20 to 25 year olds disagreed completely (100% disagreed) with the assertion that students with special needs should only be taught by special education teachers. The majority of students aged 26 to 30 also disagreed with seven of the nine (78%) student teachers having disagreed with the assumption and six of the nine (67%) student teachers from the group of over thirty-one having disagreed with item two as well. As for item three, all of the 28 (100%) student teachers from the 20 to 25 age group having agreed, all nine (100%) of the individuals from the age group of 26 to 30, and all nine (100%) people from the group of over age 31 having agreed. Twenty-four of the 28 (86%) student teachers from the ages 20 to 25 agreed with the assertion that inclusive education was good for education. Eight of nine (89%) student teacher from the group of 26 to 30 agreed with the same item and 100% of the age group over 31 agreed as well. See Tables 2.6 (20 to 25), 2.7 (26 to 30), and 2.8 (over 31) to see the results of items one through four of the post survey. These tables show that there was very little disagreement amongst the student teachers across

age range when dealing with their positive perceptions of students with special needs.

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	19	9
2	6	22	0	0
3	0	0	15	13
4	0	4	18	6

Table 2.6: Post Survey Ages 20-25 Items 1-4

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	7	2
2	3	4	2	0
3	0	0	3	6
4	0	1	7	1

Table 2.7: Post Survey Ages 26-30 Items 1-4

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	6	3
2	1	5	3	0
3	0	0	4	5
4	0	0	7	2

Table 2.8: Post Survey Over 31 Ages Items 1-4

On item five of the post-survey, 24 of the 28 (86%) student teachers from the group of 20 to 25 year olds agreed that they felt prepared for inclusive education by the teacher education program they had completed. All (100%) of the individuals from the 26 to 30 age group and eight of the nine (89%) student teachers from the over 31 subgroup agreed with number five as well. Item six was the most different ideologically of the post-survey as 18 of the 28 (64%) members of 20 to 25 year olds agreed that they had been given the knowledge and skills necessary to handle all aspects of inclusive education. However, seven of nine (78% each) from both of the elder groupings agreed they possessed the knowledge and skills necessary to handle inclusive education. Item seven from the group of 20 to 25 years old agreed 100% that they had been able to ensure accommodations of students with special needs as did the age

group of 26 to 30 year olds (100% agreed as well) did. The age group of over 31 had one person disagree, while the other eight of nine (89%) agreed with the assertion. Item eight had a little disagreement, but still had a majority of individuals having agreed that they would be able to handle behavioral manifestations of students with special needs. Seventy-five percent of student teachers from the age group of 20 to 25 year olds, 100% of student teachers from ages 26 to 30, and 89% of student teachers over 31 agreed with item eight.

Twenty of the 28 (71%) student teachers ages 20 to 25, six of eight (75%) student teachers from the ages 26 to 30, and seven of the nine (78%) student teachers over 31 agreed that mandated dual certification programs will have benefitted teacher education programs (item nine). Twenty-six of the 28 (93%) individuals from the 20 to 25 age group, seven of the nine (78%) people in the 26 to 30 age group, and all (100%) of the student teachers from the over 31 age group agreed that they would have been better prepared for inclusive education by a program that required dual certification to graduate. For complete table results of all of the age groups discussed here, see Appendices Y (20-25), Z (26-30), and AA (over 31).

### **Post Survey Results by Campus**

Of the four campuses surveyed, Campus A had 23 respondents on the post-survey, Campus B had 16 subjects, Campus C held five, and Campus D had two. On item one of the survey, all of the respondents

(100%) from all campuses agreed that students with special needs were able to learn in general education classrooms. On item two, Campuses A, C, and D had three (13%), two (40%), and one (50%) individual(s) agree, respectively, while twenty (87%), three (60%), and one (50%) subject(s) disagreed, respectively, that students with special needs should only be taught by special education teachers. All or 100% of respondents from Campus B disagreed with item two. Again, as with items one and two, on item three all subjects (100%) from all of the campuses agreed that they held positive attitudes of students with special needs. Three (13%) of the subjects from Campus A disagreed on item four that inclusive education was good for education and the other 20 (87%) agreed with the same assumption. All student teachers (100%) from Campuses B, C, and D agreed with item four.

There was little disagreement from all campuses on number with one of 23 (4%) having disagreed from Campus A, two of sixteen (13%) having disagreed from Campus B, and two of five (40%) from Campus C having disagreed that they were confident in their abilities to handle inclusive style classrooms. On item five, both subjects from Campus D agreed they were confident in their abilities. Number six was the most split of the items on the post-survey when dealing with all of the campus results as nine of 23 (39%) subjects having agreed from Campus A and three of five (60%) student teachers having disagreed from Campus C that they possessed the knowledge and skills necessary to handle all situations



that could arise in an inclusive classroom. Only two of sixteen (13%) from Campus B disagreed and both subjects (100%) from Campus D agreed on item six. On item seven, only one person from Campus C disagreed (80% agreed) with the assumption that he/she would be able to assure all accommodations to students with special needs as outlined on IEPs. All of the subjects (100%) from the remaining three campuses agreed they felt they were able to ensure students with special needs would get the accommodations outlined on their IEPs. Twenty of 23 (87%) student teachers from Campus A, 14 of 16 (88%) student teachers from Campus B, two of five (40%) student teachers from Campus C, and both (100%) of the subjects from Campus D felt they would be able to handle behavioral manifestations of students with special needs in their inclusive classrooms as outlined with item eight of the post-survey. See Tables 2.9 (Campus A), 2.10 (Campus B), 2.11 (Campus C), and 2.12 (Campus D) for table results of items 1-8 of all of the campus groupings. These table juxtapose the results from items one through eight for the student teachers according to

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	17	6
2	4	16	3	0
3	0	0	12	11
4	0	3	19	1
5	0	1	18	4
6	0	9	10	4
7	0	0	15	9
8	0	3	14	6

Table 2.9: Campus A Results Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	10	6
2	5	11	0	0
3	0	0	8	8
4	0	0	10	6
5	0	2	12	2
6	0	2	13	1
7	0	0	12	4
8	0	2	10	4

Table 2.10: Campus B Results Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	4	1
2	1	2	2	0
3	0	0	2	3
4	0	2	2	1
5	0	2	1	2
6	0	3	1	1
7	0	1	2	2
8	0	3	0	2

Table 2.11: Campus C Results Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	1	1
2	0	1	1	0
3	0	0	0	2
4	0	0	1	1
5	0	0	1	1
6	0	0	1	1
7	0	0	1	1
8	0	0	1	1

Table 2.12: Campus D Items 1-8

campus. There was heavy agreement that student teachers felt both positive towards students with special needs and their preparedness to have those students in their classrooms.

