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GENERAL EDUCATION TEACHERS' ATTITUDES ABOUT INCLUSION

by

Larry D. Monje

A dissertation submitted to the Graduate College
in partial fulfillment of the requirements
for the degree of Doctor of Education
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GENERAL EDUCATION TEACHERS' ATTITUDES ABOUT INCLUSION

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Western Michigan University, 2017

This study uses Q Methodology and semi-structured interviews to examine general education teachers' attitudes, beliefs and perceptions about inclusion of students with disabilities in their general education classrooms. As reported in the 38th Annual Report to Congress on the Implementation of the Individuals with Disabilities Act, 2016, 94.8% of students with disabilities are being educated in general education classrooms for some part of the school day (U.S. Department of Education, 2016). For this reason, it is important to understand general education teachers' attitudes, beliefs and perceptions about the inclusion of students with disabilities.

In this study there were 50 Q sort statements describing the spectrum of attitudes about inclusion. The study included 15 voluntary participants who are general education teachers at the middle school level. The Q sort data was analyzed using PQMethod software (Release 2.35; Schmolck, 2014). This analysis resulted in three distinct points of view about inclusion: Believers, Non-Believers and True Believers. The Believers and True believers both supported full inclusion. Believers felt the need for more professional development on inclusive practices. The Non-Believers did not support full inclusion for all students with disabilities. The findings suggest that more professional development on inclusive practices is necessary to ensure that all general education teachers are properly prepared to support students with disabilities in their general education classrooms.

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I would like to dedicate my dissertation to my wife who encouraged me to go back to college and earn my undergraduate degree and certification so I could become a teacher. Also, for the countless hours she supported me by proofreading my many papers, including this one.

Larry D. Monje

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CHAPTER 1: PROBLEM STATEMENT

Introduction

The reauthorization of the Individuals with Disabilities Education Act of 2004 states that the least restrictive environment for the education of students with disabilities is “To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (p.35)” (IDEIA 2004; TITLE I-B-612-a-5-A). Evidence of this can be found in the 38th Annual Report to Congress on the Implementation of the Individuals with Disabilities Act, 2016 which states that 94.8% of children ages 2 through 21 with a disability are served at least part of the day in general education classrooms and more than 60% are educated in a general education class more than 80% of the day (U.S. Department of Education, 2016). For this reason, general education teachers are often found teaching students with disabilities alongside general education students in the same classroom at the same time.

This study is designed to use a qualitative methodology called Q Methodology to try to understand general education teachers’ perceptions and attitudes about the inclusion of students with disabilities in their general education classrooms. Q Methodology is used specifically to study people’s attitudes about a particular topic. A qualitative methodology was selected for this study because it is studying general education teachers’ perceptions and attitudes about the inclusion of students with disabilities in their general education classrooms and though it is possible to quantify these constructs using quantitative methods, those methods do not report the

richness and depth that qualitative methods can discover. Quantitative measures are not a good fit in trying to understand people's perceptions and attitudes (Creswell, 2007). The Q Methodology was selected because it reduces the bias of the researcher in the way the data is analyzed and the results are descriptive of the population studied, not individuals. Q methodology uses small sample sizes to study people's beliefs, attitudes and perceptions about a specific topic, in this case the inclusion of students with disabilities in general education classrooms. This study took place in one school district so the sample size will be small but it can still yield important results. Also, no published studies were found using Q sort methodology on the topic of general education teachers' perceptions and attitudes about the inclusion of special education students in general education classrooms.

A search of the Education Resources Information Center (ERIC) using the research phrase "general education teachers' attitudes about inclusion" over the last ten years (2006-2017) resulted in 183 peer reviewed articles. Adding the keyword "qualitative" resulted in only 23 peer reviewed articles published in the last ten years in the ERIC database. Of the twenty three results 11 were not relevant because they were not focused on the topic of inclusion. Some examples of the non-relevant topics are standards based accountability practices of students with disabilities, student's experiences in an inclusive high school, usefulness of cognitive intervention programs, and quantitative research and how it guides instruction. A summary of the results of this search can be seen below in Table 1: Results of Search of ERIC Database using keywords "general education teachers' attitudes about inclusion" & "qualitative".

Table 1: Results of Search of ERIC Database Using Keywords “general education teachers’ attitudes about inclusion” & “qualitative”

Authors	Methodology	N	Findings	Country
Anderson & Gumus (2006)	Reflection papers	42 Preservice teachers	A course in special education with necessary components was found to be effective in preparing secondary education pre-service teachers to work in inclusive classrooms.	USA
Cheuk & Hatch (2007)	Interview	8	Teachers in this study focused on social development at the exclusion of academic instruction for children with disabilities.	Hong Kong
Desimone & Parmar (2006)	Interview, survey and observation	7	Teachers believe that inclusion is being successfully implemented but are unclear about their responsibilities towards included students.	USA
Fayez, Dababneh, & Jumiaan (2011)	Interview protocol	20 Preservice teachers	Preservice teachers had positive attitudes about inclusion but felt underprepared and had concerns about implementing inclusion.	Jordan
Lohrmann & Bambara (2006)	Interview	14	Two levels of support were needed by the teachers to successfully include students with challenging behaviors in their classrooms. The first level is a school-wide support. The second level is situation specific where individualized supports are provided to teacher needs. Teachers describe how student reputations, experience, and training contribute to their initial feelings of apprehension or confidence.	USA
Melekoglu (2013)	Mixed methods (content analysis and descriptive statistics)	56 Preservice teachers	Preservice teachers developed more positive attitudes about inclusion after their coursework.	Turkey
Ntuli & Traore (2013)	Semi-structured interview	10 Preservice teachers	Preservice teachers had a good understanding of the importance and benefits of inclusive education.	Ghana
Orr (2009)	Interview	15	Barriers to inclusion include negative attitudes of general education teachers and insufficient administrative support.	USA

Table 1 - continued

Roiha (2014)	Case study and survey	51	The obstacles for successful differentiation are large class sizes, the lack of school assistants or the lack of opportunities to practice co-teaching.	Finland
Sheehy & Budiyanto (2015)	Interviews survey	25 170	Teachers believe that children with special educational needs learn best in a specialist setting, alongside others with the similar needs.	Indonesia
Sosu, Mtika, & Colucci-Gray (2010)	Mixed methods (interview and survey)	71 Preservice teachers	The program contributed to positive changes in student teachers' attitudes	United Kingdom
Strieker, Gillis, & Zong (2013)	Artifact collection	256 Preservice teachers	The program was effective in increasing pre-service teachers' awareness of the challenges of co-teaching as well as their confidence, competence and commitment to co-teaching.	USA

Of the twelve studies found during the ERIC search on inclusion, seven of the studies took place outside of the United States and five studies took place in the United States. Six of the studies from the database search involved preservice teachers. The studies used a variety of methods with two of the studies using mixed methods which included descriptive statistics, a survey and content analysis. The qualitative methods used were surveys, observation, interviews, artifact collections, case study and literature review. None of the articles from the search utilized Q Methodology.

This study is designed using Q Methodology which is a qualitative method to understand how general education teachers perceive their role in the inclusion process. During the data collection process each participant uses their own unique experiences with inclusion as well as their beliefs, perceptions and attitudes about inclusion of students with disabilities in their general education classrooms. Even though there has been a considerable amount of research done on inclusion in the past ten years this study will add to the current research base. It is important because it uses the Q Methodology of which there were no published studies were found during the literature review process. Q Methodology is used to study people's opinions, beliefs and attitudes about a particular topic (Brown, 1993). The current qualitative research focuses on the individual and their opinions, beliefs and attitudes about inclusion. The results of a Q study describe the opinions, beliefs and attitudes of the individuals participating in the study (Van Exel & De Graaf, 2005). The analysis of data in a qualitative study is often tainted by researcher bias both in the questions that are asked as well as how the answers to interview questions are interpreted. The Q Method removes the researcher bias during the interpretation of the results as this is purely an objective process (Van Exel & De Graaf, 2005) utilizing computer software. For these reasons, the study is important because it uses a method not previously used

to study an important topic in the educational process of students both with and without disabilities.

Studies have found that preservice teachers from around the world developed more confidence and positive attitudes about the inclusion of students with disabilities in general education classrooms after receiving training in this area in their teacher preparation programs (Anderson & Gumus, 2006; Fayeze, Dababneh, and Jumiaan 2011; Melekoglu, 2103 Ntuli & Traore, 2013; Sosu, Mtika, and Colucci-Gray, 2010; Strieker, Gillis, and Zong, 2013). This is in contrast to some of the research with existing general education teachers which found general education teachers who often feel undertrained or not adequately trained to deal with students with special needs as well as not receiving adequate support from school administration (De Boer et al., 2011; Lohrmann & Bambara, 2006; Orr, 2009; Roiha, 2014). While, Desimone and Parmar (2006) found that general education teachers felt that inclusion was being practiced but they were unsure as to what their responsibilities were to students with disabilities in their classrooms. The research on the attitudes of general education teachers about the inclusion of students with disabilities in general education classrooms can be conflicting with some research showing that the general education teachers are supportive of inclusion but are not prepared to implement the educational model of inclusion in their classrooms.

By studying current general education teacher attitudes, perceptions and beliefs about the inclusion of students with disabilities in their classrooms it will be possible to identify ways that may improve the process of inclusion of students with disabilities in general education classrooms. The most important part of the educational process is that all students are educated to the best extent possible in the least restrictive environment.

In summary, the topic of inclusion of students with disabilities in general education classrooms is important and has been studied throughout the world but the research has sometimes shown conflicting results. The studies with preservice teachers showed that coursework in their programs helped them to be more equipped to implement inclusion. Of the studies that found inclusion to be a difficult process the barriers were lack of administrative support, lack of special education support and negative attitudes of general education teachers. While one of the studies showed that inclusion was being implemented successfully. The current research on this topic using the qualitative research methods has focused on individuals. This study will use Q Methodology to show general education teachers' attitudes and perceptions of the inclusion of students with disabilities in general education classrooms. The results of this study will be descriptive of the population studied and cannot be generalized to other populations. Q Methodology also removes the researcher bias during the analysis of the data as it is an objective process. This study is important because it uses a unique methodology designed to study individual's opinions, beliefs and attitudes on inclusion of students with disabilities in the general education classroom and the results will be descriptive of the population studied, not individuals. For these reasons, this study is important and will add to the existing research base on this topic.

Statement of the Problem

Inclusion is not defined in the Individuals with Disabilities Education Act of 2004. Because of this there is no common definition of inclusion. With there being no common definition for what inclusion is it is important to look at the district level as to general education teachers' beliefs, attitudes and perceptions towards the inclusion of students with disabilities in their classrooms. Inclusion of students with disabilities may look different from district to district

and from state to state based on that district's or state's definition of and implementation of inclusion of students with disabilities. Some examples of the different definitions of inclusion are: Friend (2008) described inclusion as a process that incorporates both special education and general education services in an integrated educational approach where all students fully participate in the general education environment with the supports necessary to promote all students to be successful. Norlin (2009, p. 5:11) answers the question of what inclusion is as: "Inclusion is commonly understood to mean that a student with disabilities receives at least portions of his education in the regular education classroom." (p.5:11) In a presentation by the Michigan Department of Education on Inclusive Practices in Early Child Special Education the statement was made "While staff may desire specific 'policies' for services, inclusive services are individualized and may look different for every child based on individual needs" (Michigan Department Of Education, 2015, p. 18) This shows how there is no common definition for inclusion.

There has been much research over the years on the inclusion of students with disabilities but much of it is out dated due to the ever changing definition of inclusion. The research that has been done only applies to the districts in which it was conducted due to the lack of an agreed upon definition of inclusion. It is difficult to conduct research across districts because the inclusion model they are using may not be the same from district to district.

It is important to know general education teachers' attitudes, perceptions and beliefs about the inclusion of students with disabilities in their classrooms to address the barriers of fully including students with disabilities in their classrooms. These barriers may be addressed through professional development or some other form of professional training. One methodology that works well with a small sample size is Q Methodology. Q Methodology is designed to measure a

person's beliefs, attitudes and perceptions about a particular topic or construct. For these reasons this research study was conducted in one school district using Q Methodology. The results of this study are important to understand what general education teachers in the district being studied need in the way of training or professional development in order to successfully implement the inclusion of students with disabilities in their general education classrooms.

Background of the Problem

Educational programs for students with disabilities were slow to develop in public schools due to a lack of funding and public apathy towards students with disabilities (Alexander & Alexander, 2012). The first schools established for students with disabilities were based on specific disabilities with the first school in the United States being established in 1817 in Connecticut to educate students who were deaf (Alexander & Alexander, 2012). In 1832 a school was established in New York to educate students who were blind (Alexander & Alexander, 2012). "The early 20th century saw the construction of large isolated institutions" (Wright 1999, p. 13), this was to educate students with disabilities in a facility separate from their "normal" peers. This type of education for students with disabilities "severely limited the quality of life for these individuals" (Wright, 1999, p. 14).

In 1962, Reynolds proposed a cascade of services model for the education of students with disabilities which was later amended by Deno (1970). They proposed that children with disabilities be educated across multiple levels dependent on the student's specific needs. This model is shown below in Figure 1: A Cascade of Services. The figure is drawn in a pyramid with most of the students at the base and fewer students in each level as you move up pyramid with the fewest number of students at the top of the pyramid. As you move from the base of the triangle each level also becomes a more restrictive environment for the child with a disability.

The idea was to have the student with a disability in the least restrictive learning environment as feasible. This model was proposed before there was any federal legislation requiring that students with disabilities be educated at the public's expense.

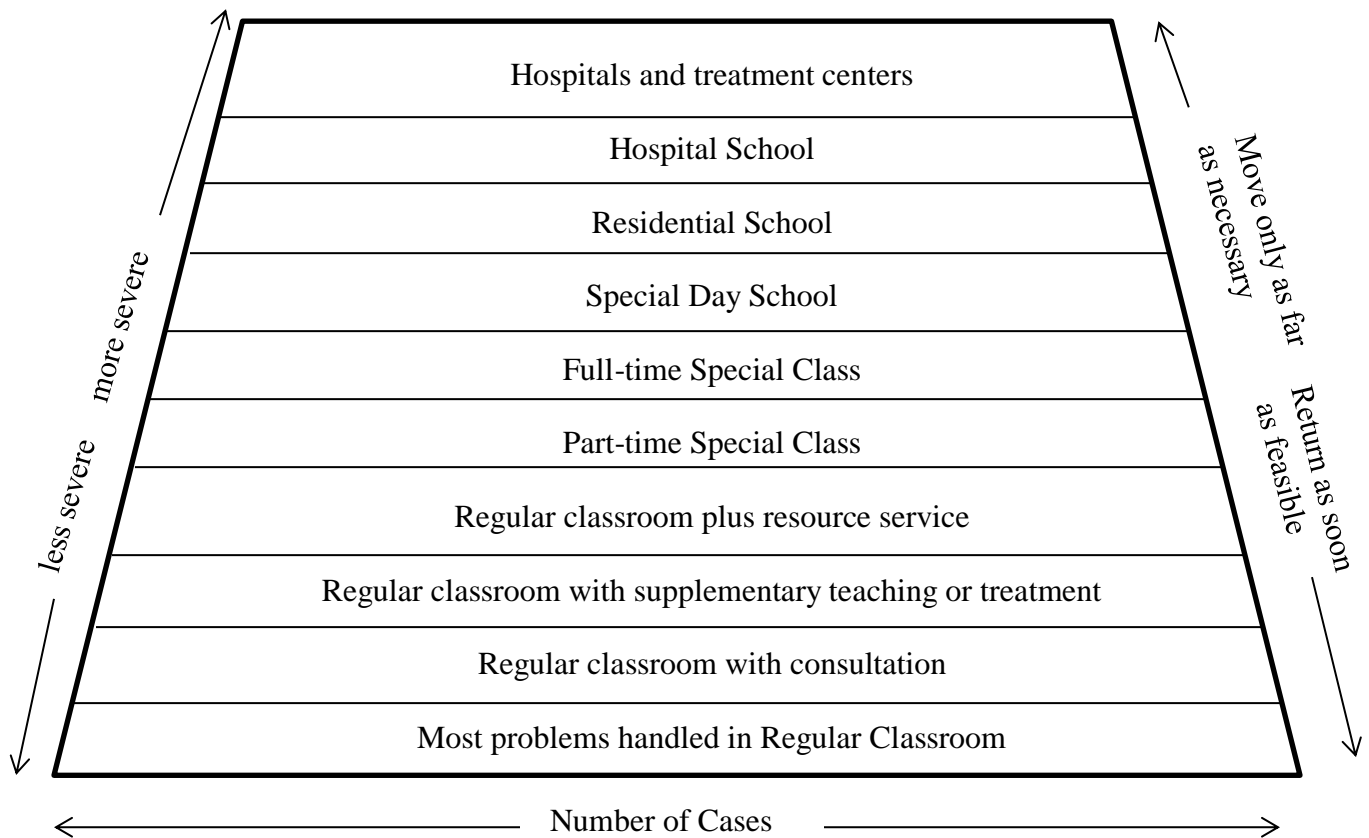


Figure 1. A Cascade of Services (Reynolds 1962)

With the passing of the Education for All Handicapped Children Act of 1975 (PL94-142), it became a federal mandate that students with disabilities be provided with an education at the public's expense. This law had four purposes: (1) to assure that all children with disabilities have available to them a free and appropriate public education which is designed to meet their unique needs, (2) to assure that the rights of children with disabilities and their parents' rights are protected, (3) to assist states and localities to provide for the education of children with disabilities and (4) to assess the effectiveness of efforts to educate all children with disabilities

(U.S. Department Of Education, 2010). In 1990 this law was amended and passed with the title of Individuals with Disabilities Education Act (IDEA) (PL101-476). The most recent reauthorization of IDEA was in 2004 and is known as the Individuals with Disabilities Education Improvement Act of 2004 or IDEIA. These changes in federal education policy were designed to ensure that students with disabilities were educated in the public school setting and at the public's expense.