Item nine, relating to whether or not a forced teacher preparation program ending in dual certification, was the second most obvious split in ideology on the post-survey. Sixteen of the 23 (70%) student teachers from Campus A, 12 of the 16 (75%) student teachers from Campus B, three of the five (60%) from Campus C, and both of the student teachers from Campus D agreed that the described type of program is necessary to adequately prepare teacher education students for inclusive education. The majority of student teachers from all campuses, 21 of 23 (91%) from Campus A, all 16 (100%) student teachers from Campus B, three of five (60%) student teachers from Campus C, and both (100%) individuals from Campus D felt a dual certification program would have better prepared them for inclusive education. See Appendices BB (Campus A), CC (Campus B), DD (Campus C), and EE (Campus D) for complete table results by campus.

### **Post Survey Results by Subject Major**

Once again, the subject areas that were surveyed are Mathematics (13), Social Studies (10), Science (11), Language Arts (11), and Career Technical Education (1-CTE). One-hundred percent of the participants in all of the subject areas agreed with item one that students with special needs were able to learn in a general education classroom. All of the Mathematics and CTE majors disagreed with number two-that only special education teachers should teach students with special needs. However, eight of the ten (80%) Social Studies student teachers, ten of eleven (91%) Science student teachers, and eight of eleven (73%) Language Arts student teachers disagreed with the assumption. On the third item-that the student teachers' perception of students with special needs was positive-all (100%) of the subjects in all of the subject areas agreed with that assertion. On the fourth statement of the post-survey, 12 of the 13 (92%) Mathematics majors agreed, nine of the ten (90%) Social Studies student teachers, ten of the eleven (91%) Science teachers, and nine of the eleven (82%) Language Arts student teachers agreed that inclusive education was good for education as a whole. At least one person from each of the disciplines disagreed with this assumption of item four and the sole CTE student teacher agreed with the statement.

On item five of the survey, ten of the thirteen (77%) Mathematics educators, ten of the ten (100%) Social Studies student teachers, nine of the eleven (82%) Science student teachers, eleven of eleven (100%)

Language Arts student teachers and the CTE student teacher agreed that they were confident of their abilities to teach students with special needs. Seven of the thirteen (54%) Mathematics student teachers disagreed that they had been given the skills and knowledge necessary to teach students with special needs in their general education classrooms. However, the trend of disagreement did not continue with the rest of student teachers as eight of ten (80%) Social Studies student teachers, seven of eleven (63%) Science student teachers, ten of eleven (91%) Language Arts student teachers, and the CTE student teacher agreed they were given the knowledge and skills to teach students with special needs. One Mathematics student teacher (92% agreed) disagreed with item seven-that he or she would be able to assure accommodation for students with special needs as outlined on IEPs-and the rest of student teachers (100%) from all of the different major areas agreed that they were able to carry this task out. The majority of all of the student teachers across the separate majors agreed that they could handle behavioral manifestations in their classrooms by having agreed with item eight. Seven of thirteen (54%) Mathematics student teachers, nine of ten (90%) Social Studies student teachers, all eleven (100%) of the Science student teachers, ten of eleven (91%) Language Arts student teachers and the CTE student teacher all agreed with item eight. See Tables 2.13 (Mathematics), 2.14 (Language Arts-LA), 2.15 (Social Studies-SS), 2.16 (Science), and 2.17 (CTE) for partial results. These tables follow the same trends as the other

demographics showing that amongst the student teachers when major of study was taken into account, the student teachers still very positive towards perceptions of students with special needs and towards their preparedness to teach those students in their classrooms.

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	8	5
2	6	7	0	0
3	0	0	6	7
4	0	1	9	3
5	0	3	9	1
6	0	7	5	1
7	0	1	9	3
8	0	6	4	3

Table 2.13: Mathematics Results Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	9	2
2	0	8	3	0
3	0	0	4	7
4	0	2	8	1
5	0	0	7	4
6	0	1	7	3
7	0	0	8	3
8	0	1	7	3

Table 2.14: LA Results Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	6	4
2	0	8	2	0
3	0	0	6	4
4	0	1	6	3
5	0	0	8	2
6	0	2	7	1
7	0	0	6	4
8	0	1	5	4

Table 2.15: SS Results Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	8	3
2	3	7	1	0
3	0	0	6	5
4	0	1	8	2
5	0	2	7	2
6	0	4	4	3
7	0	0	8	3
8	0	0	8	3

Table 2.16: Science Results Items 1-8

Question/Response	SD 1	D 2	A 3	SA 4
1	0	0	1	0
2	0	1	0	0
3	0	0	1	0
4	0	0	1	0
5	0	0	1	0
6	0	0	1	0
7	0	0	1	0
8	0	0	1	0

Table 2.17: CTE Results Items 1-8

Nine of thirteen (69%) of the Mathematics student teachers, six of the ten (60%) Social Studies student teachers, eight of the eleven (73%) Science student teachers, nine of the eleven (82%) Language Arts student teachers, and the CTE student teacher agreed that having a teacher preparation program that led to dual certification was favorable to inclusive education classrooms by having agreed with item nine. Item ten had much of the same result. The student teacher agreed that having both special education and general education certificates would have prepared them better for inclusive education. Twelve of the thirteen (92%) Mathematics student teachers, all (100%) of the Social Studies student teachers, ten of the eleven (91%) Science student teachers, nine of the eleven (82%) student teachers, and the CTE student teacher all agreed with item ten. See Appendices FF (Mathematics), GG (Language Arts), HH (Social Studies), II (Science), and JJ (Career Technical Education).

### **Pre-survey Qualitative Results**

The results of the three qualitative questions of the pre-survey, the answers were mostly that of being unprepared, like this answer to the first question: In one word, please describe your immediate feeling on having students with special needs in your student teaching classroom with the education you have received for handling inclusive classrooms. Why did you choose that word? “concerned-I have taught for 21yrs but not in a regular classroom. While I have had many students with special needs in my classroom (library) all are different with different needs and [I] don’t

feel confident.” On the other hand, one student teacher answered that the having students with special needs during student teaching would be “beneficial” because of the valuable experience it would lend to his education as a teacher.

On the second question, “Do you feel one class about general special education information fully prepared you to handle the current general education classroom that will be inclusive?” one student teacher answered, “We had a special needs class that somewhat prepared me, but not fully.” Another student teacher answered the question in this manner, “One class is not enough to prepare anyone fully to handle students with special even in a high school classroom where the students are only in the class for 50 minutes to an hour and a quarter.” Further, one of the student teachers expunged, “More practical experience is needed before I would feel adequately prepared. Actually being around the students is the best way to learn how to handle situations that revolve around student with special needs.”

The third question, “Do you feel you would have been better prepared with a dual certification program? Why or why not?” most student teachers felt they would have been prepared better, however some questioned whether or not it was realistic for the amount of time it takes to finish a four year teaching degree. One student teacher flat-out stated that, “it [dual certification] would have been too much.” Another student

teacher iterated, “Yes, to have a better understanding of IEPs and 504s [Americans with Disabilities Act section 504].”

### **Post-survey Qualitative Results**

Again, many of the student teachers on the first qualitative question of the post-survey held feelings of concern about their abilities to handle students with special needs. However, there was a marked increase in the number of student teachers that exhumed confidence in being able to handle inclusive education. One student teacher simply answered “Good” to the question while another still added that she felt “Concerned” and that her confidence, “depend[ed] on the students area of eligibility and how the disability manifest[ed] itself.” Lastly, a student teacher even stated that he felt “Hopeful” and that he chose that word “based on the progress my students with special needs made over the course of the semester.”

On the second qualitative question of the post-survey, most of the students stated something along the lines of, “I don’t feel one class has done enough, however, being in the classroom has prepared me.” This was a major pattern of belief amongst the student teachers from all campuses and pointed to the ideology that there may be a need for more practical and experiential content in special education classrooms throughout the teacher education program. Many students also answered the question with a “No” response and also elaborated that the experiences they had



during their student teaching assignments taught them more about the practical applications of inclusive education.

Not surprisingly, on the third question of the qualitative section of the post-survey dealing with dual certification, most of the students implied that having a dual certificate would have better prepared them, but they needed to be in special education classrooms during the coursework. One student stated, “Yes. As long as there is more experience in these types of classroom.” Another student teacher iterated that for her, the reasoning for a yes answer was due to her feeling it would have better prepared her to “help students with special needs reach their highest potential.” Further, one student teacher brought out that she felt dual certification would have helped her ability to “handle outbursts and educational materials.” There were a few nay-sayers, as with the pre-survey, that felt dual certification was too arduous of a task and that teacher education programs were “already long enough.” One student teacher stated, “I went into education to teach general education students and do not feel I should have to undertake an educational path I do not want.”

### **Combining the Results of the Pre and Post Surveys**

Overall, there were no major discrepancies between the pre-surveys and post-surveys. Although there were small changes in some of the attitudes of the student teachers, the changes were small enough to not dramatically impact the outcomes of the surveys or draw any conclusions

that the student teachers' attitudes changed over the course of the semester. Even along the demographic lines set forth from the groupings of the individuals, there were no essential changes to the information analyzed from pre-survey to post-survey. The data collected from both sources tended and seemingly stayed the same. The impact of the results will be discussed further in chapter five.

### **Interviews**

Seven student teachers were interviewed for the purpose of this paper and they were asked three open-ended questions via text message. The questions dealt mostly with what the qualitative questions on the surveys dealt with, but were made to garner more information about how the student teachers felt. The interviews gave the student teachers more time to think of an answer than the qualitative section of the survey since time was limited to what the supervisor of the student teaching seminar course was willing to give the students to answer the questions.

The first question of the interview asked the student teachers how they felt about the inclusion of students in general education classrooms. The majority of the student teachers had very positive response and answered with tidbits like, "I think it is great because they are being treated like normally functioning students" or "it is a great idea for education since it does not marginalize any groups of children anymore and they feel they are part of the entire school community." Another student stated, "I think it [inclusion] is great that they are being included in

more general ed. Classes because I remember when I was in school and they were taken out so much that I was scared of them.” However, two of the student teachers did question whether or not inclusion was a good endeavor for education since “students with special needs demand more time from the teacher and that takes away from time that general education students need as well.” Further, one other student teacher expunged, “I know there have been studies that show being placed in a general setting can help a student reach higher levels of expected achievement, but there are also times where their inclusion leads to much greater differentiation needed in classrooms and increased time spent on basic concepts instead of being able to go in depth in course work.” Another student teacher confessed, “Special needs is entirely too broad of a term. I feel that inclusion of students with special needs should be at the discretion of the [general education] and special ed. instructors.” This particular student teacher went on to state that if the inclusion of the student with special needs adversely effects the learning environment, then that student should be in a classroom “more catered” to the instructional needs of him or her. Despite these three examples, the overall consensus was that inclusion offered people with special needs an opportunity to become normalized with society and it also made them visible in society adding a humanistic feature to them instead of just their special education diagnosis.

As seen from this response to question one, “I love having students with special needs in my classroom. It helps keep me aware of my clarity

and successfulness overall. I love that those students force me to sometimes be out of my comfort zone and adapt lessons...” there was quite a bit of positivity towards having students with special needs in general education classrooms.