The original cascade of services proposed by Reynolds (1962) and revised by Deno (1970) consisted of multiple levels of service available to the student with a disability. Since the original cascade of services was proposed federal legislation was passed (PL94-142) which focused on the most appropriate educational setting for the student with a disability. The federal law about educating students with disabilities has changed over time with the most appropriate educational setting for students with disabilities now being the general education classroom. This has caused more students with disabilities to be placed in general education classrooms and that is why it is important to know the beliefs, attitudes and perceptions of the general education teachers about the inclusion of students with disabilities in their general education classrooms.

Purpose of the Study

The research on general education teachers' attitudes towards the inclusion of students with disabilities is not conclusive with different studies coming to different conclusions. This is not surprising as special education services differ across school systems and the definition of inclusion has changed over time as well. Therefore this study will focus on only one school district. This study is designed using the Q Methodology of which no published studies on inclusion have been found. By using this different method of collecting and analyzing the qualitative data this study is unique to the topic of inclusion. The results of the study will

describe the beliefs, attitudes and perceptions of the population studied, not the individuals participating in the study. The results of this study are not intended to be generalized to any other population of general education teachers.

This study is designed to understand how general education teachers perceive their role in the inclusion process through their own experiences with inclusion. The study is also designed to try to understand their beliefs, perceptions and attitudes about inclusion of students with disabilities in their general education classrooms. This study hopes that by studying teacher attitudes, perceptions and beliefs about the inclusion of students with disabilities in general education classrooms it can identify ways that may improve the process of inclusion both for general education teachers and for all students, including those with an identified disability. Using Q Methodology to study general education teachers' attitudes, perceptions and beliefs about the inclusion of students in general education classrooms may provide evidence which supports some of the current research.

Implications of the Study

Inclusion meets the legal requirements of least restrictive environment (LRE) and a free and appropriate public education (FAPE) required by federal law. Inclusion is now the most employed educational model for educating students with disabilities. Evidence of this can be found in the 38th Annual Report to Congress on the Implementation of the Individuals with Disabilities Act, 2016. This report states that 94.8% of children ages 2 through 21 with a disability are served at least part of the day in general education classrooms and more than 60% are educated in a general education class more than 80% of the day (U.S. Department of Education, 2016). It is important to understand the attitudes and perceptions of the general education teachers towards inclusion. The attitudes of general education teachers can influence

how they teach and interact with students with disabilities. Many of these general education teachers are older and may not have had any training on how to modify or adapt assignments or assessments to meet the needs of students with disabilities. It is believed that studying the attitudes and perceptions of general education teachers towards inclusion of students with disabilities in their classrooms can lead to two things: (1) insight as to how to better prepare pre-service teachers and (2) insight for school administrators on how to develop professional development programs so that existing general education teachers may become more confident and better prepared to educate students with disabilities in their general education classrooms. The results of this study are only intended to represent the middle school general education teachers in the district being studied.

Summary

The federal mandate of LRE resulted in the practice of inclusion of students with disabilities in general education classrooms. This has eliminated many of the possible placements proposed in the cascade of services model. This places more students with disabilities into general education classrooms. So it is important to understand how the general education teachers responsible for implementing this process feel about inclusion and their ability to successfully include students with disabilities. The method in which special education services are delivered is dependent on the school district providing them. Also, with no agreed upon definition of inclusion a teacher's perception, attitudes and beliefs about inclusion are dependent on the district where they are teaching and for that reason this study is being conducted in only one school district. This study hopes to discover how these general education teachers feel about inclusion and their role in the educational process for students with disabilities. The study is designed using a qualitative method called Q Methodology. It is hoped

that the results of this study will be used to develop professional development programs which will be beneficial to helping the general education teachers in this district to better serve those students with disabilities in their general education classrooms.

CHAPTER 2: LITERATURE REVIEW

Introduction

The Individual with Disabilities Act of 2004, known as IDEA, requires that students with disabilities be educated in the Least Restrictive Environment (LRE) possible (United States Government Publishing Office, 2004). This has led to the educational model of inclusion which is that all students with a disability are to be educated in a general education classroom whenever possible. Evidence of this can be found in the 38th Annual Report to Congress on the Implementation of the Individuals with Disabilities Act, 2016 which states that 94.8% of children ages 2 through 21 with a disability are served at least part of the day in general education classrooms and more than 60% are educated in a general education class more than 80% of the day (U.S. Department of Education, 2016). For this reason, general education teachers are often found teaching students with disabilities alongside general education students in the same classroom at the same time.

There has been a long history of research on inclusion practices which support several key points: (a) inclusion takes on many different forms (National Professional Development Center On Inclusion, 2009); (b) collaboration between the general and special educator is important for inclusion to be successful (Burstein, Sears, Wilcoxon, Cabello, & Spagna, 2004); and (c) ongoing professional development for general and special education teachers is vital to the success of inclusion (Chang, Early, & Winton, 2005). These points illustrate how important it is to have both a general education teacher and a special education teacher in a classroom with students with disabilities so they are able to provide the support needed for both the special education student and the general education teacher in order to effectively implement the inclusion model.

This chapter will provide justification for the research questions of this study. It is the intent of this study to help broaden the research on general education teachers' attitudes and perceptions on inclusion and identify areas that could be used to further develop the skills of general education teachers in educating students with disabilities in their classroom through on-going professional development. The chapter also reviews the federal legislation requiring the inclusion of students with disabilities in a general education classroom, changes in the definition of inclusion, and research on pre-service teachers' attitudes about inclusion.

Federal Legislation

The first piece of federal legislation that was passed regarding the education of students with disabilities was the landmark legislation in 1975 entitled the Education for All Handicapped Children Act. This law was signed by President Gerald R. Ford on November 29, 1975 (Alexander & Alexander, 2012). This law, Public Law No. 94-142 (PL94-142) has been the single most important law requiring the education of all students in public schools, regardless of their disability. PL94-142 required states to educate all children, no matter what disability they may have, at the public's expense. Before this law, states were not required to educate children with disabilities. PL94-142 had four purposes: (a) to ensure that all students with disabilities are entitled to a free and appropriate public education (FAPE), (b) to protect the rights of students with disabilities, (c) to assist states in providing FAPE to students with disabilities and (d) to ensure the effectiveness of the education of students with disabilities (U.S. Department Of Education, 2010).

In 1990 the Education of all Handicapped Children Act was renamed the Individuals with Disabilities Education Act (IDEA). IDEA was revised again in 1997. These revisions do not include the term inclusion but did require schools to give "an explanation of the extent, if any to

which the child will not participate with non-disabled children in the regular class” (Alexander and Alexander 2012, pp. 591-592).

In 2002, the No Child Left Behind Act (NCLB) was signed into law by President George W. Bush. This law required students with disabilities to take state and district assessments with appropriate accommodations. This law also required that students with disabilities will receive reasonable accommodations and modifications to be able to access the general education curriculum.

The most recent changes to IDEA occurred in 2004. The most important part of these revisions of IDEA is the idea of “least restrictive environment” (LRE), which requires that children with disabilities are required to be educated with children without disabilities “to the maximum extent appropriate” (Wright & Wright, 2012, p. 23). This means that students with disabilities are to be included in general education classrooms with their nondisabled peers whenever possible. This is important because with the inclusion of students with disabilities being included in general education classrooms the responsibility for educating these students is shifting from the special education teacher to the general education teacher. Students with disabilities were also expected to make adequate yearly progress in the general education curriculum.

NCLB was reauthorized in 2004. NCLB strengthened the idea that students with disabilities make adequate yearly progress in the general education curriculum (Wright & Wright, 2012). This is important because with the inclusion of students with disabilities in a general education classroom the educational growth of these students can be used in a general education teacher’s evaluation. The main purpose of NCLB is to ensure that all children have a fair, equal and opportunity for a high quality education.

With all of the legislation that has been passed at the federal level the intent has been for students with disabilities to be educated in the public schools alongside their peers and that they progress in the general education system towards graduation at the completion of high school. One of the ways that school districts are trying to meet these goals is through the educational model of inclusion, which is educating students with disabilities in general education classrooms with their nondisabled peers.

What is Inclusion?

Mainstreaming

As stated above, the term inclusion is not specifically mentioned or defined in the federal legislation regarding the education of students with disabilities but it is implied by LRE and NCLB requires that children with disabilities are expected to make annual growth towards high school graduation. As stated by Boyle, Topping, and Jindal-Snape (2013) there is no commonly agreed upon definition of the term inclusion but this does not mean it is not important. This is supported by Jassanein (2015, p. 32) who states “A commonly agreed upon definition of inclusion does not exist, in fact the terminology associated with inclusion has changed over the years”. What follows is a history of the various definitions of inclusion found in the literature.

Before inclusion, Dunn (1968) believed in “... keeping slow learning children more in the mainstream of education” (p.11). Mainstreaming was the beginning of a movement to bring the student with a disability into the general education classroom to interact with age appropriate peers. Mainstreaming had the intent of bringing students with disabilities into the general education classroom with little expectation other than interaction with age appropriate peers. Birch (1974) had higher expectations for mainstreaming when he defined mainstreaming as an “amalgamation of regular and special education into one system to provide a spectrum of

services for all children according to their learning needs” (p.iii). Later, Meisels (1978) has a similar definition of mainstreaming as “a form of educational programming that integrates special needs and non-special needs children in regular classrooms”(p.1). Wang (1981) further refines the definition of mainstreaming as “an integration of regular and exceptional children in a school setting where all children share the same resources and opportunities for learning on a full time basis” (p.196).

Mainstreaming started as a way to include students with disabilities in general education classes with little expectation for the student with disabilities to learn. Over time it evolved into the inclusion of students in general education classrooms where all children are expected to learn and have the same opportunities. The term mainstreaming is no longer used. The new term to describe when students with disabilities are in a general education classroom is inclusion.

Inclusion also has had many different definitions over time.

Regular Education Initiative

The start of the Regular Education Initiative (REI) is often credited to Madeleine Will (1986). REI advocated for all children to be educated in regular education settings. Will (1986) described four problems with the special education system at the time. First, services for students with disabilities were fragmented. Second, special education and regular education operated as dual systems. Third, students with disabilities were segregated from their nondisabled peers. Fourth, eligibility requirements for special education often caused disagreement between parents and the school about a student’s placement. Will (1986) proposed four solutions to these existing problems with special education. First, special and regular education must be allowed to work together to carry out individualized education plans (IEPs). Second, decisions about implementing new instructional models for students with disabilities should be based on data.

Third, provide a system of supports for teachers including co-teaching and professional development and fourth, using curriculum based assessments. This was the beginning of the movement from mainstreaming to full inclusion of students with disabilities.

Inclusion

Rogers (1993) defines inclusion as “the commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child ... and requires only that the child will benefit from being in the class; rather than having to keep up with the other students” (p.1). Ferguson (1996) states that inclusion is a movement to create schools that meet the needs of all students who are educated together in age-appropriate general education classrooms. Friend (2008) described inclusion as a process that incorporates both special education and general education services in an integrated educational approach where all students fully participate in the general education environment with the supports necessary to promote all students to be successful. Norlin (2009, p. 5:11) answers the question of what inclusion is as: “Inclusion is commonly understood to mean that a student with disabilities receives at least portions of his education in the regular education classroom. Full inclusion means the placement of a student in his home school in a regular education classroom with age and grade appropriate peers” for the entire school day.

All of these definitions of inclusion are similar as they include having students with disabilities in the general education classroom accessing the same curriculum as the nondisabled students. The early definitions of inclusion focused on where the student was educated and not so much on how much they were learning. Over time the definition of inclusion has changed from just having the student with disabilities present in the general education classroom to now being

focused on having that student be as successful as possible at learning the content taught in the general education classroom.

It is important to note that inclusion is where the students with disabilities are educated. Wright and Wright (2012) state the child with a disability should be taught the general education curriculum to the maximum extent possible. Full inclusion is not mandated by IDEA (Norlin, 2009). Warnock and Norwich (2010) propose that the definition of “inclusion is a process that maximizes the entitlement of all pupils to a broad, relevant and stimulating curriculum, which is delivered in the environment that will have the greatest impact on their learning. All schools, whether special or mainstream, should reflect a culture in which the institution adapts to meet the needs of its pupils and is provided with resources to enable this to happen.” (p. 34). Both of these definitions are correct and follow the federal regulations on special education but they are different in their interpretation of the federal regulations.

Most recently Shoulders and Krei (2016) define inclusion “as occurring when general and special education teachers work together in the same classroom, which incorporates students with disabilities with their typically developing peers” (p.23). “Inclusion is an effort to incorporate the best practices of special education into the general education classroom so all students can benefit” (p. 24). These definitions of inclusion, which are the most recent, stress the supports that are to be provided to a student with a disability in the general education classroom so they can be successful in learning the general education curriculum in a general education classroom.

All of these definitions are different but they follow the federal regulations, they have similarities and differences which is why this study is important. It does not make sense to study teachers in multiple locations where the definition of inclusion may be different. If the definition

of inclusion is different the teachers' attitudes will likely be different because of the difference in the definition and thus the implementation of inclusion. This is one of the reasons that this study was done in one school district.

Summary

Beginning with mainstreaming and working towards the most recent definition and practice of inclusion the main emphasis is to have students with disabilities in the general education classroom for as much of the school day as possible. Mainstreaming was mostly about getting the child with a disability into the general education classroom. This has progressed to the most recent implementation called inclusion which is having the child with a disability not just present in the general education classroom but receiving their education in the general education classroom with appropriate modifications and accommodations, as well as necessary supports, to provide as much access as possible to the general education curriculum. Inclusion does not mean that a student with disabilities will progress at the same rate as nondisabled students however that outcome is a possibility.

Pre-service Teachers and Inclusion

Vaz et al. (2015) found "that older teachers tend to have more negative attitudes towards inclusion" (p. 8) which is the same result as previous research done by De Boer, Pijl, and Minnaert (2011) as well as Avramidis and Norwich (2002). The reason cited for older teachers having a negative attitude towards inclusion is due to a lack of training in how to include students with disabilities in their general education classroom. In the past, general education teachers were not taught how to work with students with disabilities; it was not part of their undergraduate teacher training. General education teachers currently coming out of teacher training programs have some experience with students with disabilities but it usually consists of

one or two classes at the undergraduate level. This is not enough training on how to work with student with disabilities as “inclusive education represents a very large domain which cannot be taught in one semester of the bachelor degree program” (Unianu, 2012, p. 903).

Research done by Ko and Boswell (2013) found that general education teachers of physical education reported that they had “insufficient pre-service learning” (p.237) related to the inclusion of students with disabilities in their classrooms. Other studies have found that general education teachers do not receive sufficient training to be successful in teaching students with disabilities in their classrooms (Hodge, Ammah, Casebolt, LaMaster, & O'Sullivan, 2004; Liberman, Houston-Wilson, & Kozub, 2002; Morley, Bailey, Tan, & Cooke, 2005; Smith & Green, 2004; Vickerman & Coates, 2009). This would suggest there needs to be more education on working with students with disabilities in the general education classroom at the pre-service teaching level so that when they graduate as teachers they are more prepared to work with students with disabilities in their classrooms.

The pre-service training that general education teachers are receiving is helping improve teacher attitudes as reported by Varcoe and Boyle (2014) who found that “pre-service teachers who had received training in special education displayed significantly more positive attitudes towards inclusive education compared to those who had not received the training” (p. 332).

Alvarez McHatton and Parker (2013) also found elementary education pre-service teachers attitudes about inclusion improved over time and with course work and field work focusing on inclusion. This improvement in attitude was based on dispelling the preconceived ideas the pre-service teachers had about inclusion and their understanding that inclusion is part of being a teacher of all students. Campbell, Gilmore, and Cuskelly (2003) had similar results in a study of pre-service teachers in Australia where the pre-service teachers reported more positive attitudes

in working with students with disabilities after a semester long course about people with disabilities which included fieldwork where the pre-service teachers were required to work with students with disabilities.

Pre-service training for general education teachers is improving with regards to inclusion by including some course and fieldwork for general education teachers in this area but there is more work to be done, including more training for these teachers in the area of inclusion. Even with improvements in this pre-service training there will still be the need for ongoing professional development for these teachers as well as for older teachers who may not have had any training on the inclusion of students with disabilities at the undergraduate level.

Research Questions

A review of the literature has shown that there is no accepted definition for the term inclusion and it has changed over time. Because there is not an accepted definition of inclusion and it has changed over time it leads one to ask the following research questions to be asked in one school district of middle school teachers.