On the second question, “How do you feel the education program prepared you to handle all aspects of students with special needs being included in general education classrooms? If applicable, what could have been done differently to better prepare you?” the seven student teachers all agreed that the one required class did “open their eyes” (as one student teacher stated) but that the class was not nearly enough to adequately prepare the students for inclusive education. Further, six of the student teachers iterated what many of the qualitative answers stated: more time was needed inside of special education classrooms and that hands-on experience was essential to learning. Alluding to more experience within special education classrooms, this student teacher stated, “I think on a theoretical level we were given the basics on how to handle the inclusion of students with special needs into the classroom. It is however very hard to be prepared for students with just that. We did a 15 hour placement at [the university] in a special education classroom which helped some, but I think additional time spent with special needs is necessary.” The idea of more practical application and experience with students with special needs was a running trend throughout all of the qualitative sections of the data gathering process seen from this statement as well: “Experience is the key

and we must learn with our students...I believe much of our education must happen on the job, under the guidance of specialized support staff in the district.” Another student teacher added, “One thing that would have been better is to require more time volunteering in a special education room.” Again, these response elicited a definite feeling that more time spent in special education classrooms with students with special needs would have been beneficial.

Finally, on the third question of the interviews, dealing with dual certification, the majority of the student teachers agreed that the practice of instituting dual certification programs would be beneficial and better prepare the student teachers for the inclusive classroom. On the other hand, the majority of them also questioned the time length and also questioned whether or not it was ethical practice to force a potential teacher education student to undertake a path of education they do not want. One student teacher had expostulated she would have been interested in a third minor in special education (on her elementary education certificate) and would have been more apt to follow that path than if it were forced upon her. Another student teacher stated, “I like the idea of [dual certification] but personally wouldn’t do that because I would want a strong background in the two academic minors [in elementary education].” Further, a second student teacher iterated, “I would be in favor of it [dual certification] as long as it was the same amount of credits but didn’t take away from us teachers learning [our]

major and minor in depth.” A third student teacher interjected, “I absolutely would be interested in that [dual certification]. It’s in the nature of a good teacher to want to be better prepared for his or her students and if the dual certification would spend more time with special education needs, I would be interested. Anything for the students.” Further, another student teacher proclaimed, “Yes I would be [interested] if it meant having the same amount of [credit] hours. Because if we are including these students into our class...then I would feel more comfortable knowing more about disabilities and what to expect and how to handle them [the students] the way they deserve.” She also stated she worried that forcing the issue would make the preparation of teacher education students in their content majors/minors suffer, which was also a trend amongst the interviewees.

## **CHAPTER 5**

### **DISCUSSION, CONCLUSION, RECOMMENDATIONS**

#### **Answering Sub-question One**

The first sub-question of this thesis delved into the attitudes this group of student teachers felt about students with special needs and their overall feeling towards inclusive education. The first item on both the pre and post-surveys alluded to the idea that these student teachers felt students with special needs would be able to learn in general education classrooms. This feeling did not change to the second item of the surveys, as, on both the pre and post-surveys, the student teachers disagreed overwhelmingly to the statement that students with special needs should only be taught by special education teachers. This group of student teachers have a positive overall perception of students with special needs from the outcomes of both the pre and post-survey on item number three. There was also much agreement from pre and post-survey that the student teachers felt inclusive education was good for education.

The conclusion of the first sub-question, having pertained to overall feelings of students with special needs and inclusive education, from this group of student teachers held very positive attitudes towards

both the students with special needs and to the idea of inclusive education. Even further, some of the student teachers, although small in number, felt the students with special needs would be a welcomed addition to their general education classrooms and were “excited” for the opportunity to work with such a “diverse group of students”.

### **Answering Sub-Question Two**

The second sub-question the thesis asked how the student teachers felt towards their preparedness, through the education program they received, for inclusive education. This sub-question of the thesis was where there was more overall disagreement about preparedness. On the fifth item of the pre and post-survey, the majority of the student teachers agreed with the assumption that they had confidence in their own abilities to handle situations that would be posed by inclusive education. However, on the sixth item, which queried whether or not they felt they had been given the knowledge and skills necessary to handle inclusive education, only half agreed. There was a small shift from pre to post-survey on the sixth item, but having drawn from the qualitative question answers, it could be assumed that over their student teaching assignments, some student teachers gained the knowledge and skills to handle these situations from the experiences they had. It can also be assumed that just having the direct experiences with students with special needs and inclusive education was enough for them to have gained the knowledge and skills necessary to completely understand inclusive education.



Number seven, which alluded to the student teachers being able to handle accommodations and IEPs of the students with special needs, showed that the majority of student teachers were confident in their ability to do this. Also having looked at item seven, the post-surveys seem to quantify that mathematics student teachers felt they were the most underprepared of the entire group (this was the only true anomaly away from the norm of the entire thesis). Lastly, on the eighth item, the majority of student teachers felt they would be able to handle behavioral manifestations of students with special needs however many of the student teachers did mention they were “scared” or “anxious—not in a good way” because they “didn’t know what to expect.” Some even felt it was “unfair” because they “haven’t received the training for the types of issues that could happen with students with special needs.” Further, one young lady imposed she felt, “Blindsided; because I did not think about students with special needs being in my classroom.” Furthermore, having drawn from the second qualitative question of the surveys, the majority of student teachers did not feel one class about special education was enough to have adequately prepared them for every facet of inclusive education and that was shown through the amount of variance in agreement or disagreement from the student teachers on items five through eight.

Overall, the second sub-question elicited a mixed response from the student teachers with approximately half of them feeling they were prepared for inclusive education classrooms and half of them not feeling

they were prepared. There were a large number of student teachers that invoked the idea of having more experiential time set up to better prepare them for “modern classrooms.” One student teacher felt she “needed more face time with special needs and being in the classroom, the actual environment, is the best way to learn about how these types of classrooms function.” This gave heed to the idea of including a requirement of more practical experience hours in special education classrooms and with students with special needs in teacher education programs.

### **Answering Sub-Question Three**

The third sub-question of the thesis was brought into focus by the ninth and tenth items of the survey. This part of the survey dealt with how the student felt about instituting dual certification and if they felt it would have better prepared them for inclusive classrooms. The majority of responses from the pre and post-surveys pointed to positive feelings towards making teacher education programs that focused on dual certification. The data from item nine alluded to the assumption that because of NCLB and IDEA, dual certification teacher education programs needed to be implemented was received very well by the majority of these student teachers. Also, as indicated by the results of item ten, the student teachers overwhelmingly felt they would have been better prepared for inclusive classrooms had they been made to take a dual certification program. One student teacher, although having agreed with number ten, evoked on the third qualitative question, “This type of

program would be unfair. Although it would better prepare teachers for the classroom, it also may be something individuals don't want. I would have gone into special education if I wanted that certification." However, comments like that were few in number, but there was some dissension to the idea of forced dual certification.