1. What are general education teachers' attitudes, positive and/or negative, about having students with disabilities in their classrooms?
2. Do general education teachers believe students with disabilities can be successful in the general education setting?
3. Do general education teachers feel they receive adequate support for students with disabilities in their classroom?
4. Do general education teachers feel qualified to teach students with disabilities in the general education classroom?

Question 1

What are general education teachers' attitudes, positive and/or negative, about having students with disabilities in their classrooms?

Research

There has been a long history of research on general education teachers' attitudes towards the inclusion of students with disabilities in the United States as reported by Stoler & Peterson in 1991. The recent focus in this research has been in the area of inclusion of students with disabilities in the general education classroom and the general education teachers' attitudes towards those students with disabilities being included in their classrooms. This research has focused on the impact of general education teachers' attitudes towards inclusion and how it can impact the education of students with disabilities. The research shows what would be expected which is that negative teacher attitudes towards inclusion is having a negative impact for students with disabilities and more positive attitudes towards the inclusion of students with disabilities results in more positive outcomes for these students.

An earlier study on teachers' attitudes towards inclusion of students with disabilities in general education classrooms published in 1981 by Schmelkin was conducted utilizing a questionnaire with a seven point Likert scale from strongly agree to strongly disagree with a neutral choice in the middle. She researched general education teachers, special education teachers and non-teachers and their attitudes toward the mainstreaming of students with disabilities in general education classrooms. All three groups studied had positive attitudes towards the mainstreaming of students with disabilities.

Logan and Wimer (2013) used a survey instrument with a Likert scale to determine teachers' attitudes towards the inclusion of students with disabilities. They also had a section for

reflective comments where the teachers could write their own thoughts about inclusion. Their results showed that high school teachers embraced the idea of inclusion more than the elementary school teachers. The comments that teachers made about inclusion were both positive as well as negative. Some examples are: (1) It depends on the degree of disability whether a student should be placed in a regular education class, (2) Smaller class sizes would help with the inclusive model, (3) Working with special education students is truly a great challenge, (4) It can be beneficial if done correctly, (5) There are not enough special education teachers and paraprofessionals to accommodate number of students identified, (6) There is no time to plan with co-teacher, (7) I have had an amazing inclusion teacher with me this year.

De Boer, Pijl, and Minnaert (2011) as well as Avramidis and Norwich (2002) all had similar results. It is not a surprise that the results of these studies show that older teachers have a more negative attitude towards inclusion of students with disabilities. Vaz et al. (2015) stated this may be because many of these general education teachers have had little or no training on how to teach students with disabilities. De Boer, Pijl, and Minnaert (2011) found teachers who had more experience and training in inclusion had more positive attitudes about inclusion. . Also, these teachers may not believe that students with disabilities can be successful being included in general education classrooms.

If general education teachers have a negative attitude about the inclusion of students with disabilities and if they feel they cannot be successful in teaching those students in their classrooms they may ignore those students which will have a negative impact on the academic outcomes for the ignored students. Research has supported the idea that general education teachers lack the ability to be successful when teaching students with disabilities in their classrooms (Buell, Hallam, & Gamel-McCormick, 1999) so much so that they feel that inclusion

is “an obstacle to their current teaching assignments and responsibilities” (Van Reusen, Shoho, & Barker, 2001, p. 14). Cook, Cameron, and Tankersley (2007) found that general education teachers were “more concerned, indifferent, and rejecting toward their included students with disabilities, as compared to their students without disabilities” (p.238). Wogamon (2013) found 42% of the teachers in her study had no professional development related to inclusion, 39% had one to three hours of training, 12% had four to nine hours of training and 7% had 10 or more hours of training. Van Reusen, Shoho, and Barker (2001, p. 13) found “that over half (54%) of the high school teachers who completed the survey obtained response scores that reflected negative attitudes toward the inclusion of students with disabilities into their general education classrooms.” This lack of professional development on how to work with students with disabilities may lead to negative attitudes towards students with disabilities being included in their general education classrooms.

With research showing that many general education teachers have negative attitudes about inclusion and students with disabilities it is important to find a way to improve these teacher’s attitudes and feelings of success with these students to improve educational outcomes for all students, not just those with disabilities. Again, it is possible that the general education teachers in these studies may believe that students with disabilities are not able to be successful in the general education classroom causing them to have negative attitudes towards the students with disabilities in their general education classrooms.

Research does show that more positive attitudes towards inclusion and higher levels of self-efficacy results in a better educational experience for students with disabilities. The research has shown that general education teachers have had both positive as well as negative attitudes

towards the inclusion of students with disabilities in their general education classrooms. This research has been both qualitative and quantitative as well as some mixed methods studies.

Justification for Question One

The improvement of general education teachers' attitudes towards inclusion will lead to general education teachers being more successful in teaching those included students with disabilities. This premise has been supported by research about general education teachers' attitudes towards inclusion. The research shows that successful inclusion is largely dependent on the general education teachers' attitudes towards students with disabilities (Burke & Sutherland, 2004; De Boer, Pijl, & Minnaert, 2011; Forlin, Cedillo, Romero-Contreras, Fletcher, and Hernandez 2010; Shade & Stewart, 2001). Morley, Bailey, Tan, and Cooke (2005) found "teachers with more positive attitudes toward inclusion were reported by their students to have classroom environments with greater levels of satisfaction and cohesiveness and lower levels of friction, competitiveness, and difficulty than for those with teachers who held less positive attitudes" (p. 113).

It is important to know if in the district in this study if the general education teachers have positive and/or negative attitudes towards students with disabilities in their classrooms because the research shows that negative teacher attitude towards students with disabilities have a negative impact on the students' academic outcomes. Research has shown positive teacher attitudes are associated with teacher self-efficacy meaning that they believe they can teach students with disabilities in their general education classrooms. For these reasons it is important to know the positive as well as the negative experiences that general education teachers have about the inclusion of students with disabilities in their classrooms.

Question 2

Do general education teachers believe students with disabilities can be successful in the general education setting?

Research

With the federal legislation requiring students with disabilities to be educated in general education classrooms a question to ask would be does it work? Are students with disabilities making academic gains when included in general education classrooms? One way to measure if inclusion works would be through academic outcomes. The measures used could be grades or scores on standardized tests of students with disabilities who are included in general education classrooms. At this point in time the published research studies in this area have yielded mixed results.

A study by Rea, McLaughlin, and Walther-Thomas (2002) found that when they compared the academic outcomes for students with disabilities in inclusive education to those students who received their special education services in pull-out programs the students who were in the inclusive classrooms received better grades than those in pull-out programs. The students in inclusive educational programs also had higher or comparable scores on standard achievement tests than those students in the pull-out programs. When they looked at behavioral infractions there were no differences. But those students in the inclusive programs attended more days of school than those in the pull-out programs. This was a quantitative study of eighth grade students with learning disabilities. The results of this study show that students with disabilities benefit from receiving their instruction in inclusive educational settings when using academic outcomes of grades and standardized test scores as the measure.

Fore, Hagan-Burke, Boon, and Smith (2008) conducted a study of high school students with learning disabilities in inclusive educational settings and pull-out programs. Their results showed no evidence to show that high school students with learning disabilities performed better in pull-out programs verses inclusion in general education classes. This study showed that it made no difference where the student with disabilities received their educational instruction.

With inclusion being how most students with disabilities are receiving their instruction, Cameron and Cook (2013) investigated the outcomes that general education teachers have for students with different levels of disability. They found general education teachers' expectations and goals for students with severe disabilities were for social development. For those students with mild disabilities their goals were behavior skills and improving the student's self-confidence. These goals are not related to academic gains but to social skills. Academic goals were of little importance for students with severe disabilities. The teachers in this study felt they had little to offer students with severe disabilities other than socialization with their age appropriate peers. The general education teachers in this study were not working on academic outcomes for the students with disabilities in their general education classrooms. This would make one think that these students might be better served in a pull-out program with a special education teacher providing the academic instruction for these students. That is not to say that the social and behavioral goals these teachers were working on with students with disabilities in their general education classrooms are not important but, it appears they set the expectations for these students much lower because of the student's disability.

Dessementet, Bless, and Morin (2012) conducted a study in Switzerland with students who were 7 or 8 years old and had an IQ between 40 and 75 (in the United States these students would be described as having a cognitive impairment). The study had controlled variables of age,

associated impairments, socio-economic status, cognitive skills as well as pretests in math and literacy. The results of this study showed that the students in the inclusion environments did slightly better in literacy skills than those students in specialized schools for students with disabilities. There was no difference between the students in the inclusive educational setting and those in the specialized school setting in mathematics and adaptive behavior.

In a more recent study Tremblay (2013) found no difference between pull out special education classes and co-taught general education classes using academic tests as the measure. The participants in this study were students in first and second grade with learning disabilities. This was a quantitative study. What he did find was that those students in the inclusive educational setting attended more days of school than those students in the special education classrooms. This finding is the same as the study by Rea, McLaughlin, and Walther-Thomas published in 2002. These two studies did not show a difference in academic gains but they did have the positive outcome of the students with disabilities in general education classrooms attending more days of school which may have a positive impact on their learning.

These studies show that the students in inclusive educational environments may perform slightly better than those students in pull-out or specialized programs. The studies do show that there are benefits other than academics such as better attendance. The studies show that attendance is improved for students in inclusive educational environments over those students in pull-out programs. These results are similar to those published in 2007 by Lindsay. He performed a meta-analysis of published studies to see if inclusive education is more effective than pull-out programs. His results showed that there was a slight benefit to inclusive education over pull-out type programs but noted that more research needs to be done in this area as he found only fourteen published studies to use in his analysis (Lindsay, 2007). The research shows

that there may be a slight academic benefit for students with disabilities to be educated in inclusive educational environments.

Justification for Research Question Two

No studies were found that asked teachers if they believed students with disabilities could be successful in their general education classrooms. It is important to know if the general education teachers working with students with disabilities believe these students can be successful in their classrooms or if they are just going through the motions with these students because it is part of their job. Another reason this question is important because if general education teachers do not believe that students with disabilities cannot be successful in their general education classrooms the students will not be held accountable for their own learning or the teacher may ignore them because they do not feel they have anything to offer that student in the way of learning.

Question 3

Do general education teachers feel they receive adequate support for students with disabilities in their classroom?

Research

The degree to which teachers feel supported in their inclusion environment by colleagues and administrators is an influential factor in how teachers perceive inclusion. Teachers who felt supported through a commitment to the practice and additional staff held more positive attitudes toward inclusion (Ernst, 2006). Colber (2010) found that 94% of general education teachers agreed that training in teaching students with special needs should be required for all regular educators. Wogamon (2013) found 42% of the teachers in her study had no professional development related to inclusion, 39% had one to three hours of training, 12% had

four to nine hours of training and 7% had 10 or more hours of training. Shoulders and Krei (2016) found that 74% of the general education teachers in their study received minimal to no hours of professional development in co-teaching with special education teachers. Professional development in the area of inclusion appears to be one area that is often neglected and is an area of great need as the majority of general education teachers have had minimal to no professional development in this area.

The Wogamon (2013) study shows that even though general education teachers feel they need support through professional development it is not happening. Many studies reported that general education teachers should receive support through professional development but few studies asked the general education teachers if they were receiving adequate support for students with disabilities in their general education classrooms.

Sutton (2013) found that there is a significant relationship between teachers' attitude of student performance and the support and training received by the general education teacher. The more training the general education teacher receives in how to full include students with disabilities in their classroom the more those general education teachers believe that students with disabilities can learn the material they are teaching. Sutton (2013) also found general education teachers needed support and training to be better prepared in providing adequate instructional practices to students with disabilities within their classrooms. This study also found that 69.5% of the teachers in the study had received less than five hours of professional development in the inclusion of students with disabilities in general education classrooms. This study shows that general education teacher believe professional development in the inclusion of students with disabilities is important however they are not receiving this professional development.

The idea of ongoing professional development continues to be an important part of improving inclusion as is shown by the research of Damore and Murray (2009) who found that “it is critical to provide urban educators with professional development opportunities related to teaching students with disabilities in general education settings” (p.242). These studies show how important professional development was in the past and how important it continues to be in teaching students with disabilities in the general education classroom.

Professional development of inclusion of students with disabilities can take on many different forms. Nishimura (2014) found that professional development using the coaching model resulted in positive experiences and a new appreciation of inclusion by the participants. The participants had an increased willingness as well as increased ability to carry out inclusive practices. It is important that general education teachers be willing to teach students with disabilities in their classrooms in order for the teacher and all students to be successful.

Monsen, Ewing, and Kwoka (2014) conducted a quantitative study on teachers’ perceived adequacy of support. What they found was that the more support the teachers felt they had the more positive the attitudes were towards the inclusion of students with disabilities in general education classrooms. Those teachers that did not feel supported had a more non-inclusive classroom and had more negative attitudes towards the inclusion of students with disabilities in their general education classroom. A recent study by Mackey (2014) used the qualitative techniques of interviews, observations, and document analysis to study three middle school teachers and their approach to the inclusion of students with disabilities in their classrooms. The three teachers in this study felt their undergraduate programs in teacher education did not adequately prepare them to include students with disabilities in their

classrooms however, “all three teachers were confident in their ability to meet the needs of all students in their inclusive classroom” (p. 14).

It has also been found that the more support a teacher receives, as well as their perceived adequacy or self-efficacy, the more positive their attitude towards inclusion. Self-efficacy is the teacher’s belief that they have the necessary skills and knowledge to do their job which is teaching all students, those with disabilities and those without. The more support the teacher has in the way of professional development and administrative support the more likely it is they will have a positive attitude towards the inclusion of students with disabilities in their classroom (Monsen, Ewing, & Kwoka, 2014).

Justification for Research Question Three

Many teachers who are currently teaching in general education settings have little or no training in how to teach students with disabilities in the general education setting. It is unreasonable to ask these teachers to be effective at including students with disabilities when they have not been properly trained in how to educate these students in their classrooms. For these reasons, all teachers could benefit from professional development in inclusive educational practices to improve their knowledge and skills. Teaching is an evolutionary process where each year, with more experience and knowledge, the teacher is always improving and honing their teaching skills. The goal of professional development should be to improve not just their teaching skills but also their attitudes towards inclusion as well as improving their self-efficacy of working with students with disabilities.

The research has shown that support in the form of professional development resulted in positive teacher attitudes towards the inclusion of students with disabilities. Colber (2010) found that general education teachers believed that they should receive support through professional

development but Wogamon found in 2013 that 42% of the general education teachers in her study had not received any professional development on the inclusion of students with disabilities in their general education classrooms. Shoulders and Krei (2016) found that 74% of the general education teachers in their study received minimal to no hours of professional development in co-teaching. The research shows there is a need for support through professional development but as recently as 2013 there has been a lack of this form of support. The question of whether or not teachers are receiving adequate support is asked to see if it is similar to the current research or if it is different in the district in this study.

All teachers can benefit from professional development in the area of inclusion, regardless of how much or how little experience they have in working with students with disabilities in their classroom. Research has shown the skills general education teachers need to be successful in teaching students with disabilities. A lack of professional development in the inclusion of students with disabilities in general education has been a problem for many years and the current research has shown that it continues to be a problem that general education teachers receive little to no training on how to successfully implement the inclusion of students with disabilities in their general education classrooms. Do general education teachers receive enough support for them to be successful in teaching students with disabilities in their general education classrooms?

Question 4

Do general education teachers feel qualified to teach students with disabilities in the general education classroom?

Research

Mainstreaming and inclusion have been a progression from pull-out programs where students with disabilities were receiving their education in special classrooms. The inclusion of students with disabilities in the general educational setting for the majority of the student's school day is now the norm for most students with a disability. In the past, the special education teacher was the main person responsible for the education of students with disabilities, usually in a different classroom than the general education students.

Educating children with disabilities is now shifting to be the responsibility of the general education teacher in the general education classroom (Royster, Reglin, & Losike-Sedimo, 2014). This change in the educational model for teaching students with disabilities has found some general education teachers unprepared to teach the students with disabilities in their classrooms alongside their nondisabled peers. If general education teachers are not trained in inclusion of students with disabilities do they feel qualified to teach students with disabilities in their general education classrooms?

General education teachers are being held accountable for student growth as it is a part of their evaluation for continuing employment. For this reason, general education teachers need both the tools to effectively teach students with disabilities in an inclusive setting and the support of special education staff as well as ongoing professional development in order to effectively teach students with disabilities in their classroom (Dieker & Murawski, 2003).

Many general education teachers have negative attitudes towards inclusion but Vaz et al. (2015) found that training teachers how to be an inclusion teacher was associated with positive teacher attitudes towards inclusion. This shows that with proper training it is possible to positively change general education teachers' attitudes about inclusion. While a positive attitude

towards inclusion is important, there also needs to be proper training in inclusionary teaching practices because as Van Reusen, Shoho, & Barker (2001, p. 13) found it is “imperative that teachers assigned to inclusive classrooms be prepared to work with all students in their classrooms because positive attitudes alone will not result in improved or effective instruction.” These studies show that if we expect general education teachers to teach students with disabilities in their classrooms they must be properly trained to do so and a positive attitude towards inclusion is not enough. Training in research based instructional practices for students with disabilities is also necessary.

Self-efficacy is important for a general education teacher to be a successful inclusion teacher. How does a teacher develop self-efficacy? Self-efficacy is developed through experience as well as the teacher’s belief that they can be successful in educating students with disabilities (Urton, Wilbert, & Hennemann, 2014). Vaz et al. (2015) have also reported that low self-efficacy was associated with negative attitudes towards the practice of inclusion. For these reasons, it is important for school districts to offer training to general education teachers in order to help improve the general education teachers’ self-efficacy of teaching students with disabilities in their general education classrooms. If general education teachers feel they will be successful in teaching students with disabilities they are more likely to be successful in teaching those students. So the question is do general education teachers feel qualified to teach students with disabilities in their general education classroom?

In 2006, DiSimone and Parmar (2006) found that teachers experienced a lack of knowledge of the learning needs of students with disabilities. Training of general education teachers through professional development is still needed as McMahon, Keys, Berardi, Crouch, and Coker (2016) recently stated “training may better prepare teachers to work with students

with disabilities” (p.667). Shoulders and Krei (2016) concluded that “teachers who are better prepared for their work can contribute to the overall success of students, especially students with special needs” (p. 29).

Justification for Question Four

With the shift to educating students with disabilities in general education classrooms it is important to know if these teachers feel qualified to teach students with disabilities in their general education classrooms. Research has shown that there has been a lack of professional development for general education teachers on how to teach students with disabilities in the general education classroom. So given that there has been a lack of training through professional development on inclusion do the general education teachers in this study feel they are qualified to teach students with disabilities in their general education classrooms? This is an important question because if they feel qualified they will do their best to ensure that all students in their classrooms are learning including those students with disabilities. If they do not feel qualified it is important to know why they do not feel qualified to teach students with disabilities in their classrooms.

Summary

There have been many changes in education since the first federal legislation requiring the education of students with disabilities in the public schools. One of these trends has been the inclusion of students with disabilities in the general education classroom for all of their classes instead of separation of these students using pull-out programs for part of the day. Since inclusion has become the educational model for students with disabilities there has been a considerable amount of research done on general education teachers attitudes towards inclusion. This research has taken place both in the United States as well as around the world. It is

important that general education teachers be trained in inclusion practices if they are to be successful in teaching students with disabilities. This training should be taking place in teacher education programs at the undergraduate level as well as in ongoing professional development for teachers who are already teaching. This training is important if we want the inclusion of students with disabilities to be successful for the teacher as well as for all students, with or without disabilities. With all of this research on inclusion there are some questions that have not been asked of general education teachers and their attitudes or beliefs about inclusion of students with disabilities in their general education classrooms. First, researchers have not asked general education teachers if they believe that students with disabilities can be successful in their classrooms. Second, studies of inclusion of students with disabilities have shown that for inclusion to work there needs to be administrative support as well as continuing professional development on inclusion in order for it to be effective for students with disabilities. But the teachers in these studies have not been asked if they are receiving adequate support for students with disabilities in their general education classrooms. Third, except for one study of general education teachers that worked with students with hearing disabilities teachers have not been asked if they feel qualified to teach students with disabilities in their general education classrooms. It is important to know if general education teachers feel qualified to teach students with disabilities in their general education classrooms. These are all important questions that have not been addressed in previous research on inclusion and should be asked of general education teachers that work with students with disabilities in their general education classrooms.

CHAPTER 3: METHODOLOGY

Introduction

The purpose of this study is to assess middle school general education teachers of core subjects (ELA, math, science, and social studies) attitudes, beliefs and perceptions about the inclusion of students with disabilities into their general education classrooms. This study used the qualitative method of Q Methodology with a follow up semi-structured interview. Q Methodology was first introduced in 1935 by William Stephenson as a method to study people's perceptions of a topic or idea (Stephenson, 1935). One of the advantages of using Q Methodology is that a large sample of participants is not necessary. Studies using Q Methodology typically have between eight and thirty participants (Webler, Danielson & Tuler, 2009). Q Methodology correlates people using factor analysis to determine similarities and differences in viewpoints on a particular subject using the data collected during the sort of the Q statements (Van Exel & De Graaf, 2005). The Q sort is completed by the participant next is a semi structured interview conducted by the researcher the interview is recorded and transcribed for analysis. This allows the participant to explain why they sorted the statements the way they did allowing for a richer understanding of each participant's point of view on the subject of inclusion.

Q Methodology has been found to be a reliable method to study subjective topics. Brown (1980) conducted a test-retest to measure the reliability of the analysis of Q sort data. He found correlation coefficients of 0.80 and greater. Nicholas (2011) conducted a case study on the reliability of using Q Methodology using the test-retest method and he found a correlation of 0.89 between the two factors in his study.

A pilot study along with the literature review was conducted to help develop a valid set of Q sort statements representing the spectrum of possible beliefs and attitudes about inclusion. Validity was also ensured by giving the participants a chance to explain their Q sorts during the follow up interviews.

Research Questions

The results of the Q sort data analysis and the semi-structured interviews were used to answer the research questions of this study which are:

1. What are general education teachers' attitudes, positive and/or negative, about having students with disabilities in their classrooms?
2. Do general education teachers believe students with disabilities can be successful in the general education setting?
3. Do general education teachers feel they receive adequate support for students with disabilities in their classroom?
4. Do general education teachers feel qualified to teach students with disabilities in the general education classroom?

Appropriateness of the Research Design

This is a qualitative study using Q Methodology with a semi-structured follow up interview as the data collection methods. Q Methodology is designed to measure people's perceptions and attitudes about a topic. Currently used methods of measuring attitudes include the Likert Scale, Semantic Differential and Q Methodology (Cross, 2005). Each of these methods has their advantages and disadvantages. The advantages and disadvantages of each of these methods is described below along with why Q Methodology was selected for the research design in this study.

The Likert Scale uses a set of statements about a particular attitude or belief and the participants are then asked to indicate how much they agree or disagree with the given set of statements. The Semantic Differential is a measure similar to the Likert Scale and asks respondents to rate a statement on a set of bipolar adjective scales (Manstead & Semin, 2001). One advantage of these two measures is they are economical and can gather large amounts of data in a relatively short time period from a large number of participants. Another advantage of using these two measures is that because large amounts of data can be collected it is possible to generalize the results of the analysis to a larger population. These two methods of measuring attitudes have three disadvantages: (1) allowing the participant to agree or disagree with all of the statements asked on the measure, (2) it may not be possible to collect the data from all of the participants and (3) there is no interaction between the researcher and the participants. These two methods typically do not use a follow up interview with the participants to allow them to explain their point of view or why they marked a statement the way that they did. The reason that interviews are not collected when using these measures is because it is usually cost prohibitive with a large number of participants. These two methods are also limited by the instrument being used to measure attitudes, beliefs and perceptions.

There were several reasons Likert Scale and Semantic Differential were deemed inappropriate for this study. First, Likert Scale and Semantic Differential typically use a large number of participants which were not available for this study as this study was conducted in one school district making Q Methodology a more appropriate choice for this study. Second, by using semi-structured interviews it would allow for a complete investigation of the attitudes and beliefs general education teachers have about the inclusion of students with disabilities in their general education classroom by letting the participants explain their Q sort as well as any other

Q Methodology was chosen for this research study because it combines the strengths of both qualitative and quantitative research (Cross, 2005) and “is considered particularly suitable for researching subjective experiences, perspectives, and beliefs” (Shinebourn, 2009, p. 94). Q Methodology is useful in identifying factors or people who have similar attitudes about the phenomenon or experience being investigated. Another advantage of the Q Method over the Likert Scale or Semantic Differential is that it is a forced sort. A forced sort requires the participant to consider their choices more carefully (Cross, 2005) as they cannot agree with more statements than they disagree with. A table is used in the sorting process which allows only one statement in each box on the table making it a forced sort. This produces a normal distribution of the Q sort statements.

Figure 2. Q Sort Table

It was also decided to follow up the Q sort with a semi-structured interview allowing the participants to explain their choices during the Q sort process as well as to share any experiences they had about the inclusion of students with disabilities in their general education classrooms. Q Methodology also requires a small number of participants. Major relationships begin to appear with just a few participants and increasing the number of participants does not change the number of factors (Ward, 2009). It just increases the number of participants that load on each factor. For these reasons it was decided that Q Methodology is the most appropriate methodology for this study investigating the phenomenon of general education teachers' attitudes, beliefs and perceptions about the inclusion of students with disabilities in general education classrooms.

Research Design Using Q Methodology

The first step to using Q Methodology is a participant is presented with a set of statements about a topic which in this case is the inclusion of students with disabilities in general education classrooms. The statements used in this study can be found in Appendix A. The person is instructed to sort the statements into two piles those they agree with and those they disagree with. The participant is then instructed to take the statements they agree with and place them in the squares on the table with the statements they agree with being in the spaces furthest to the right and working towards the center until they run out of cards. Then they take the statements they disagree with and put the two statements they most disagree with on the left and work their way back to the center of the table. An example of the sorting table can be found in Appendix B.

In this study 50 statements were used during the Q sort process. These statements are called the Q-set. The Q-set statements were developed from the answers to the questions during

the interviews of the pilot study (see below pilot study) as well as from the literature review about general education teachers' attitudes, beliefs and perceptions about the inclusion of students with disabilities in general education classrooms. The Q-set statements developed for this study can be found in Appendix A. The Q-set statements represent both extremes, positive and negative, of how people feel about the topic being investigated. In this case, the inclusion of students with disabilities being included in general education classrooms. The person sorts the statements according to their point of view or beliefs about inclusion of students with disabilities in general education classrooms from their own experiences. There is no right or wrong way to sort the statements.

Each statement card has a number on the back of it. These numbers are what are recorded and used in the analysis of the data. Once the Q sort has been completed the researcher records the number of each statement and its location on the table. After the desired number of participants has completed the Q sort the results are input into a software program called PQMethod (Release 2.35; Schmolck, 2014) for analysis. This analysis uses factor analysis which identifies factors which are points of view that are consistent among those subjects that performed the Q sort (Brown, 1993; Van Exel & De Graaf, 2005). Those participants that have sorted the Q statements in a similar manner are grouped together as a factor and represent a particular point of view on the subject.

Pilot Study

A pilot study was conducted to test and validate the interview protocol. The protocol for the pilot study can be found in Appendix C. The pilot study was conducted at one middle school in the Midwest. There were four participants in the pilot study. The pilot study used a semi-structured interview process using the interview protocol in Appendix C.

The interviews were recorded and then transcribed. Data analysis of the interview data was a process of consolidation, reduction and interpretation of the participants' responses (Merriam, 2009; Miles and Huberman 1999). After the interviews were transcribed the open coding process was used in the analysis of the data. The open coding process "involves segmenting data into categories of information" (Creswell, 2007, pp. 239-240). Descriptive labels were assigned to each of the categories during the open coding analysis (Miles & Huberman, 1994). The labels for the categories of information should be the smallest piece of information that can stand on its own in the absence of other information (Merriam, 2009).

The next step in the analysis of the interview data was axial coding which condenses the labels from the open coding into broader categories. These categories are themes (Creswell, 2007; Merriam, 2009; Miles & Huberman, 1994). The themes are the findings of the interviews conducted with the participants during the pilot study and were used to help develop the Q-set statements used in the Q sort portion of this research project.

A reliability check was performed at this point by comparing the themes from the pilot study to those of published research on the attitudes, beliefs and perceptions of general education teachers about the inclusion of students with disabilities in their general education classrooms. Triangulation is a method of ensuring reliability in qualitative studies. Triangulation is using multiple data sources to check the themes developed from the data. In the pilot study there was only one source of data so the results were compared to previously published studies on inclusion. The results of the pilot study were similar to existing research thereby ensuring reliability. Based on this reliability check there were some modifications made to the interview protocol between the pilot study and the main study. Three questions asked during the pilot study were removed from the protocol used during the main study. The interview protocol for the pilot

study can be found in Appendix C. Questions 4, 8, and 9 were the questions removed from the pilot study protocol during the main study.

After the pilot study it was decided to proceed with the research but to add the Q Method of data collection and analysis as well as conducting the semi-structured interviews after the Q sort was completed using both types of data to answer the research questions. The results of the pilot study were used to help develop the Q set statements used in the Q sorting process and to revise the interview protocol.

Setting and Participants

The participants for this study are middle school teachers (grades 6-8) of general education subjects: English, math, science, and social studies in an urban district located in the Midwest. A recruitment email was sent globally to the teachers at each of the four middle schools that were approved to participate in the study. A copy of the recruitment email can be seen in Appendix E. A total of seventeen teachers responded to the email invitation to participate in the study. Two of the respondents were not included because they are special education teachers. All of the fifteen participants in the study were asked to sign an informed consent document that was approved by the Human Subjects Institutional Review Board. Participants were informed verbally by the researcher that their participation was voluntary. This was also stated in the recruitment email and in the informed consent document which each participant signed before any research was conducted. A copy of the informed consent document can be found in Appendix F.

One of the teachers included in the analysis was not a teacher of a core subject but is a general education teacher. This participant is a teacher of life skills which is an elective. Table 2:

Participant Demographics is below shows the demographic data of the participants included in the study.

Table 2: Participant Demographics shows the subject and the school each of the participants teaches at as well as their number of years of teaching experience. One of the four approved schools had no teachers respond to the recruitment email. The participants in this study included three math teachers, five social studies teachers, three science teachers, three ELA teachers and one teacher of life skills. There was a wide range of teaching experience among the participants in this study.

Table 2: Participant Demographics

Participant Number	Subject	School	Number of Years Teaching
1	Math	School B	11
2	Life Skills	School B	33
3	Social Studies	School B	5
4	Math	School A	25
5	Math	School A	14
6	Science	School A	29
7	Social Studies	School A	4
8	Social Studies	School A	27
9	Science	School A	8
10	ELA	School A	10
11	ELA	School B	10
12	Social Studies	School C	11
13	ELA	School B	9
14	Science	School A	16
15	Social Studies	School A	29

Instrumentation

In this research study two types of instrumentation were used. The first is the Q sort statements known as the Q set and Q sort grid (Appendix A and B). A semi-structured interview protocol was also used (Appendix D).

As described by Brown (1993) in *A Primer on Q Methodology: Operant Subjectivity*, Q Methodology uses the word *concourse* to describe a collection of existing opinions and ideas that people have about a topic. The statements that are selected for the Q sort should be about equal numbers of positive and negative and should try to be representative of all possible opinions or points of view about the particular topic being investigated.

The Q set statements for this study were developed from the literature review of general education teachers' attitudes about the inclusion of students with disabilities in their classrooms as well as from the information gathered during the pilot study about general education teachers' attitudes about the inclusion of students with disabilities in their classrooms. During the literature review process on general education teachers' attitudes about the inclusion of students with disabilities, notes were taken on the previous findings on inclusion in the published literature. From this information, statements were developed to represent points of view or opinions of the inclusion of students with disabilities in general education classrooms. For each statement that was developed, a statement representing an opposite or as close as possible to an opposite statement was developed. This was to help ensure that there were about an equal number of positive and negative statements about the inclusion of students with disabilities.

Procedures for Q Sort and Semi-Structured Interview Data Collection

The procedure for performing a Q Methodology study involves the following steps: (1) defining the *concourse*, (2) selecting the Q set, (3) selection of the P set (P set are the participants), (4) Q sorting by the participants followed by a semi-structured interview (the semi-structured interview is not part of Q method), (5) Data collection, (6) data analysis and interpretation (Brown, 1993; Van Exel & De Graaf, 2005).

Q Methodology uses the word *concourse* to describe a collection of existing opinions and ideas that people have about a topic. In this study the *concourse* are the attitudes beliefs and perceptions that general education middle school teachers of have about the inclusion of students with disabilities in their classroom. A pilot study was performed to help develop the *concourse* for the Q study along with a literature review of the current research on inclusion and the researcher's personal experience. From this collection of beliefs and perceptions about the inclusion of students with disabilities in general education classrooms, a set of 50 statements was selected for the Q-set. The statements were selected to represent the *concourse* of inclusion, complete spectrum of possible points of view on the subject of inclusion, positive, negative and neutral.

The semi-structured interview was conducted after the Q sort was completed. The interview protocol which was revised from the pilot study can be found in Appendix D. The interview questions were asked from the protocol and the participants responded with their answers. If clarification was needed on a participants answer to a particular question follow up questions were asked by the researcher. These interviews were recorded for later transcription and analysis.

The next step was to select the participants for the p-set. Volunteers were solicited via email from among all of the general education teachers of middle school core subject areas in a Midwestern school district. When a participant agreed to participate in the study a time and place was agreed upon by the participant and the researcher to meet to conduct the Q sort and the semi-structured interview. Before any research was conducted, each participant was asked to read and sign an informed consent document which explained the reason for the research.

For the Q sorting task the researcher explained how they were to perform the task. The procedures for the Q sort and semi-structured interview are listed below:

1. Have the participant read the 50 statements and sort them into three piles, one pile for statements they agree with, one pile for statements they disagree with and one pile they have no opinion on.
2. The participant then takes the agree pile and selects the two statements they most agree with, and put them in the boxes on the far right of the sorting grid. The participant then works to the left placing the statements they most agree with in the next column to the left working their way back to the center of the grid (see Appendix B for the sorting grid)
3. Next, the pile of disagree cards are sorted with the two statements the participant finds most disagreeable to the far left and working towards the middle of the grid.
4. The neutral or no opinion cards are then sorted with nine spaces for neutral. If there are more cards remaining the participant must decide if they are to be placed on either the agree or disagree side of the grid based on how the participant feels about the statement.
5. When all of the cards are placed on the grid, have the participant review their choices and make any changes they would like to make (only one card may be placed in each square on the sorting grid forcing a normal distribution).
6. After the Q sort, the researcher records the numbers of each of the statements on the Q sort table (see Appendix B).