Overall, the idea of dual certification was well received, as shown by the data, would have better prepared these student teachers for inclusive education classrooms. One student teacher iterated, "More education can only make me a stronger educator." Another stated, "Although it may take more time, it would be more beneficial than just one class." This data strengthened the argument for at least instituting a policy requiring more experiential, practical preparation time for teacher education programs and assumes the argument for dual certification was strongly merited.

### **Conclusion**

In conclusion, the question, "What are the attitudes of student teachers towards their perception of preparedness for inclusive education?" was assumedly answered by the data collected from the Likert-like survey items, the three qualitative questions, and the interviews conducted. There was a definite split in how the student teachers felt towards the preparedness question as although student teachers agreed they could handle certain aspects of inclusive education, they held feelings of disagreement when asked whether they felt they had been given the

knowledge and skills necessary to teach in inclusive classrooms. Many of the student teachers also felt, according to their answers to the second qualitative question, that the one required special education course from their teacher education program was not enough to adequately prepare them for inclusive education.

In summation, the student teachers felt very positive about students with special needs and also the institution of dual certification programs as seen from the results of the survey. However, there was a split in the feelings of preparedness. The most important conclusions came from the qualitative questions where 95% of the student teachers from the pre-survey and 89% of the student teachers from the post-survey answered “No” to whether or not one class prepared them for inclusive classrooms. This proclamation was also reinforced by the split in results of item number seven, which measured whether student teachers felt they had been given the knowledge and skills necessary to teach in inclusive education.

### **Limitations**

There were four limitations to the research done for this thesis and two of them revolved around the subjects used for the survey. First, there was the issue of the nine subjects that were unable to take the post-survey for the various reasons stated in Chapter Four. Subject mortality of the nine individuals further accentuated the second limitation of the study which was that the pool of subjects was rather small to make large

generalizations for this type of research. In the future, it is suggested that the survey be done with a variety of universities to increase the size of the subject pool. This would have also made for better generalization with the data collected.

A third limitation of this thesis was that the questions and items on the survey may not have garnered the results set forth by the thesis statement. Although the Likert items of the survey were rather strong, the qualitative questions should have been added to the interviews to further highlight the qualitative data gathered from the interviews. This leads to the last limitation of the study which has to do with how the interviews were conducted. Unfortunately, due to time and spatial conflicts, the interviews were done over text message. A better way to have conducted these interviews would have been to: first, use the qualitative questions during the interviews and; second, do the interviews face-to-face with a recording device to garner better information from the research subjects.

### **Recommendations**

The data suggested that these student teachers felt very heavily that more practical experience was needed to adequately prepare future teachers in teacher education programs for inclusive classrooms. This meant putting the teacher education students into classrooms where they will be immersed in the practical and experiential side of education and every other facet education entails. It is seemingly apparent from the data collected that these student teachers felt more than the one required class

in special education was needed to better prepare student teachers for the reality of inclusive classrooms.

It was also seemingly apparent through the data collected that this group of student teachers felt they would have been better prepared to handle inclusive education if they had been enrolled in a dual certification teacher education program. They also felt that dual certification teacher programs would be beneficial to education since it would have prepared them more adequately than the one special education class required by most state universities. However, the student teachers iterated that the dual certification should be optional as seen from their qualitative responses and from their interview responses. Forcing teacher education students to take a dual certification track was not received well since many of the student teachers felt they had chosen general education because that was the career path they wanted in education. Another contention about dual certification was that it may take away from building strong content knowledge since the credits for the special education endorsement would most likely have to replace major/minor credit requirement courses.

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## **APPENDICES**

Appendix A

Ferris State  
University

*Institutional Review Board (FSU - IRB)*

Connie Meinholdt, Ph.D. - Chair  
820 Campus Drive  
Ferris State University  
Big Rapids, MI 49307  
(231) 591-2759  
IRB@ferris.edu

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To: Dr. Christine Conley-Sowels & Mr. Benjamin Leverette  
From: C. Meinholdt, IRB Chair  
Re: IRB Applications #110601 (Title: Perceptions and Attitude of  
Student Teachers toward Preparedness of Inclusive Classroom  
Settings)  
Date: August 17<sup>th</sup>, 2011

The Ferris State University Institutional Review Board (IRB)\* has reviewed your application for using human subjects in the study, "Perceptions and Attitude of Student Teachers toward Preparedness of Inclusive Classroom Settings" (#110601) and determined that it is *exempt – 1C* from committee review. We request that 2 changes be made to your informed consent document given to participants: (1) please change the dates for the "expected duration of study" need from August 2010 to August 2011 and from May 2011 to May 2012 and (2) please replace the e-mail contact for the Human Subjects Committee from my faculty e-mail to the new committee e-mail: [IRB@ferris.edu](mailto:IRB@ferris.edu). You can also delete the "College of Arts and Sciences" for the HSRC\* contact information if you wish. We were not sure whose signature you are including as the "Board Chair" on the consent form and wondered if this could be deleted as well. Please send us a revised copy of your consent form to append to your original application.

This exemption/approval has an expiration date three years from the date of this letter. As such, you may collect data according to procedures in your application until August 18<sup>th</sup>, 2014.

It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in this application.

Your application has been assigned a project number (#110601) which you may wish to refer to in future applications involving the same research procedure.

Finally, we wish to inform researchers that the IRB will require follow-up reports for all research protocols approved beginning in August 2011 as mandated by the Code of Federal Regulations, Title 45 for using human subjects in research. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let me know if I can be of future assistance.