7. Next, the researcher uses the interview protocol in Appendix D to conduct a semi-structured interview. The interviews were recorded for later transcription and analysis.

Data Analysis of Q Sort

The analysis of the Q sorts was done using the computer software PQMethod. PQMethod is software used in analyzing the Q sort data for factors, also known as discourses that are present in the group of participants. PQMethod was developed in 1992 by John Atkinson under the guidance of Steven Brown at Kent State University. PQMethod 2.35 is supported by Schmolck (2015). The computer analysis is similar to factor analysis looking for composite points of view being represented by the factor. The software calculates commonalities and differences in the sorts of each participant.

The first step of the data analysis is to input each of the Q statements into the software. The software assigns a number to each statement based on the order they are entered into the software. The second step is to input the collect Q sort data. You must define the Q sort table and then enter the data for each participant. The Q sort table has a number at the top of each column. The column the furthest to the right has a value of 4, this is the most agree column. The value of each column decrees by 1 as you move towards the center of the table. The column the furthest to the left has a value of -4, this is the most disagree column. The value of each column decrees by 1 as you move towards the center of the table. The column in the middle has a value of zero. The Q sort table can be found in Appendix B. The third step is to extract the initial factors which is comprised of three steps. The first step is to find the correlations between the participants' sorts. PQMethod reports eight factors during this step along with Eigenvalues and the percentage of variance explained by each factor. The second step it to extract the initial factors. The

Eigenvalues are used to help determine the number of factors to keep for rotation. Eigenvalues >1 explain more variance than a single factor would therefore in this analysis a three factor model was chosen because there are three factors with an Eigenvalue greater than one (Donner 2001).

The output from this step of the process is a factor loading matrix which shows how each Q sort fits or loads on a particular factor. At this step the software preselects which participant is assigned to which factor based on the factor loadings. Factor loadings of greater than 0.500 indicate that the Q sort is loaded on that factor. The closer the factor loading is the cleaner it loads on that factor meaning the higher the loading the closer that participant is to the view point expressed by the factor. It is possible for a Q sort to load significantly on more than one factor. When this happens the sort is not used in the analysis. An example of this can be seen in Table 3: Factor Loading Matrix. Participant 3 loaded significantly on factors 2 and 3 and was therefore not used in the final analysis. Participant 9 loaded significantly on both factors 1 and 3 and was therefore not used in the final analysis. Table 3 also shows the percentage of variance explained by each factor. After the participants are assigned to a factor or excluded from the analysis the final step of the rotation is performed by the software.

The next step after determining the number of factors is to rotate these factors. The reason the factors are rotated is “to arrive at a clearer representation of distinct pattern of observations” (Donner, 2001, p. 31). This is done by maximizing the variance between each of the factors you have selected (Donner, 2001). One of the options for rotating the factors in PQMethod is to use varimax rotation where the software makes all of the decisions on how to rotate the number of factors you have decided to use for your model. After the factors have been rotated the data is then ready for the final step in the data analysis process.

Table 3: Factor Loading Matrix**X indicates a defining sort**

Participant	Factor 1	Factor 2	Factor 3
1	0.0901	0.8520 X	0.0144
2	0.2444	-0.1488	0.8059 X
3	0.4303	0.5673	0.5579
4	0.3219	0.3165	0.7707 X
5	0.3219	0.3165	0.7707 X
6	0.6287 X	0.4350	0.2488
7	0.5931 X	0.3886	0.2695
8	0.7102 X	0.1715	0.3945
9	0.5474	0.3168	0.5614
10	-0.6907 X	-0.2973	-0.4810
11	-0.0115	0.5563	0.6887 X
12	0.4577	0.0508	0.6742 X
13	0.6596 X	0.0354	0.3672
14	0.8048 X	0.2155	0.1036
15	0.6077 X	-0.2313	0.1327
% of Explained Variance.	29	14	25

The final step in the data analysis process is the calculation of factor scores. A factor score is a Z-score of participants that define the factor. The Z-scores allow the software to form a normal distribution of the Q sort statements. From the Z-score the software computes an idealized sort for each factor. The statements that load on a factor are called distinguishing statements for that factor. The distinguishing statements that load on the extreme ends of the sort are called characterizing statements and are used to develop a descriptive point of view for the participants in the factor (Van Exel & De Graaf, 2005). The results of this data analysis are reported in Chapter 4.

Table 4: Factor Characteristics shows the reliability as well as the standard error for each of the factors. As expected the more participants that load on a factor the more reliable the results and in turn a lower standard error of the Z-Scores.

Table 4: Factor Characteristics

	Factor 1	Factor 2	Factor 3
Number of Participants	7	1	5
Average Reliability Coefficient	0.800	0.800	0.800
Composite Reliability	0.966	0.800	0.952
Standard Error of Factor Z-Scores	0.186	0.447	0.218

Analysis of Semi-Structured Interviews

The interviews were recorded and then transcribed. Data analysis of the interview data was a process of consolidation, reduction and interpretation of the participants' responses (Merriam, 2009; Miles and Huberman 1999). After the interviews were transcribed the open coding process was used in the analysis of the data. The open coding process "involves segmenting data into categories of information" (Creswell, 2007, pp. 239-240). Descriptive labels were assigned to each of the categories during the open coding analysis (Miles & Huberman, 1994). The labels for the categories of information should be the smallest piece of information that can stand on its own in the absence of other information (Merriam, 2009).

The next step in the analysis of the interview data was axial coding. Axial coding condenses the labels from the open coding into broader categories. These categories are themes. The axial coding process condensed the open coding labels down to seven themes (Creswell, 2007; Merriam, 2009; Miles & Huberman, 1994). The themes are the findings of the interviews

conducted with the participants after the Q Sort. The analysis of the semi-structured interviews was done by hand. The results of this process are reported in Chapter 4.

Ethical Considerations

The ethical considerations in this study are that each of the participants was given a copy of the informed consent document that explained the procedures and the reasons for the study. The participants were asked to read through the informed consent document and were asked if they had any questions. Any questions they were addressed before the participant signed the informed consent document. A copy of the informed consent document can be seen in Appendix F. All of the participants participated voluntarily and were assured of the confidentiality of their responses to the Q sort process and interview questions. Participants were not forced to answer any questions they were not comfortable answering and were free to withdraw from the study at any time.

Validity and Reliability

A pilot study was conducted to ensure internal validity by testing the interview protocol of the semi-structured interviews. After the pilot study it was decided to add the Q sort method of data collection and analysis to the study. For this reason, the interview protocol was modified by adding two questions: (1) why they picked the two statements they most agreed with from the Q sort process and (2) why they chose the two statements they most disagreed with from the Q sort process. Using the Q sort process as well as the follow up semi structured interviews allowed the participants to fully express and explain their perceptions and attitudes about the inclusion of students with disabilities in their classrooms.

The pilot study was also used in the development of the concourse and Q set statements as well as a literature review to discover all of the possible beliefs about the inclusion of students

with disabilities in general education classrooms so that the Q set was all inclusive of all possible beliefs or attitudes about inclusion. Careful development of the concourse and the Q set helped to ensure reliability in the Q study (Yang & Montgomery, 2013).

On the question of reliability Brown (1980) maintains that a Q sort can be replicated with 85% consistency up to a year later using the same participant and the same P set. One of the limitations of the Q Method is the Q set itself as it contains a limited number of statements about the particular topic being investigated. To help reduce this limitation this study employed the use of a semi structured interview after the Q sort so the participants could express their individual points of view about the statements in the Q set and explain why they sorted the statements the way that they did. It would be expected that the results of individual Q sorts would change over time because as individuals our point of view on any topic changes over time due to our own individual experiences. Using two forms of data collection also helps to ensure the validity of this research study. Only including the participants that load cleanly on one of the factors also helped to ensure reliability (Brown, 1980). For this reason, two of the participants were not included because their Q sort did not load cleanly on one of the factors. Their Q sorts loaded almost equally on two of the three factors.

Validity is ensured by following the protocol for both the Q sorting process as well as with the semi-structured interviews (Brown, 1980; Yang & Montgomery, 2013).

Summary

The purpose of the study is to examine middle school general education teachers' attitudes and perceptions about the inclusion of students with disabilities in their classrooms. It is a qualitative study using two data collection methods, Q Methodology and semi-structured interviews. The results of both methods are being combined to answer the research questions and

test the hypothesis. This research will add to the understanding of general education teachers' attitudes and perceptions about inclusion because, as far as the researcher could determine Q Methodology has not been used to study the subject of inclusion of student with disabilities in general education classrooms. Using Q Methodology is also the most appropriate research design because of the small number of participants and because of the use of semi-structured interviews which allowed the participants to fully express their beliefs, attitudes and perceptions about the inclusion of students with disabilities in their general education classrooms.

CHAPTER 4: RESULTS

Introduction

The purpose of the study is to examine middle school general education teachers' attitudes at the level perceptions and attitudes about the inclusion of students with disabilities in their classrooms using Q sort methodology and semi-structured interviews. As with most qualitative studies, the sample size in this study is small. In Q methodology the typical number of participants is usually between eight and thirty. Normally a ratio of one participant for every three Q statements is acceptable (Webler, Danielson, & Tuler, 2009). This study has fifty statements and there are fifteen participants in this study which is a ratio of 3.3 to 1. The results of the study are the combination of the analysis of the Q sorting and the semi-structured interviews that took place after the Q sorting process. Data from both of these sources were combined and reported below as the findings of this study. These findings were used to answer the research questions.

Q Sort Findings

The Q sort data was analyzed using the software PQMethod. PQMethod uses the participant's responses and performs factor analysis on those responses. The software analyzes for eight factors. The number of factors used is based on the Eigenvalues the software returns. All factors with an Eigenvalue greater than one are selected (Donner 2001). In this study there were three factors with Eigenvalues greater than one. Each factor represents a point of view on the topic being studied, in this case inclusion. Each factor is given a descriptor based on the point of view on inclusion of students with disabilities in general education classrooms. The descriptor names as well as the number of participants in each factor are given below in Table 5:

Factor Names and Distribution. The sort of two of the participants was not used because they did not load cleanly on one factor.

Table 5: Factor Names and Distribution

Factors	Factor Descriptor	Number of Participants
Factor 1	Believers	7
Factor 2	Nonbelievers	1
Factor 3	True Believers	5
No Factor		2

Each statement has a score ranging from positive 4 to negative four based on the amount of agreement or disagreement a participant has with the statement. The distribution of these scores is a normalized distribution where zero will have the most statements assigned that value and only two statements with a positive or negative four. Table 6: Factor Q-Sort Values for each Statement by Factor shows the value that each factor placed on each statement. Numbers further from zero indicate more agreement or disagreement with the particular statement. Negative values show disagreement and positive values show agreement. Using this table it is possible to see how the factors agree or disagree with each other on a particular statement. The values represent an average of all of the participants in that factor. The statements in the table are in the numerical order that each statement was assigned by the investigator.

Table 6: Factor Q-Sort Values for Each Statement by Factors

Number	Statement	Factor 1: Believers	Factor 2: Non- Believers	Factor 3: True Believers
1	Students with disabilities should be fully included in general education classes.	2	-1	-1
2	Students with disabilities in the general education classroom disrupt student's learning.	-1	0	0
3	Students with disabilities lack motivation to be successful in the general education classroom.	-4	-2	-2
4	Students with disabilities need too many accommodations and modifications to the curriculum.	-2	0	0
5	Students with disabilities improve the general education learning environment.	1	1	2
6	Students with behavior problems should be in a special classroom.	1	1	0
7	Only high functioning students with disabilities should be mainstreamed.	-3	4	-1
8	Low functioning students should be in a special education classroom.	0	4	0
9	I feel qualified to teach children with disabilities.	0	0	3
10	I receive enough support from special education teachers.	0	-1	2
11	I receive enough support from paraprofessional staff.	-1	-1	1
12	Administrators don't provide enough support for students with disabilities to be mainstreamed.	1	0	2
13	I receive support through professional development to enhance my educating students with disabilities.	-2	-1	0
14	Administrators don't understand how difficult it is to teach with students with disabilities in the general education classroom.	1	1	1
15	I need more help in my classroom when students with disabilities are included.	3	3	1
16	I don't understand why students with disabilities are mainstreamed.	-3	-2	-2
17	Having students with disabilities in general education classes benefits all students.	4	3	2
18	I don't want students with disabilities in my classroom.	-3	0	-2
19	I like having students with disabilities in my classroom.	2	-3	3
20	I need more support than I am receiving for the students with disabilities in my classroom.	3	0	1

Table 6 - continued

Number	Statement	Factor 1: Believers	Factor 2: Non- Believers	Factor 3: True Believers
21	I don't know how to make the modifications and accommodations for students with disabilities.	0	-2	-1
22	I am not sure how to grade students with disabilities in my classroom.	0	0	-3
23	General education students don't like having students with disabilities in the general education classroom.	-2	-1	-2
24	Teaching students with disabilities makes me a better teacher.	2	3	4
25	I need to change the way I teach when I have students with disabilities in the classroom.	2	3	1
26	I am not qualified to teach students with disabilities.	0	-2	-3
27	Students with disabilities with behavior issues should not be in the general education classroom.	0	2	1
28	Students with disabilities with behavior issues keep other students from learning.	0	2	2
29	Students with disabilities should be in a special education classroom.	-1	-1	-1
30	Low functioning students should be in a special school.	-1	2	-4
31	I need help providing students with disabilities with accommodations and modifications.	3	2	0
32	Growth data for students with disabilities shouldn't be part of my evaluation.	1	2	0
33	More professional development should be provided to help general education teachers working with special education teachers.	3	1	3
34	Working with students with disabilities is the same as working with general education students.	-2	-2	-1
35	Teaching students with disabilities is the same as teaching general education students.	-1	-2	-1
36	Students with disabilities should be treated the same as general education students.	1	-2	-1
37	Students with disabilities are nothing but problems in my classroom.	-2	0	-3
38	I don't understand how to teach IEP goals for students with disabilities.	-1	1	-1
39	I treat students with disabilities the same as general education students.	1	-3	0

Table 6 - continued

Number	Statement	Factor 1: Believers	Factor 2: Non- Believers	Factor 3: True Believers
40	Dealing with students with disabilities in my classroom takes away from my teaching time.	-1	2	1
41	I have no problem having students with disabilities in my classroom.	2	-3	3
42	I don't know how to grade students with disabilities.	0	1	-2
43	I am over whelmed by the requirements for students with disabilities.	0	1	0
44	Inclusion of students with disabilities doesn't work.	-3	0	-2
45	All students should be educated together in the same classroom.	1	-4	1
46	Only special education teachers should teach students with disabilities.	-2	-3	-3
47	Students with disabilities are treated differently than general education students.	2	-1	2
48	Students with disabilities should be treated differently than general education students.	-1	0	0
49	All students deserve an education.	4	1	4
50	It isn't my job to teach students with disabilities.	-4	-4	-4

Table 7: z-Scores for Each Statement by Factors shows normalized z-scores for each of the statements for each of the factors.. The z-score shows how many standard deviations away from the mean each of the statements is for each of the factors. A positive score shows that the factor agrees with the statement where a negative scores show that they disagree with the statement. The higher the z-score the more they agree or disagree with the statement (Shavelson, 1996). In this table the statements are listed in the numerical order assigned to each statement by the investigator. The z-scores give a more accurate representation of how each factor rank ordered each of the Q statements. Each z-score is an average of each of the participants in a factor. As with the Q sort values in the above table, the larger the number the more that factor either agreed or disagreed with the statement. Positive numbers show agreement and negative numbers show disagreement.

Table 7: Z-Scores for Each Statement by Factors

Number	Statement	Factor 1: Believers	Factor 2: Non- Believers	Factor 3: True Believers
1	Students with disabilities should be fully included in general education classes.	1.49	-0.12	-0.87
2	Students with disabilities in the general education classroom disrupt students' learning.	-0.72	-0.41	0.31
3	Students with disabilities lack motivation to be successful in the general education classroom.	-1.23	-1.30	-0.12
4	Students with disabilities need too many accommodations and modifications to the curriculum.	-1.18	-0.18	0.30
5	Students with disabilities improve the general education learning environment.	0.26	0.13	1.03
6	Students with behavior problems should be in a special classroom.	0.74	0.25	-0.73
7	Only high functioning students with disabilities should be mainstreamed.	-1.71	2.12	-0.68
8	Low functioning students should be in a special education classroom.	-0.53	2.25	-0.60
9	I feel qualified to teach children with disabilities.	-0.87	0.58	2.01
10	I receive enough support from special education teachers.	-0.56	-0.49	1.52
11	I receive enough support from paraprofessional staff.	-0.75	-0.70	0.97
12	Administrators don't provide enough support for students with disabilities to be mainstreamed.	0.01	0.64	0.72
13	I receive support through professional development to enhance my educating students with disabilities.	-1.57	-0.87	0.89
14	Administrators don't understand how difficult it is to teach with students with disabilities in the general education classroom.	0.06	0.46	0.51
15	I need more help in my classroom when students with disabilities are included.	1.50	0.90	-0.33
16	I don't understand why students with disabilities are mainstreamed.	-1.10	-0.30	-0.63
17	Having students with disabilities in general education classes benefits all students.	1.61	1.01	-0.01
18	I don't want students with disabilities in my classroom.	-1.14	-0.39	-0.98
19	I like having students with disabilities in my classroom.	0.05	-0.65	1.94
20	I need more support than I am receiving for the students with disabilities in my classroom.	1.59	0.21	-0.27

Table 7 - continued

Number	Statement	Factor 1: Believers	Factor 2: Non- Believers	Factor 3: True Believers
21	I don't know how to make the modifications and accommodations for students with disabilities.	-0.08	0.09	-0.78
22	I am not sure how to grade students with disabilities in my classroom.	0.17	0.32	-1.29
23	General education students don't like having students with disabilities in the general education classroom.	-0.19	-0.35	-0.83
24	Teaching students with disabilities makes me a better teacher.	-0.31	1.16	2.23
25	I need to change the way I teach when I have students with disabilities in the classroom.	0.91	2.14	-0.20
26	I am not qualified to teach students with disabilities.	0.66	-0.94	-1.47
27	Students with disabilities with behavior issues should not be in the general education classroom.	0.03	0.40	0.08
28	Students with disabilities with behavior issues keep other students from learning.	0.10	0.16	0.89
29	Students with disabilities should be in a special education classroom.	-0.55	0.09	-0.38
30	Low functioning students should be in a special school.	-0.24	1.48	-1.85
31	I need help providing students with disabilities with accommodations and modifications.	1.59	1.21	-0.85
32	Growth data for students with disabilities shouldn't be part of my evaluation.	0.42	0.53	-0.17
33	More professional development should be provided to help general education teachers working with special education teachers.	1.38	0.70	0.84
34	Working with students with disabilities is the same as working with general education students.	-0.12	-1.79	-0.14
35	Teaching students with disabilities is the same as teaching general education students.	-0.07	-1.42	-0.29
36	Students with disabilities should be treated the same as general education students.	1.32	-1.86	-0.69
37	Students with disabilities are nothing but problems in my classroom.	-0.67	-0.07	-1.45
38	I don't understand how to teach IEP goals for students with disabilities.	-0.06	-0.21	-0.34
39	I treat students with disabilities the same as general education students.	1.31	-1.73	-0.25

Table 7 - continued

Number	Statement	Factor 1: Believers	Factor 2: Non- Believers	Factor 3: True Believers
40	Dealing with students with disabilities in my classroom takes away from my teaching time.	-0.97	0.21	0.53
41	I have no problem having students with disabilities in my classroom.	0.27	-0.59	1.99
42	I don't know how to grade students with disabilities.	0.00	0.69	-1.21
43	I am over whelmed by the requirements for students with disabilities.	0.42	-0.34	-0.06
44	Inclusion of students with disabilities doesn't work.	-1.79	0.52	-0.39
45	All students should be educated together in the same classroom.	1.21	-1.97	0.08
46	Only special education teachers should teach students with disabilities.	-0.28	-1.47	-1.21
47	Students with disabilities are treated differently that general education students.	0.48	-0.30	1.02
48	Students with disabilities should be treated differently than general education students.	-1.17	0.92	0.85
49	All students deserve an education.	2.08	0.19	1.49
50	It isn't my job to teach students with disabilities.	-1.82	-0.93	-1.15

Factor 1: Believers

There were seven participants whose Q sorts placed them in Factor 1 called Believers. This group is called the Believers because they believe in the inclusion of students with disabilities in their general education classrooms. The Believers feel they do not get enough support for the students with disabilities in their classroom. Also, they do not have problems having students with disabilities in their general education classrooms and they do not feel that dealing with students with disabilities takes away from their teaching time. They also treat students with disabilities the same way they treat general education students.

This perspective is supported by the distinguishing statements for the Believers which can be seen below in Table 8: Distinguishing Statements for Believers. Statement #20 is the distinguishing statement this group agreed with the most with a sort value of 3 and a z-score of 1.39. The statement reads “I need more support than I am receiving for the students with disabilities in my classroom.”

This group also felt that students with disabilities should be fully included and they have no problem having students with disabilities in their classroom. The group on average rated the following Q sort statements with a score of 2: (#1) “Students with disabilities should be fully included in general education classes”, (#41) “I have no problem having students with disabilities in my classroom”, (#19) “I like having students with disabilities in my classroom.”

The three distinguishing statements they disagreed with the most show that they support inclusion. This group believes that inclusion does work. They also disagree with the belief that only high functioning students should be included or that students with disabilities lack the motivation to be successful. The Q sort statements they rated with a -3 or -4 were: (#7) “Only high functioning students with disabilities should be mainstreamed”, (#44) “Inclusion of students

with disabilities doesn't work" and (#3) "Students with disabilities lack motivation to be successful in the general education classroom." The participants in this group realize there may be some problems with the inclusion of students with disabilities in their general education classrooms but overall it is positive for all of the students in the school to have students with disabilities included in general education classrooms.

The analysis of the Q-sort data show that the Believers believe in the inclusion of students with disabilities in their general education classrooms. There are seven participants in the Believers but they feel strongly they need more support than they are receiving to properly meet the needs of students with disabilities in their general education classrooms. They do not have a problem having students with disabilities in their classrooms. Not only do they not have a problem with students with disabilities in their general education classrooms they like having them in the classroom. The Believers do not believe that students with disabilities lack the motivation to be successful in the general education classroom. They also disagree that inclusion of students with disabilities in general education classes does not work. The distinguishing statements for the Believers can be seen in Table 8: Distinguishing Statements for Believers.

Table 8: Factor 1: Believers Distinguishing Statements

* indicates significance $p < .01$

** indicates significance $p < .05$

Statement Number	Statement	Q-Sort Value	Z-Score
20	I need more support than I am receiving for the students with disabilities in my classroom.	3	1.39**
1	Students with disabilities should be fully included in general education classes.	2	1.11**
41	I have no problem having students with disabilities in my classroom.	2	0.76**
19	I like having students with disabilities in my classroom.	2	0.67*
36	Students with disabilities should be treated the same as general education students.	1	0.65**
39	I treat students with disabilities the same as general education students.	1	0.49*
30	Low functioning students should be in a special school.	-1	-0.38**
40	Dealing with students with disabilities in my classroom takes away from my teaching time.	-1	-0.70**
7	Only high functioning students with disabilities should be mainstreamed.	-3	-1.38*
44	Inclusion of students with disabilities doesn't work.	-3	-1.46*
3	Students with disabilities lack motivation to be successful in the general education classroom.	-4	-1.64*

Factor 2: Non-Believers

There is only one participant in the Non-Believers group. The reason it is called the Non-Believers is because this group believes only high functioning students should be mainstreamed and low functioning students should be in a special classroom or school. This group does not like having students with disabilities in their general education classroom and has problems with them being in the classroom.

The distinguishing statements for the Non-Believers can be seen below in Table 9 Distinguishing Statements for Non-believers. Even though there is only one participant in this group it is necessary to include this participant's data in the final analysis as it was the only sort that did not support inclusion. Just because only one participant belonged to this group does not mean that it is not a valid perspective to have on the inclusion of students with disabilities. The perspective for this factor is that they do not support inclusion.

The Q sort statements this group most agreed with a Q sort score of 4 are: "Only high functioning students with disabilities should be mainstreamed" and "Low functioning students should be in a special education classroom." This participant does not feel that all students with disabilities should be included in a general education classroom.

The four statements this group disagreed with the most are: (#39) "I treat students with disabilities the same as general education students", (#19) "I like having students with disabilities in my classroom", (#41) "I have no problem having students with disabilities in my classroom" and (#45) "All students should be educated together in the same classroom." Each of these statements received a Q sort score of -3 or -4. These statements show that this general education teacher does not agree with the inclusion of students with disabilities in their general education classroom.

Non-Believers support inclusion of some students with disabilities in general education classrooms but not all students with disabilities. They feel low functioning students should not be included in general education classrooms but placed in alternative programs or schools.

The Nonbelievers feel strongly that only high functioning students should be included in general education classes. They feel that low functioning students should be in a special education classroom or even in a special school for students with disabilities.

The Nonbelievers feel strongly that all students should not be educated together in the same classroom. The Nonbelievers do not like having students with disabilities in their general education classrooms and they have problems having students with disabilities in their general education classrooms. They do not treat students with disabilities the same as general education students.

There was only one participant in the Non-Believers group. Even though there was only one participant in this group it is necessary to include this participant's data in the final analysis as it was the only sort that did not support inclusion. Just because only one participant belonged to this group does not mean that it is not a valid perspective to have on the inclusion of students with disabilities. In statistics this person would be considered an outlier but in Q Method this is not the case. As Brown (1993) points out if you expand the number of participants you would add to the number of participants with that particular point of view but even if you did not it would still be a valid point of view if even held by only one person. Points of view are unique to the individual with there being no right or wrong point of view. The one person in this study who has a uniquely different point of view on inclusion should not be ignored as an outlier just because their point of view is unique. The perspective for this factor is that they do not support full inclusion of all students with disabilities.

Table 9: Factor 2: Non-Believers Distinguishing Statements

* indicates significance $p < .01$

** indicates significance $p < .05$

Statement Number	Statement	Q-Sort Value	Z-Score
7	Only high functioning students with disabilities should be mainstreamed.	4	1.98**
8	Low functioning students should be in a special education classroom.	4	1.98**
30	Low functioning students should be in a special school.	2	0.99**
49	All students deserve an education.	1	0.49**
37	Students with disabilities are nothing but problems in my classroom.	0	0.00*
18	I don't want students with disabilities in my classroom.	0	0.00*
47	Students with disabilities are treated differently than general education students.	-1	0.49**
39	I treat students with disabilities the same as general education students.	-3	1.48**
19	I like having students with disabilities in my classroom.	-3	1.48**
41	I have no problem having students with disabilities in my classroom.	-3	1.48**
45	All students should be educated together in the same classroom.	-4	1.98**

Factor 3: True Believers

True Believers group included five of the participants in the study. The reason they are labeled True Believers is because they fully support inclusion and they feel they get enough support for inclusion so it works for all students. They feel qualified to teach students with disabilities and like having students with disabilities in their classrooms.

The distinguishing statements for True Believers can be seen in Table 10: Distinguishing Statement for True Believers. The three distinguishing statements the True Believers agreed with and have a Q sort value of 3 are: (#9) “I feel qualified to teach children with disabilities”, (#41) “I have no problem having students with disabilities in my classroom”, and (#19) “I like having students with disabilities in my classroom.” All three of these statements received a Q sort score of 3 and show that these teachers feel qualified to teach students with disabilities and enjoy having students with disabilities in their classrooms. This is also supported with the distinguishing statement they most disagree with which is (#30) “Low functioning students should be in a special school.” This shows these teachers believe in inclusion of students with disabilities in general education classes even if those students are of a lower ability level due to their disability.

The True Believers do believe in the inclusion of students with disabilities in general education classrooms. They feel qualified to teach students with disabilities in their general education classrooms. The True Believers enjoy having students with disabilities in their classrooms and have no problems with the inclusion of students with disabilities. They differ from the Believers in that they feel they do get enough support from special education teachers and paraprofessional staff. The True Believers do feel they know how to grade students with

disabilities in their general education classrooms. They feel strongly that low functioning students with disabilities should not be in a special school.

True Believers included five of the participants in the study. This group fully supports inclusion and feels that they get enough support for inclusion to work for all students. The distinguishing statements for True Believers can be seen in Table 10.

Table 10: Factor 3: True Believers Distinguishing Statements

* indicates significance $p < .01$

** indicates significance $p < .05$

Statement Number	Statement	Q-Sort Value	Z-Score
9	I feel qualified to teach children with disabilities.	3	1.82*
41	I have no problem having students with disabilities in my classroom.	3	1.62*
19	I like having students with disabilities in my classroom.	3	1.52*
10	I receive enough support from special education teachers.	2	1.06*
11	I receive enough support from paraprofessional staff.	1	0.49
25	I need to change the way I teach when I have students with disabilities in the classroom.	1	0.32
31	I need help providing students with disabilities with accommodations and modifications.	0	-0.05
39	I treat students with disabilities the same as general education students.	0	-0.09
7	Only high functioning students with disabilities should be mainstreamed.	-1	-0.70
42	I don't know how to grade students with disabilities.	-2	-0.97
22	I am not sure how to grade students with disabilities in my classroom.	-3	-1.17
30	Low functioning students should be in a special school.	-4	-1.66*

Consensus Statements

The consensus statements are those that all of the participants in the study agreed on within statistical probabilities which are shown in Table 11: Consensus Statements. There are two statements that the factors agree on with a p-value $> .01$ and eleven statements with a p-value $> .05$. Even with the differences with the three factors these are the statements that all three factors had some agreement on. The z-scores or Q-sort values are not an exact match but they are within statistical significance. The farther away from zero the scores are the more they agreed or disagreed with the statement. Positive numbers show agreement and negative number show disagreement and a score of 0 is neutral.

Statistically all participants agreed it is their job to teach students with disabilities. They also did not feel that only special education teachers should teach students with disabilities. They do understand why students with disabilities are included in general education classrooms. They do not believe that working with students with disabilities is the same as working with general education students.

The participants believe that the inclusion of students with disabilities in general education classrooms improves the general education learning environment. There is also agreement that students with behavior problems should be in special education classrooms. These student should not be in general education classrooms but the participants did not feel strongly about this issue with Q-sort values of 1 or 0.

Table 11: Consensus Statements

* indicates significance $p < .01$

** indicates significance $p < .05$

Statement Number	Statement	Factor 1: Believers		Factor 2: Non-Believers		Factor 3: True Believers	
		Q-Sort Value	Z-Score	Q-Sort Value	Z-Score	Q-Sort Value	Z-Score
2*	Students with disabilities in the general education classroom disrupt student's learning.	-1	-0.50	0	0.00	0	0.16
5**	Students with disabilities improve the general education learning environment.	1	0.52	1	0.49	2	1.01
6*	Students with behavior problems should be in a special classroom.	1	0.40	1	0.49	0	-0.25
12**	Administrators don't provide enough support for students with disabilities to be mainstreamed.	1	0.57	0	0.00	2	0.72
14**	Administrators don't understand how difficult it is to teach with students with disabilities in the general education classroom.	1	0.38	1	0.49	1	0.55
16**	I don't understand why students with disabilities are mainstreamed.	-3	-1.31	-2	-0.99	-2	-1.15
21**	I don't know how to make the modifications and accommodations for students with disabilities.	0	-0.31	-2	-0.99	-1	-0.71
23**	General education students don't like having students with disabilities in the general education classroom.	-2	-0.76	-1	-0.49	-2	-0.89
27**	Students with disabilities with behavior issues should not be in the general education classroom.	0	0.08	2	0.99	1	0.46
29**	Students with disabilities should be in a special education classroom.	-1	-0.45	-1	-0.49	-1	-0.26
32**	Growth data for students with disabilities shouldn't be part of my evaluation.	1	0.32	2	0.99	0	0.14

Table 11 - continued

* indicates significance $p < .01$

** indicates significance $p < .05$

Statement Number	Statement	Factor 1: Believers		Factor 2: Non-Believers		Factor 3: True Believers	
		Q-Sort Value	Z- Score	Q-Sort Value	Z- Score	Q-Sort Value	Z- Score
34**	Working with students with disabilities is the same as working with general education students.	-2	-0.74	-2	-0.99	-1	-0.74
35**	Teaching students with disabilities is the same as teaching general education students.	-1	-0.62	-2	-0.99	-1	-0.69
38**	I don't understand how to teach IEP goals for students with disabilities.	-1	-0.32	1	0.49	-1	-0.36
43**	I am over whelmed by the requirements for students with disabilities.	0	0.23	1	0.49	0	0.01
46**	Only special education teachers should teach students with disabilities.	-2	-1.12	-3	-1.48	-3	-1.59
50**	It isn't my job to teach students with disabilities.	-4	-2.08	-4	-1.98	-4	-1.95

Factor Demographics

Table 12: Demographics and Factor Groups shows the demographics of each participant including the factor group they belong to. Believers contained teachers from two of the three schools included in the study and all of the subjects were included except for math. The number of years of teaching also varied in this group of teachers. As with the Believers, the number of years of teaching also varied in the True Believers group. True Believers contained teachers from all three schools included in the study and had teachers from all of the subjects except science.

Non-believers contained only one teacher of math with 11 years of teaching experience. Two of the participants in this study did not load cleanly on any of the factors and are listed at the bottom of Table 12: Demographics and Factor Groups.

There are no patterns discernable in the demographics within the three factors. Comparison between the Believers and the True believers shows that both factors have multiple subject areas represented as well as multiple school buildings. Each of these groups also has teachers with a large range of teaching experience from those with relatively little experience to those with a large amount of experience. It is hard to compare the Non-Believers to any other factor as they only have one member in their group making it impossible to have patterns.