*\*The IRB has been previously called the Human Subjects Research Committee (HSRC)*

## Appendix B

### Directions for Survey of Student Teachers for the Fall 2013 Semester-Ferris State University

Hello and before you get to the survey, I would like to thank you for participating in this research study! It should only take between 10 and 15 minutes to complete. I am a Ferris State graduate student in Curriculum and Instruction in special education. The reason for this study is to measure the perceptions of student teachers towards their own preparedness to handle inclusive education classrooms. The second reason for this research is to find out if more special education course work is needed for general education teacher programs to better prepare future teachers for inclusive education. By inclusive education, the research assumes the meaning as any general education classroom that has in attendance: 1. any student with a documented disability and individual educational program; and 2. any student with Section 504 services in accordance with the Americans with Disability Act that is in the general education setting for any period of a school day.

The directions are as follows, please follow them to their specificity:

Each question/statement has a numbered Likert like system (1 being strongly disagree to 4 being strongly agree). Please circle the number that corresponds to your feelings on the question/statement. Please do not write in your own response number (i.e. 2.5).

I will never ask for any personal identification information (except your telephone number) and these surveys are totally anonymous, only to be viewed by me upon completion. You cannot and will not be held responsible in any manner for answering these questions truthfully.

1. Please answer the qualitative (last 3 questions on the survey) questions SPECIFICALLY! YOUR INPUT MATTERS and I would like your honest answers to these questions. I am simply trying to see if education program students can be better prepared for the current general education classroom.
2. If you would like to help me with interviews over the phone or text message within the first two weeks of your student teaching, please leave your telephone number in the space provided at the end of the demographic portion of the survey. I can assure that I will only use this



information for professional, research related reasons and never for any personal gains of any kind.

3. For the demographic information, please fill this section out completely as the research will look at specific majors/minors, gender differences, campus differences, and age differences.

Again, I would like to thank you for your support and participation in my own education and this survey!

**\*NOTE:** \*Throughout the survey, the term “special needs” is assumed to mean any student with a documented disability, a student with an individualized education plan (IEP), or special services due to meeting eligibility requirements of Section 504 of the American’s with Disabilities Act.

#### DEMOGRAPHIC INFORMATION

Please mark or write your answer so I can get a better idea of the population I am surveying.

Only those who want to participate in phone interviews need to leave a telephone number.

#### **Level You Will Teach (mark one)**

Elementary Education: \_\_\_\_\_ Secondary Education: \_\_\_\_\_

#### **Secondary (write your response)**

Major: \_\_\_\_\_ Minor: \_\_\_\_\_

#### **Elementary (write your response)**

Minors (if applicable): \_\_\_\_\_

#### **Gender (mark one)**

Male: \_\_\_\_\_ Female: \_\_\_\_\_

#### **Age Level (circle one)**

<19      20-25      26-30      31-35      36-40      >41

**Campus (please indicate which campus you are student teaching from)**

Big Rapids \_\_\_\_\_ Flint \_\_\_\_\_ Grand Rapids \_\_\_\_\_  
Lansing \_\_\_\_\_ Traverse City \_\_\_\_\_

**Please provide your telephone number if you are willing to participate with phone/text interviews:**

\_\_\_\_\_

Text: \_\_\_\_\_ Call: \_\_\_\_\_ Please give me days and a time period to call at your convenience within the first two weeks of your placement.

Survey for General Education Student Teachers

1. Students with special needs can learn in a general education classroom.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

2. Students with special needs should only be taught by special education teachers.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

3. My overall perceptions of students with special needs is positive.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

4. Inclusive education is good for education.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

5. After my educational experience, I am confident in my abilities to handle situations brought on by inclusive education.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

6. I have been given the knowledge and skills necessary to teach students with special needs in the general education classroom.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

7. I will be able to ensure accommodations for students with special needs as outlined on their IEPs.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

8. I am able to handle behavioral manifestations of students with special needs in my classroom.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

9. Due to legislation like the Individuals with Disabilities Education Improvement Act of 2004, teacher education programs need to institute dual certification into coursework.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

10. I would have been better prepared for inclusive education if I had been educated in both general education and special education coursework.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree



Appendix C

Overall Results for Pre-Survey

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	3	37	15
<b>2</b>	10	38	6	1
<b>3</b>	0	1	28	26
<b>4</b>	2	8	36	9
<b>5</b>	3	17	31	4
<b>6</b>	3	24	22	6
<b>7</b>	0	5	38	12
<b>8</b>	1	16	31	7
<b>9</b>	0	14	38	3
<b>10</b>	1	5	36	13

Appendix D

Overall Pre-Survey Elementary Educator Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	2	26	10
<b>2</b>	7	25	6	0
<b>3</b>	0	1	19	18
<b>4</b>	2	4	26	6
<b>5</b>	1	12	22	3
<b>6</b>	2	17	16	3
<b>7</b>	0	3	25	10
<b>8</b>	1	9	24	4
<b>9</b>	0	8	29	1
<b>10</b>	1	6	21	10

Appendix E

Overall Pre-Survey Secondary Educator Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	11	5
<b>2</b>	3	13	0	1
<b>3</b>	0	0	9	8
<b>4</b>	0	4	10	3
<b>5</b>	2	5	9	1
<b>6</b>	1	7	7	2
<b>7</b>	0	2	13	2
<b>8</b>	0	6	8	3
<b>9</b>	0	6	9	2
<b>10</b>	0	0	12	5

Appendix F

Overall Pre-Survey Female Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	2	26	9
<b>2</b>	5	26	5	1
<b>3</b>	0	0	20	17
<b>4</b>	0	6	25	6
<b>5</b>	2	12	20	3
<b>6</b>	2	20	12	3
<b>7</b>	0	4	24	9
<b>8</b>	1	11	19	6
<b>9</b>	0	5	29	3
<b>10</b>	1	3	24	9



Appendix G

Overall Pre-Survey Male Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	11	6
<b>2</b>	5	12	1	0
<b>3</b>	0	1	8	9
<b>4</b>	2	2	11	3
<b>5</b>	1	5	11	1
<b>6</b>	1	5	9	3
<b>7</b>	0	1	14	3
<b>8</b>	0	5	12	1
<b>9</b>	0	10	8	0
<b>10</b>	0	2	11	5