Table 12: Demographics and Factor Groups

Participant Number	Subject	School	Number of Years Teaching	Factor Descriptor
6	science	School A	29	Believers
7	social studies	School A	4	Believers
8	social studies	School A	27	Believers
10	ELA	School A	10	Believers
13	ELA	School B	9	Believers
14	science	School A	16	Believers
15	social studies	School A	29	Believers
1	math	School B	11	Non-believers
2	life skills	School B	33	True Believers
4	math	School A	25	True Believers
5	math	School A	14	True Believers
11	ELA	School B	10	True Believers
12	social studies	School C	11	True Believers
3	social studies	School B	5	None
9	science	School A	8	None

Interview Findings

Themes from the Interview Data

The data collected from the interviews was analyzed by a process of consolidation, reduction and interpretation of the participants' responses (Merriam, 2009; Miles and Huberman 1999). The open coding process was the first step used in the analysis of the interview data. The open coding process "involves segmenting data into categories of information" (Creswell, 2007, pp. 239-240). Descriptive labels were assigned to each of the categories during the open coding analysis (Miles & Hubberman, 1994). The next step in the analysis of the interview data was axial coding. Axial coding condenses the labels from the open coding into broader categories. These categories are themes. The axial coding process condensed the open coding labels down to seven themes which are reported below (Creswell, 2007; Merriam, 2009; Miles & Hubberman, 1994).

The seven themes:

1. All students deserve an education.
2. It is my job to teach students with disabilities.
3. Lack of professional development.
4. Students with disabilities help the educational process.
5. Students with behavior issues hinder the education process for all students.
6. Teaching students with disabilities makes me a better teacher.
7. Yes, I feel qualified to teach students with disabilities but

Theme One

All students deserve an education is the first theme to emerge from the data. With one exception, during the interview process all of the teachers expressed that all students deserve an

education. Participant 14 expressed that “it is a universal right for students to have an education.” During the interview process participant five stated “It is my job to teach all students because they all deserve an education.” When interviewed participant 7 responded “All students deserve an education.” Participant 11 put it this way “All of the students in the school should be all of our responsibility.” Participant 13 can be quoted as saying “It is my job to teach every student regardless of the disabilities.” These quotes from the interviews show that the general education teachers in this study do believe that all students deserve an education whether or not they have a disability. This theme does not address the issue of where those students with disabilities should be educated, either in special classes or general education classes.

Theme Two

The second theme to emerge from the interviews is that the general education teachers in this study believe that it is their job to teach students with disabilities. Participant 4 stated that “Yes, it is my job to teach students with disabilities.” Participant 12 said “It is my job to teach all students and that doesn’t matter if they have documented disabilities or any other kind of exceptionality.” This theme does address where students with disabilities should be receive their education. Fourteen of the teachers in this study feel that teaching students with disabilities in their general education classrooms is their responsibility.

Theme Three

The third theme is there is a lack of professional development focused on how to work with students with disabilities in the general education classroom. They also feel the need for more professional development is needed in this area. Participant 10 said “The more severe the student issues the more support I need.” Participant 5 stated they “Had never had professional development on educating students with IEPs.” Participant 13 responded with “I don’t feel that I

do enough of a service for them I feel like a lot of the times they are overlooked or they are kind of passed over. We don't do enough, we don't have enough training, we don't do enough professional development. I don't have enough in my tool kit to give them the attention they need, give them the education they need." Participant 13 stated "I think we don't have enough professional development on supporting our special ed students in the classrooms and if we did it would allow for more benefit for the general ed kids." Participant 7 said "We don't get enough professional development to work with students with disabilities." This was the strongest theme to emerge from the interview data. Seven of the teachers in this study expressed the lack of professional development on the inclusion of students with disabilities.

Theme Four

The fourth theme is that students with disabilities help the educational process for all students. Participant 12 stated "Diversity helps with the educational process" and "all individuals help with education." Participant 10 said "I really honestly believe that all students with any kind of issue benefit everybody. Inclusion and mainstreaming is far more beneficial than negative." Participant 11 responding to the question "Do students with disabilities help or hinder the educational process" responded "They help because in life you have to learn to deal with all kinds of people." Participant 13 had this to say about the inclusion of students with disabilities "Inclusion helps because it is real world experiences and I think the more we get our general ed population to understand that they are equals to them, there is just some disability that needs to be supported, I think they will be more welcomed in society." These teachers believe that having students with disabilities in the general education classroom helps both the students with disabilities as well as the general education students. The teachers in this study believe that

having students with disabilities in their classrooms benefits everyone in the classroom, including them.

Theme Five

The fifth theme to emerge from the data is that students with severe behavior issues are a hindrance to the educational process for all students. Participant 12 stated “Constant behavior issues on a daily basis hinder education.” Participant 13 had a similar comment about behavior “I think my only issue is when you have students who are severely cognitively impaired and are continuous causing daily disruptions, like hitting other students or flipping kids off. It is one thing to have behavior but for it to be consistent every single day that it disrupts the complete learning environment, that would be where I would say this student needs a different placement.” Participant 11 also had concerns about behavior and said “Sometimes those behaviors problem students have can really cause the environment to change in the classroom and you have to have a different set of rules maybe for that class because of those one or two students that have huge behavior issues.” Even though the general education teachers in this study believe that students with disabilities should be educated in their general education classrooms they also believe that when there are severe behavior issues with a particular student they should not be included in the general education classroom.

Theme Six

The sixth theme is that the general education teachers in this study feel that having students with disabilities in their classrooms make them better teachers for all students. Participant 7 expressed “You need to change the way you teach to every kid.” Participant 6 stated “I use a variety of styles in my teaching, visual, hands on, reading, to reach every kid.” Participant 4 said “I present material in a variety of way.” Participant 11 believes “Students with

disabilities require you to change up the way you are teaching making you a better teacher.” The teachers in this study feel that having students with disabilities in the classroom makes them have to look at the way they are teaching and alter their teaching style or method to reach all of the students in the classroom. They believe that this makes them a better teacher for all students, not just those with disabilities.

Theme Seven

The last theme to emerge from the data is that the general education teachers in this study feel qualified to teach students with disabilities but there are some exceptions. Participant 11 stated “For the most part I feel qualified to teach students with disabilities.” Participant 4 said “I feel qualified to teach students with disabilities.” Participant 7 feels qualified but expressed “I feel qualified and feel I can do the, make an effect but, for it to be maximized, I think there needs to be more training, more PD.” Participant 13 said “I pride myself on being able to differentiate, accommodate and modify on the whim. My inclusion teacher and I never sit down and plan anything, it is just how I bring the teaching across to the students in the classroom in the different ways. I would say I am qualified.” The teachers in this study do feel qualified to teach students with disabilities but feel with proper training through professional development they could better serve the students with disabilities in their general education classrooms.

Summary

The results of the Q sort and interview process found that general education teachers believe all students deserve an education. They also believe it is their job to teach students with disabilities in their classrooms. They feel students with disabilities in the general education classroom are a benefit to all students, both those with disabilities as well as the nondisabled students. However, they also believe that students who present severe and constant or chronic

behaviors are detrimental to the learning environment in the general education classroom and can hinder the educational process for all students. The participants in this study feel that teaching students with disabilities makes them better teachers of all students. They also believe there is a need for more professional development on how to work with students with disabilities as well as on how to work with special education teachers. Most of the participants in this study feel qualified to teach students with disabilities but with some exceptions such as those students with severe behavior issues.

CHAPTER 5: DISSCUSSION

Introduction

This research was designed to reveal middle school general education teachers' attitudes about the inclusion of students with disabilities in their classrooms. The study takes place in one school district. The findings revealed three distinct points of view about inclusion: Believers, Non-Believers and True Believers. The Believers and True Believers believe in the full inclusion of students with disabilities. The Believers expressed the need for more professional development on inclusive practices. The Non-Believers do not support the full inclusion of all students with disabilities.

Significance of Findings

With the exception of one participant, a Non-Believer, the other participants agreed that it is their job to teach students with disabilities in their general education classes. There was a difference though between the Believers and the True Believers, the difference was in whether or not they thought they had the necessary skills to be able to effectively implement inclusion of students with disabilities in their classrooms. An interesting finding was that even though the Believers feel the need more professional development they also felt qualified to teach students with disabilities. This shows that the teachers in this study have high self-efficacy about their teaching. As Vaz et al. (2015) have reported low self-efficacy was associated with negative attitudes towards the practice of inclusion. 91% of the general education teachers in this study were found to have positive attitudes about the inclusion of students with disabilities in their general education classrooms. The Non-Believers did not express a need for more professional development. However, the Non-Believers felt that not all students with disabilities should be

included in general education classrooms they did feel qualified to teach students with disabilities in their general education classrooms.

Previous research shows that successful inclusion is largely dependent on the general education teachers' attitudes towards students with disabilities (Burke & Sutherland, 2004; De Boer, Pijl, & Minnaert, 2011; Forlin, Cedillo, Romero-Contreras, Fletcher, and Hernandez 2010; Shade & Stewart, 2001). The participants in this study expressed positive attitudes about having students with disabilities in their classrooms. Based on the previous research this is a good indicator that these teachers will be successful at implementing the inclusion of students with disabilities in their general education classrooms. The one exception was when disruptive behaviors were exhibited on a continual basis. The teachers in this study felt that these students should be educated in a different educational setting as it is not fair to the other students in the classroom to continually have their learning interrupted. The Non-Believers also felt that students who are cognitively impaired should not be in a general education classroom because they are not able to grasp the material being taught at grade level.

Previous research has shown that general education teachers have not had sufficient training in inclusion through professional development. In this study the True Believers did feel that they had received enough support through professional development. Wogamon (2013) found that 81% of the participants in her study had three hours or less of professional development on the topic of inclusion. The results are quite different in this study as 38% of the participants expressed that they have received enough support through professional development. The school district in this study must be doing something right for such a large percentage of general education teachers to feel that they have received sufficient professional development on inclusion. That is not to say that there is no more work to do on professional development as

46% of the teachers involved in this study expressed that they had received insufficient professional development on inclusion.

Implications

Implications of this Study

A finding of this study was that general education teachers feel the need for more professional development on how to fully include students with disabilities in their general education classrooms. So the implementation of professional development focused on the Believers is necessary to improve their skills of including students with disabilities in their general education classrooms. The Believers in this study were the largest group comprising 53% of the participants. By implementing appropriate and effective professional development for this group it may be possible to move them to the True Believers group. Because there is no agreed upon definition of inclusion and because inclusion of students with disabilities may be implemented differently across districts, this professional development has to be specific to the district in this study.

The negative feelings expressed by the participants about the inclusion of students with disabilities were based around negative or disruptive behavior in the classroom. This should be taken into consideration when developing professional development on inclusion for students with disabilities in general education classrooms. By focusing on this area, the district could help general education teachers develop the skills necessary to manage the negative behavior they see being exhibited in their classrooms thus changing their negative feelings into more positive feelings regarding inclusion.

Another idea for consideration is to use the teachers in the True Believer group as mentors to those teachers in the Believers and Non-Believers groups. The Believers feel

qualified to teach students with disabilities but feel they are in need of professional development on inclusion. Being mentors, True Believers could work with a small group of teachers from the Believers and Non-Believers to help them learn the necessary skills to be fully effective in teaching students with disabilities in their general education classrooms. This could be done in conjunction with professional development on inclusion. Again, this would be for the specific school district under study.

This study focused on general education teachers' attitudes about inclusion of students with disabilities in one school district. This study shows that even with a small number of participants it is possible to gain meaningful insight into how teachers in a school district feel about a particular topic. The information from this study can be used to inform administration on how to proceed in developing meaningful professional development for its general education teaching staff. The methodology in this study could be used in other school districts to improve professional development so that it targets the specific needs of the specific district where the data was collected.

Implications for use of this Methodology

In this study, Q Methodology was used in conjunction with semi-structured interviews and was done in person. Interviews are not a necessary component of the Q Method. There are programs available so the Q Method can be done on the computer as well as online. A list of software programs are available to aid in data collection and analysis can be found on the qmethod.org website (International Society for The Scientific Study of Subjectivity, 2016). By using computers to gather the data, it could be used with larger groups of participants with the possibility of revealing more points of view on inclusion within the school district. Once collected, the analysis of the data is straightforward and takes relatively little time. More data

does not add to the analysis time in any significant way. This method could be used by districts to gather data on any number of topics to measure the attitudes or feelings of their teachers allowing their voices to be heard.

Another use for this methodology could be as a pretest or a posttest. The school district could collect data from the general education teachers before the implementation of professional development on inclusion. Then, using the same set of Q statements the district could collect data after the professional development to see if it had any effect on the general education teachers' attitudes regarding support for inclusion of students with disabilities. The school district could do this data collection and analysis on a yearly basis and use the information to guide them when planning its professional development.

Limitations of this Study

Strengths

One of the strengths of this study is that it used multiple methods of data collection allowing for triangulation. Triangulation is when multiple sources of data are used to reach conclusions and answer research questions. Triangulation was utilized in this study by gathering data from the Q sort analysis as well as the semi-structured interviews. Triangulation ensures validity by using multiple methods of data collection and analysis and reaching the same conclusions (Creswell, 2007).

Another strength of this study is Q method allows for meaningful data with a small number of participants. Q Methodology proposes that there are a limited number of points of view for a given area of study and therefore is not concerned about trying to represent a specific population. If only one person has a specific viewpoint on a topic it is still a valid perspective and that is why the factor with only one participant was included in the data analysis. The study

was conducted in only one district so it did not have to take into consideration the multiple definitions of inclusion. It was assumed that all of the teachers in the study had a common understanding of how inclusion was to be implemented in the district.

A third strength of this study is the researcher felt the semi-structured interviews reached saturation (Fusch & Ness, 2015). The ideas being expressed by the teachers in this study became repetitive and did not yield any new information regarding how they felt about the inclusion of students with disabilities in their classrooms. This saturation is also supported through the fact that all but one of the teachers fell into two points of view about inclusion with the only significant difference between these two groups being whether or not they had received sufficient professional development on inclusion. In this study the sample size was limited by the number of volunteers agreeing to participate in the study. The researcher felt no more significant information would have been gathered by trying to increase the sample size.

Weaknesses

One weakness of the study was all of the participants in the study were volunteers. Because volunteers knew what the study was about before volunteering, it is possible that those teachers with negative feelings or attitudes about inclusion chose not to participate in the study. Also, because not all of the teachers in the district were part of the study it is possible there are points of view on inclusion that exist in this population that the current study did not discover.

Another weakness of this study is the researcher bias brought into the study. It is important to know that the researcher has a professional relationship with twelve of the participants in this study. The researcher has been a special education teacher in this district for ten years which could have some influence on the interpretation of the data. This relationship

may have influenced the answers that the participants gave during the Q sort as well as during the semi-structured interviews.

A third weakness of this study is an assumption was made that the general education teachers who participated in the study were effective teachers. This assumption was also made in previous research. This is a weakness with the study because if the teachers are not effective at teaching, their point of view on inclusion is of little value. This leads to another problem how to measure teacher effectiveness. Teacher effectiveness could be measured by self-efficacy or by student outcomes or a combination of both. Self-efficacy is the teacher's belief that they are qualified and able to do the job of educating all students. It is my belief that if a teacher has self-efficacy then improved student outcomes will follow. If the teacher has this belief then, as the research has shown, inclusion is more successful because this leads to more positive attitudes towards inclusion. More positive attitudes through self-efficacy leads to more positive attitudes towards inclusion which in turn would lead to higher educational outcomes for students.

Another weakness of this study is the Q sort statements were developed by the researcher based on the pilot study as well as on the literature review. The researcher could have had focus groups read over the Q sort statements to find any overlap in the statements or possible ambiguities in the statements themselves. The researcher could also have asked an expert or panel of experts on the topic of inclusion to look for any inconsistencies in the statements and to make sure all possible points of view on the topic of inclusion were expressed through the Q sort statements. If this was done, it would have helped with the validity of the study because this would have been triangulation from different sources to develop the Q sort statements.

A final weakness of this study is research question three "Do general education teachers feel they receive adequate support for students with disabilities in their classroom?" this question

is too vague. Further investigation is needed as to what types of support teachers feel they need to be more successful with the inclusion of students with disabilities. For example based on the data teachers may need help with behavior interventions. Teachers in this study expressed negative attitudes about the disruptive behaviors of some students with disabilities which takes away from the learning time of the other students in the classroom. Because of the ambiguity of research question three, teachers may feel the need for other types of support such as more co-teachers or paraprofessionals in the classroom.

Addition to Knowledge Base

This study has added to the existing knowledge base on inclusion by using a unique methodology, Q Method. This method is useful in determining different points of view on a topic. In this study, three unique points of view on inclusion were found. These are the Believers, Non-believers and True Believers. The two majority points of view, Believers and True Believers, expressed both fully supported the inclusion of students with disabilities in their classrooms. The minority point of view, Non-Believers, was expressed by only one participant but it is still a valid point of view on the topic of inclusion. In statistics, this person would be considered an outlier but in Q Method this is not the case. Brown (1993) points out if you expand the number of participants you would add to the number of participants with that particular point of view but even if you did not it would still be a valid point of view even if held by only one person. This is why the Non-Believers were included in this study even though the point of view was expressed by only one of the participants in the study.