Appendix H

Overall Pre-Survey Age Group 20-25 Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	25	6
<b>2</b>	4	25	3	0
<b>3</b>	0	1	15	16
<b>4</b>	1	4	22	5
<b>5</b>	1	12	15	3
<b>6</b>	2	14	12	3
<b>7</b>	2	5	25	0
<b>8</b>	0	9	21	2
<b>9</b>	0	8	24	0
<b>10</b>	0	2	24	6

Appendix I

Overall Pre-Survey Age Group 26-30 Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	7	1
<b>2</b>	1	7	1	0
<b>3</b>	0	0	7	2
<b>4</b>	0	1	6	2
<b>5</b>	0	1	8	0
<b>6</b>	0	4	6	0
<b>7</b>	0	1	4	4
<b>8</b>	0	2	5	2
<b>9</b>	0	3	5	1
<b>10</b>	0	2	6	1

Appendix J

Overall Age Group Over 31 Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	5	8
<b>2</b>	6	6	2	0
<b>3</b>	0	0	6	8
<b>4</b>	1	3	8	2
<b>5</b>	1	4	8	1
<b>6</b>	2	6	4	2
<b>7</b>	0	2	9	3
<b>8</b>	0	5	5	4
<b>9</b>	0	3	9	2
<b>10</b>	1	1	6	6

Appendix K

Overall Pre-Survey Campus A Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	20	3
<b>2</b>	4	16	4	0
<b>3</b>	0	1	8	15
<b>4</b>	2	2	18	2
<b>5</b>	2	7	14	1
<b>6</b>	2	11	9	2
<b>7</b>	0	3	16	5
<b>8</b>	1	7	15	1
<b>9</b>	0	6	18	0
<b>10</b>	1	2	15	6

Appendix L

Overall Pre-Survey Campus B Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	11	8
<b>2</b>	4	14	1	1
<b>3</b>	0	0	14	6
<b>4</b>	0	4	12	4
<b>5</b>	1	7	10	2
<b>6</b>	1	6	12	1
<b>7</b>	0	2	14	4
<b>8</b>	0	7	10	3
<b>9</b>	0	6	12	2
<b>10</b>	0	1	11	8

Appendix M

Overall Pre-Survey Campus C Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	5	3
<b>2</b>	1	7	1	0
<b>3</b>	0	0	5	4
<b>4</b>	0	2	5	2
<b>5</b>	0	3	6	0
<b>6</b>	0	6	1	2
<b>7</b>	0	0	7	2
<b>8</b>	0	2	5	2
<b>9</b>	0	2	6	1
<b>10</b>	0	2	6	1

Appendix N

Overall Pre-Survey Campus D Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	1	1
<b>2</b>	1	1	0	0
<b>3</b>	0	0	1	1
<b>4</b>	0	0	1	1
<b>5</b>	0	0	1	1
<b>6</b>	0	1	0	1
<b>7</b>	0	0	1	1
<b>8</b>	0	0	1	1
<b>9</b>	0	1	1	0
<b>10</b>	0	0	2	0



Appendix O

Overall Pre-Survey Mathematics Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	10	6
<b>2</b>	4	12	0	0
<b>3</b>	0	0	9	7
<b>4</b>	0	2	11	3
<b>5</b>	1	9	6	0
<b>6</b>	1	8	6	1
<b>7</b>	0	1	14	1
<b>8</b>	0	7	9	0
<b>9</b>	0	3	12	1
<b>10</b>	0	2	10	4

Appendix P

Overall Pre-Survey Language Arts Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	2	10	2
<b>2</b>	0	10	4	0
<b>3</b>	0	1	5	8
<b>4</b>	1	2	11	0
<b>5</b>	1	2	10	1
<b>6</b>	1	5	8	0
<b>7</b>	0	1	8	5
<b>8</b>	1	0	10	3
<b>9</b>	0	2	11	1
<b>10</b>	1	3	6	4

Appendix Q

Overall Pre-Survey Social Studies Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	1	6	3
<b>2</b>	3	6	0	1
<b>3</b>	0	0	6	4
<b>4</b>	0	3	5	2
<b>5</b>	1	1	6	2
<b>6</b>	1	3	3	3
<b>7</b>	0	1	6	3
<b>8</b>	0	4	4	2
<b>9</b>	0	6	4	0
<b>10</b>	0	0	7	3

Appendix R

Overall Pre-Survey Science Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	8	3
<b>2</b>	1	8	2	0
<b>3</b>	0	0	5	6
<b>4</b>	1	1	6	3
<b>5</b>	0	5	5	1
<b>6</b>	0	7	2	1
<b>7</b>	0	2	6	3
<b>8</b>	0	5	5	1
<b>9</b>	0	3	8	0
<b>10</b>	0	0	8	3

Appendix S

Overall Pre-Survey Career Technical Education Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	2	1
<b>2</b>	1	2	0	0
<b>3</b>	0	0	2	1
<b>4</b>	0	0	2	1
<b>5</b>	0	1	2	0
<b>6</b>	1	0	2	0
<b>7</b>	0	0	3	0
<b>8</b>	0	0	2	1
<b>9</b>	0	0	2	1
<b>10</b>	0	0	2	1

Appendix T

Overall Post Survey Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	32	14
<b>2</b>	10	30	6	0
<b>3</b>	0	0	22	24
<b>4</b>	0	5	32	9
<b>5</b>	0	5	32	9
<b>6</b>	0	14	25	7
<b>7</b>	0	2	29	15
<b>8</b>	0	8	25	13
<b>9</b>	0	14	25	7
<b>10</b>	1	3	26	16

## Appendix U

## Overall Post Survey Elementary Educator Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	22	11
<b>2</b>	8	19	6	0
<b>3</b>	0	0	15	18
<b>4</b>	0	5	20	8
<b>5</b>	0	8	18	7
<b>6</b>	0	8	18	7
<b>7</b>	0	0	22	11
<b>8</b>	0	5	19	9
<b>9</b>	0	8	20	5
<b>10</b>	1	2	20	10

Appendix V

Overall Post Survey Secondary Educator Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	10	3
<b>2</b>	2	11	0	0
<b>3</b>	0	0	7	6
<b>4</b>	0	0	12	1
<b>5</b>	0	3	8	2
<b>6</b>	0	6	7	0
<b>7</b>	0	1	8	4
<b>8</b>	0	3	6	4
<b>9</b>	0	5	6	2
<b>10</b>	0	1	7	5