In this study 46% of the teachers expressed the need for more professional development on the inclusion of students with disabilities in their general education classrooms. This is similar to Wogamon (2013) who found that 42% of the general education teachers in her study had not

received any professional development on the inclusion of students with disabilities in their general education classrooms. Shoulders and Krei (2016) found that 74% of the general education teachers in their study received minimal to no hours of professional development in co-teaching with special education teachers. Even though this study replicated the results of previous studies it is still significant and adds to the knowledge base on inclusion because it used a different methodology to arrive at a similar result giving more validity to each of these studies.

Next Steps in Research

There is a considerable amount of research on the topic of inclusion including research on general and special education teachers' attitudes towards the inclusion of students with disabilities in general education classrooms. No published studies were found on the topic of general education teachers' attitudes towards the inclusion of students with disabilities using Q Methodology. Therefore, it would be beneficial to replicate this study with both elementary as well as high school teachers to see if the results are similar to the findings of this study. It is also recommended that this study be replicated in other types of school districts such as suburban and rural districts.

This study found that teachers felt they needed more professional development on inclusion. Further research should include a study to determine specific topics the teachers need for professional development regarding inclusion. These topics could include behavior interventions, making accommodations and modifications, implementing IEP goals and objectives, grading students with disabilities, etcetera. It would be important to know what these teachers feel they need for professional development instead of the district making an assumption as to what they teachers need.

If the school district in this study did implement professional development on the inclusion of students with disabilities it would be beneficial to conduct a Q Method study before the implementation of the professional development. When the professional development was completed the district would have the participants do another Q Method study using the same Q-sort statements to measure if the professional development had any effect on their attitudes about inclusion of students with disabilities. This could be done on an annual basis to see if the school district is making any progress on general education teachers' attitudes towards the amount of professional development they are receiving on inclusion.

If the school district was to implement a mentoring program utilizing the True Believers as mentors for those teachers who are not True Believers it could utilize this methodology. The Q sort could help identify which teachers to use as mentors as well as which teachers would benefit from having a mentor. It could also be used to determine whether the mentoring had any effect, positive or negative, on the general education teachers being mentored.

In this study as with the studies in the published research, it was assumed the participants were effective teachers. Teachers who are not effective in their teaching practices may have a distorted point of view about the inclusion of students with disabilities in their general education classrooms. This may not be because of the students with disabilities in their classroom but due to the fact they are not effective teachers with any students. Further research could control for this variable by making sure all of the participants in the study are effective teachers before including them in the study. By controlling for this variable it would ensure that the attitudes, beliefs and perceptions expressed by the teachers in the study would be based on the inclusion of students with disabilities in their classrooms and not their ineffective teaching practices.

The district in this study uses Survey Monkey to collect data on how beneficial their professional development sessions were for the teachers. Survey Monkey uses a Likert Scale where a respondent can just click the same response for all of the questions. It would be more beneficial to use Q Method as a means of data collection for this purpose as the data collected would be more meaningful. Q Method uses a forced sort which requires the respondents to give more thoughtful responses because they cannot just agree or disagree with all of the statements. The teacher responses for the Q sort could be collected online just as they are with Survey Monkey. The amount of Q sort statements could be limited so it would take the equivalent amount of time to take a survey. It would take some time upfront to develop the Q statements but the benefit of more meaningful data would be worth it for the district.

In this study data was collected about the school they teach at, what subject the teacher teaches and their years of experience. Further studies could also collect data about age, gender and amount of professional development on inclusion to see if there are any patterns that develop based on these variables. In this study there were no patterns found based on years of experience or subject taught. All but one of the teachers in this study were from two schools and the data did not show any differences based on where they were teaching.

Conclusion

The results of this study agree with some of the previously published literature on the subject of general education teachers' attitudes about the inclusion of students in their classrooms. This study has shown that it is possible to focus on one school district with a small number of participants and come to meaningful conclusions. One reason that the general education teachers in this study have such positive attitudes about inclusion could be because the district has provided professional development on inclusion. But with 46% of the participants

expressing that they have not had enough professional development the district should focus on providing more professional development on inclusion for its general education teachers. Making sure to collect pre and post data to ensure that the districts efforts at improving its teaching staff are truly being accomplished.

Q Methodology is useful in investigating subjective topics where individuals have different points of view based on their unique experiences and knowledge. The most time consuming part of this methodology is developing the Q sort statements. The data collection could be done at a district professional development or staff meeting. The district could then use the results to drive its development of useful professional development or other programs like peer to peer mentoring to improve teachers' skills relevant to their teaching.

The general education teachers in this study feel qualified to teach students with disabilities in their general education classrooms but may need help with unique students. One reason this may be is because the district has already provided some professional development on inclusion but 46% of the participants feel they still need more professional development to implement inclusion of students with disabilities effectively.

School districts should consider using Q Methodology to make data based decisions about professional development or other programs they are considering implementing. This method yields a much richer understanding of the topic being studied than the traditional surveys that are often used by districts when investigating teacher attitudes or opinions.

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Appendix A: Q Sort Statements

1. Students with disabilities should be fully included in general education classes.
2. Students with disabilities in the general education classroom disrupt student's learning.
3. Students with disabilities lack motivation to be successful in the general education classroom.
4. Students with disabilities need too many accommodations and modifications to the curriculum.
5. Students with disabilities improve the general education learning environment.
6. Students with behavior problems should be in a special classroom.
7. Only high functioning students with disabilities should be mainstreamed.
8. Low functioning students should be in a special education classroom.
9. I feel qualified to teach children with disabilities.
10. I receive enough support from special education teachers
11. I receive enough support from paraprofessional staff.
12. Administrators don't provide enough support for students with disabilities to be mainstreamed.
13. I receive support through professional development to enhance my educating students with disabilities.
14. Administrators don't understand how difficult it is to teach with students with disabilities in the general education classroom.
15. I need more help in my classroom when students with disabilities are included.
16. I don't understand why students with disabilities are mainstreamed.
17. Having students with disabilities in general education classes benefits all students.
18. I don't want students with disabilities in my classroom.
19. I like having students with disabilities in my classroom.
20. I need more support than I am receiving for the students with disabilities in my classroom.
21. I don't know how to make the modifications and accommodations for students with disabilities.
22. I am not sure how to grade students with disabilities in my classroom.
23. General education students don't like having students with disabilities in the general education classroom.
24. Teaching students with disabilities makes me a better teacher.
25. I need to change the way I teach when I have students with disabilities in the classroom.
26. I am not qualified to teach students with disabilities.
27. Students with disabilities with behavior issues should not be in the general education classroom.
28. Students with disabilities with behavior issues keep other students from learning.
29. Students with disabilities should be in a special education classroom.
30. Low functioning students should be in a special school.

31. I need help providing students with disabilities with accommodations and modifications.
32. Growth data for students with disabilities shouldn't be part of my evaluation.
33. More professional development should be provided to help general education teachers working with special education teachers.
34. Working with students with disabilities is the same as working with general education students.
35. Teaching students with disabilities is the same as teaching general education students.
36. Students with disabilities should be treated the same as general education students.
37. Students with disabilities are nothing but problems in my classroom.
38. I don't understand how to teach IEP goals for students with disabilities.
39. I treat students with disabilities the same as general education students.
40. Dealing with students with disabilities in my classroom takes away from my teaching time.
41. I have no problem having students with disabilities in my classroom.
42. I don't know how to grade students with disabilities.
43. I am over whelmed by the requirements for students with disabilities.
44. Inclusion of students with disabilities doesn't work.
45. All students should be educated together in the same classroom.
46. Only special education teachers should teach students with disabilities.
47. Students with disabilities are treated differently that general education students.
48. Students with disabilities should be treated differently than general education students.
49. All students deserve an education.
50. It isn't my job to teach students with disabilities.

Appendix B: Q Sort Table

[illegible]

Appendix C: Pilot Study Interview Protocol

Interviewer: _____

Interviewee: _____

Date: _____

Location of Interview: _____

Review informed consent document.

Informed Consent Signed: Yes or No

Questions:

1. How long have you been teaching?
2. Do you have special education students in your classroom?
 - a. How many or what percentage of your students are identified as special education students?
 - b. Is this the same in all of your classes?
3. What are your feelings or experiences of special education students in your classroom?
4. Does it matter what the disability is (more or less severe)?
 - a. Which types of special education students are the most successful and why?
 - b. Which types of special education students are least successful and why?
5. What types of support do you receive for the special education students in your classroom?
 - a. Do you feel the support adequate for the special education students in you classroom?
6. Do you feel qualified to teach students with disabilities in your classroom?
 - a. Have you always felt this way or has it changed over time?

7. How do special education students help or hinder the education process for other students?
8. Are special education students successful in your classroom?
 - a. What makes them successful?
 - b. What hinders their success?
 - c. Is this true of all special education students?
9. What accommodations or modifications to coursework do you make for special education students?
 - a. What type of help do you receive help making these accommodations or modifications?
10. Is there anything we haven't talked about that you would like to add or talk about regarding inclusion?

Appendix D: Interview Protocol

Interviewer: _____

Interviewee number code: _____

Date: _____

Location of Interview: _____

Review informed consent document.

Informed Consent Signed: Yes or No

Questions:

1. How long have you been teaching?
 - a. What subject do you teach?
2. Have you had student with disabilities in your classroom?
3. Why did you pick the two statements you most agree with in the Q sort?
4. Why did you pick the two statements you most disagree with in the Q sort?
5. What are your feelings or experiences with students with disabilities in your classroom?
6. What types of support do you receive for students with disabilities in your classroom?
7. Do you feel qualified to teach students with disabilities in your classroom?
8. How do students with disabilities help or hinder the education process for all students?
9. Is there anything we haven't talked about that you would like to add or talk about regarding inclusion?

Appendix E: Recruitment Email

You are invited to participate in a research project entitled "General Education Teachers Attitudes about Inclusion" designed to measure general education teacher's attitudes, perceptions and beliefs about the inclusion of students with disabilities in their classroom. The study is being conducted by Dr. George Haus and Larry Monje from Western Michigan University, Department of Literacy Studies and Special Education. This research is being conducted as part of the requirements of a dissertation by Larry Monje.

This research is comprised of a semi structured interview which will take between 30 and 45 minutes to complete. The interviews will take place at a location convenient for the participant and be recorded for transcription. If you choose to participate you will need to sign an informed consent document. Your replies will be completely confidential. A pseudonym will be used when connected to the data. You may choose to not answer any question asked by the researcher. If you choose to not participate in this research you may disregard this email. If you are interested in participating in this research please reply to this email. If you have any questions, you may contact Dr. George Haus at 584-0912, Larry Monje at 337-0570. Thank you for your consideration in participating in this research project.

Appendix F: Informed Consent Document

Principal Investigator: George Haus
Student Investigator: Larry Monje
Title of Study: General Education Teachers Attitudes about Inclusion

You have been invited to participate in a research project titled “General *Education Teachers Attitudes about Inclusion*.” This project will serve as Larry Monje’s, research project for the requirements of a qualitative research practicum course. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study?

What this study seeks to understand is general education teacher’s attitudes about students with special needs in general education classes. The study seeks to understand the perceptions and experiences of general education teachers with inclusion of students with special needs in their classrooms.

Who can participate in this study?

This study is open to all general education teachers of core subjects at [REDACTED], [REDACTED] who are willing to participate in the Q sorting and interview process.

Where will this study take place?

This study will take place at [REDACTED]

What is the time commitment for participating in this study?

The time commitment for this study is approximately one hour, during this time you will be interviewed by the researcher about your experiences with the inclusion of special education students in your classroom and asked to sort statements about inclusion as to whether or not you agree or disagree with the statements.

What will you be asked to do if you choose to participate in this study?

If you choose to participate in the study you will be interviewed by the researcher and asked to answer questions based on your own experiences and asked to sort statements about inclusion as to whether or not you agree or disagree with the statements.

What information is being measured during the study?

The study will measure teacher perceptions about having special education students in their classrooms. The method of measuring and collecting this data will be through the use of a semi structured interview designed to elicit response from you about their perceptions, experiences and beliefs about the inclusion of special education students in their classroom.

What are the risks of participating in this study and how will these risks be minimized?

You may be uncomfortable with some of the questions asked and they have the right to decline to answer. Also, all of the information collected will be confidential and your name will not appear with their answers to the questions.

What are the benefits of participating in this study?

There are no known benefits to the participants in this study. It is hoped that the information gathered from the study can be used to enhance teacher practice through professional development as well as disseminating the results of the study through scholarly journal articles.

Are there any costs associated with participating in this study?

The only cost associated with this study is the participant's time required for the interview.

Is there any compensation for participating in this study?

There is no compensation for participating in the study.

Who will have access to the information collected during this study?

The data collected in this study will be presented in a qualitative research class and may also be submitted to be published in peer reviewed journals about education. The participants will not be identified in either the presentation or possible publication in a journal.

What if you want to stop participating in this study?

You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either professionally or personally if you choose to withdraw from this study.

The investigator can also decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact the primary investigator, George Haus at 269-387-5947 or <mailto:george.haus@wmich.edu>. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

Participant's signature

Date

Appendix G: Definition of Terms

Accommodations - services or supports used to enable a student with a disability to fully access the subject matter and instruction in the general education setting (Wright & Wright, 2012)

Attitudes- the way you think and feel about someone or something (Merriam-Webster Incorporated, 2015)

Beliefs – a feeling of being sure that someone or something exists or that something is true (Merriam-Webster Incorporated, 2015)

Collaboration - an interactive process that enables general education and special education teachers with diverse expertise to work together as equals and engage in shared decision making toward mutually defined goals for the benefit of all students (Dettmer, Knackendoffel, & Thurston, 2013)

Co-teaching - an instructional delivery approach in which general and special educators share responsibility for planning, delivery, and evaluation of instructional techniques for a group of students; general and special educators work in a coactive and coordinated fashion, which involves the joint teaching of academically and behaviorally heterogeneous groups of students in integrated settings (Kloo & Zigmond, 2008)

Differentiation - the adaptation of classroom learning to suit each student's individual needs, strengths, preferences, and pace by either splitting the class into small groups, giving individual learning activities, or otherwise modifying the material (Dettmer, Knackendoffel, & Thurston, 2013)

Free and Appropriate Public Education (FAPE) - A free appropriate public education is available to all children with disabilities residing in the State between the ages of 3 and 21,

inclusive, including children with disabilities who have been suspended or expelled from school (IDEIA, 2004).

General education teacher - teachers that are licensed and/or certified to teach, they may be certified to teach specific grade levels (i.e., elementary education) or specific subject areas (Wright & Wright, 2012)

Inclusion – There is no agreed to definition of inclusion in the literature or law. Please see the section “What is Inclusion?” In chapter two for some of the definitions of this term found in the literature.

Individual Education Program (IEP) - a written statement for a child with a disability that is developed, reviewed, and revised in a meeting of their IEP team. The law sets out specific details for who is on the IEP team, what the IEP must contain, and when it must be reviewed and revised. All of these requirements must be met in order for an IEP to be valid. Once written, the IEP is a legally binding document that the school must follow (IDEIA, 2004)

Individuals With Disabilities Education Improvement Act (IDEIA) – first enacted in 1975 as the Education for all Handicapped Children Act, it is a comprehensive law that governs the education of students with disabilities. The current version of the law was amended in 2004 (IDEIA, 2004)

Least restrictive environment (LRE) – “To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily” (IDEIA, 2004)

Modification - an adjustment to the instructional content or performance expectations of students with disabilities from what is expected or taught to students in general education (Wright & Wright, 2012)

No Child Left Behind Act (NCLB) - federal legislation that enacts the theories of standards-based education reform. NCLB ensures that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments (NCLB, 2004)

Perceptions - the way you think about or understand someone or something (Merriam-Webster Incorporated, 2015)

Professional development - a comprehensive, sustained, and intensive instructional approach aimed at improving teachers' and principals' effectiveness in raising student achievement (IDEIA, 2004)

Regular Education Initiative (REI) – a concept which focuses on having special and general education teachers working together to provide the best education possible for all children (Harkins, 2012)

Self-efficacy - is a person's belief in his or her ability to succeed in a particular situation, determining how the individual would think, act, and feel (Bandura, 1997)

Special education teacher – teachers who are prepared to use specially designed instruction to meet the unique needs of a child with a disability (IDEIA, 2004)

Appendix H: HSIRB Approval Forms

WESTERN MICHIGAN UNIVERSITY



Human Subjects Institutional Review Board

Date: October 14, 2014

To: George Haus, Principal Investigator
Larry Monje, Student Investigator

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 14-03-20

This letter will serve as confirmation that your research project titled "General Education Teachers Attitudes about Inclusion" has been **approved** under the **expedited** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may **only** be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., ***you must request a post approval change to enroll subjects beyond the number stated in your application under "Number of subjects you want to complete the study."*** Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: October 13, 2015

251 W. Walwood Hall, Kalamazoo, MI 49008-5456
PHONE: (269) 387-8293 FAX: (269) 387-8276

Date: October 21, 2015

To: George Haus, Principal Investigator
Larry Monje, Student Investigator

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 14-03-20

This letter will serve as confirmation that the changes to your research project titled “General Education Teachers Attitudes about Inclusion” requested in your memo received October 21, 2015 (to increase total number of subjects to N=70; remove questions 4, 8, 9 from instrumentation; include Q sort data collection and revise consent document to reflect these changes) have been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may **only** conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: October 13, 2016