Appendix W

Overall Post Survey Female Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Disagree 4</b>
<b>1</b>	0	0	23	8
<b>2</b>	8	18	5	0
<b>3</b>	0	0	13	18
<b>4</b>	0	4	20	7
<b>5</b>	0	4	20	7
<b>6</b>	0	12	13	6
<b>7</b>	0	1	20	10
<b>8</b>	0	8	14	9
<b>9</b>	0	4	21	6
<b>10</b>	1	2	15	13

Appendix X

Overall Post Survey Male Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	9	6
<b>2</b>	2	12	1	0
<b>3</b>	0	0	9	6
<b>4</b>	0	1	12	2
<b>5</b>	0	1	12	2
<b>6</b>	0	2	12	1
<b>7</b>	0	0	10	5
<b>8</b>	0	0	11	4
<b>9</b>	0	9	5	1
<b>10</b>	0	1	11	3

Appendix Y

Overall Post Survey Age Group 20-25 Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	19	9
<b>2</b>	6	22	0	0
<b>3</b>	0	0	15	13
<b>4</b>	0	4	18	6
<b>5</b>	0	4	19	5
<b>6</b>	0	10	15	3
<b>7</b>	0	0	20	8
<b>8</b>	0	7	15	6
<b>9</b>	0	8	16	4
<b>10</b>	1	1	14	12

Appendix Z

Overall Post Survey Age Group 26-30 Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	7	2
<b>2</b>	3	4	2	0
<b>3</b>	0	0	3	6
<b>4</b>	0	1	7	1
<b>5</b>	0	0	6	3
<b>6</b>	0	2	5	2
<b>7</b>	0	0	5	4
<b>8</b>	0	0	6	3
<b>9</b>	0	3	5	1
<b>10</b>	0	2	5	2

Appendix AA

Overall Post Survey Age Group Over 31 Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	6	3
<b>2</b>	1	5	3	0
<b>3</b>	0	0	4	5
<b>4</b>	0	0	7	2
<b>5</b>	0	1	7	1
<b>6</b>	0	2	5	2
<b>7</b>	0	1	5	3
<b>8</b>	0	1	4	4
<b>9</b>	0	2	5	2
<b>10</b>	0	0	8	1

Appendix BB

Overall Post Survey Campus A Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	17	6
<b>2</b>	4	16	3	0
<b>3</b>	0	0	12	11
<b>4</b>	0	3	19	1
<b>5</b>	0	1	18	4
<b>6</b>	0	9	10	4
<b>7</b>	0	0	15	9
<b>8</b>	0	3	14	6
<b>9</b>	0	7	12	4
<b>10</b>	0	2	16	5

Appendix CC

Overall Post Survey Campus B Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	10	6
<b>2</b>	5	11	0	0
<b>3</b>	0	0	8	8
<b>4</b>	0	0	10	6
<b>5</b>	0	2	12	2
<b>6</b>	0	2	13	1
<b>7</b>	0	0	12	4
<b>8</b>	0	2	10	4
<b>9</b>	0	4	11	1
<b>10</b>	0	0	9	7

Appendix DD

Overall Post Survey Campus C Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	4	1
<b>2</b>	1	2	2	0
<b>3</b>	0	0	2	3
<b>4</b>	0	2	2	1
<b>5</b>	0	2	1	2
<b>6</b>	0	3	1	1
<b>7</b>	0	1	2	2
<b>8</b>	0	3	0	2
<b>9</b>	0	2	3	0
<b>10</b>	1	1	2	1



Appendix EE

Overall Post Survey Campus D Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	1	1
<b>2</b>	0	1	1	0
<b>3</b>	0	0	0	2
<b>4</b>	0	0	1	1
<b>5</b>	0	0	1	1
<b>6</b>	0	0	1	1
<b>7</b>	0	0	1	1
<b>8</b>	0	0	1	1
<b>9</b>	0	0	2	0
<b>10</b>	0	0	1	1

Appendix FF

Overall Post Survey Mathematics Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	8	5
<b>2</b>	6	7	0	0
<b>3</b>	0	0	6	7
<b>4</b>	0	1	9	3
<b>5</b>	0	3	9	1
<b>6</b>	0	7	5	1
<b>7</b>	0	1	9	3
<b>8</b>	0	6	4	3
<b>9</b>	0	4	8	1
<b>10</b>	1	0	6	6

Appendix GG

Overall Post Survey Language Arts Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	9	2
<b>2</b>	0	8	3	0
<b>3</b>	0	0	4	7
<b>4</b>	0	2	8	1
<b>5</b>	0	0	7	4
<b>6</b>	0	1	7	3
<b>7</b>	0	0	8	3
<b>8</b>	0	1	7	3
<b>9</b>	0	2	8	1
<b>10</b>	0	2	6	3

Appendix HH

Overall Post Survey Social Studies Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	6	4
<b>2</b>	0	8	2	0
<b>3</b>	0	0	6	4
<b>4</b>	0	1	6	3
<b>5</b>	0	0	8	2
<b>6</b>	0	2	7	1
<b>7</b>	0	0	6	4
<b>8</b>	0	1	5	4
<b>9</b>	0	4	4	2
<b>10</b>	0	0	7	3

Appendix II

Overall Post Survey Science Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	8	3
<b>2</b>	3	7	1	0
<b>3</b>	0	0	6	5
<b>4</b>	0	1	8	2
<b>5</b>	0	2	7	2
<b>6</b>	0	4	4	3
<b>7</b>	0	0	8	3
<b>8</b>	0	0	8	3
<b>9</b>	0	3	5	3
<b>10</b>	0	1	6	4

Appendix JJ

Overall Post Survey Career Technical Education Results

<b>Question/Response</b>	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Agree 3</b>	<b>Strongly Agree 4</b>
<b>1</b>	0	0	1	0
<b>2</b>	0	1	0	0
<b>3</b>	0	0	1	0
<b>4</b>	0	0	1	0
<b>5</b>	0	0	1	0
<b>6</b>	0	0	1	0
<b>7</b>	0	0	1	0
<b>8</b>	0	0	1	0
<b>9</b>	0	0	1	0
<b>10</b>	0	0	1	0