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Perception of Roles of General Education Teachers & Special Education Teachers in Regard to the Inclusion of Students with a Cognitive Impairment in the General Education Classroom

by

Justine Barbara Keuning-LaFrence

A Thesis Submitted to the Graduate Faculty of

GRAND VALLEY STATE UNIVERSITY

In

Partial Fulfillment of the Requirements

For the Degree of

Master of Education in Special Education

College of Education

August 2016

Acknowledgments

I would like to extend a thank you to my thesis advisor, Dr. Amy Schelling, for her guidance and support through the writing of this project. Her knowledge and expertise were invaluable to me and I'm so grateful for her willingness to guide me through this writing process and her kindness and encouragement helped me keep going. I am also very grateful for the other members of my thesis committee: Dr. Mary Bair and Dr. Ellen Schiller. The gift of their time to help my project reach completion was so appreciated. I also need to thank my parents and brother for always believing in me and supporting my love of learning. And finally, I couldn't have completed this project without the love, support, and computer skills of my incredible cheerleader and husband, Brian.

Justine B. Keuning-LaFrence

Abstract

The field of education has grown and changed to include students with a cognitive impairment being educated in the general education classroom. In order for these students to access the general education curriculum and achieve academic success, general education teachers and special education teachers must collaborate effectively to provide for the needs of these students. Effective collaboration depends on teachers having a perception of their roles and their co-workers' roles that is compatible with their co-workers' perceptions. This study looks at the perceptions of both general education teachers and special education teachers in regard to students with a cognitive impairment in the general education classroom. Misconceptions and misunderstandings were identified. Clearing up these misconceptions may lead to increased collaboration and greater academic achievement of students with a cognitive impairment.

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Chapter One: Project Proposal

Problem Statement

Since the 1990s, twenty years after the mandate for the least restrictive environments for students with disabilities, the placement of students with disabilities has changed dramatically, in regards to historical norms (Swain, Nordness, & Leader-Janssen, 2012). Students with a cognitive impairment (CI) are being taught more often in the general education classroom, as it is often found to be the least restrictive environment for their education. Because of the critical roles both general education teachers and special education teachers play in the instruction of students who receive special education services, they must work together for the good of the students (Eccleston, 2010). However, currently little research exists exploring how perceptions of teachers' roles and responsibilities impact effective collaboration.

Despite knowing that the general education classroom is the best place for most students to learn, research has shown that students with a CI are not always well integrated into the general education classroom, particularly as it relates to the planning of the classroom setup, delivery of the general education curriculum, and assessment (Kavale & Forness, 2000; Maanum, 2009). When students with a CI are not well integrated into the classroom, it results in an aggravation of their learning difficulties (Clark, Dyson, Millward, & Robson, 1999). High-risk learners, like students with a CI, require instruction in the classroom that is highly effective and research-based in order to improve their academic performance (Cook, Tankersley, & Landrum, 2013). This instruction needs to be supplied by qualified general education and special education

teachers, who are working together to achieve the same goal of helping all their students succeed in the classroom (Dettmer, Knackendoffel, & Thurston, 2013).

Successful collaboration allows general education teachers and special education teachers to share the work of teaching, making decisions, and creating goals for their students (Dettmer et al., 2013). Collaborative planning for inclusion is both complex and necessary because no individual teacher has all the expertise and it is to the benefit of students to work together (Dettmer et al., 2013). If, according to DuFour (2014), collaboration between general education teachers and special education teachers can result in better learning outcomes for students, ways to increase collaboration must be studied.

One possible way to increase the effectiveness of the planning and the potential for the success of students in an inclusion setting is to define the roles and responsibilities of both general education and special education teachers. Research shows that how teachers perceive their work and the work of their fellow teachers plays a large role in the outcomes of an inclusion program (Kochhar, West, & Taymans, 2000; McLeskey & Waldron, 2000; Agaliotis & Kalyva, 2011). Teachers who do not understand each other's roles or their own roles, in regards to educating students with cognitive impairments, are not able to effectively collaborate to meet the needs of these students (Dettmer et al., 2013). Defining roles and responsibilities removes a barrier to to effective collaboration (DuFour, 2004).

Importance of the Problem and Rationale for the Study

In order for students with CI to be successful in the general education classroom, any differences in perceived roles between general education teachers and special

education teachers need to be cleared up and responsibilities need to be clarified in regard to teaching these students (Dettmer et al., 2013). As placement of and expectations for students with special needs have changed, roles and expectations of various faculty have changed, including an increased amount of responsibility for general education teachers (Cook, 2001). Special education teachers have taken on a larger role, moving from being direct service providers to students with disabilities to coordinating collaboration with the general education teachers (Agaliotis & Kalyva, 2011). In order to collaborate for the benefit of all students, education professionals need to deepen their understanding of their colleagues' roles and responsibilities (Leader-Janssen, Swain, Delkamiller, & Ritzman, 2012).

However, these roles, particularly of the other party, have not always been well communicated or well understood by either general education teachers or special education teachers (Leader-Janssen et al., 2012). This lack of understanding could have a detrimental effect on the education of students with disabilities, particularly those with mild to moderate CI. This lack of understanding leads to poor communication and poor collaboration between teachers. Collaboration and communication are both critical to the success of students with a CI in the general education classroom (Burstein, Sears, Wilcoxen, Cabello, & Spagna, 2004, Leader-Janssen et al., 2012).

In order to continue to meet the intention of the least restrictive environment for students with disabilities, it is imperative that general education teachers and special education teachers come to a new and deeper understanding of each other's roles, responsibilities, struggles, and successes. This understanding will lead to better planning and better implementation of inclusive environments for students with cognitive

impairments and other disabilities. If teachers are unable to fully collaborate, students with cognitive impairments will not make the academic gains that could be achieved with better teacher collaboration.

Background of the Problem

Background of Special Education

The earliest record of special education comes from the late 1700s and is an account of a French physician, Jean-Marc Gaspard Itard, attempting to "civilize" a boy found living in the woods (Lane, 1979). Following Itard's work, his student, Edouard Seguin, began to create individualized education programs for students believed to be unable to learn (Gargiulo, 2012). Both of these innovators contributed to the modern ideas of special education – individualized instruction, positive reinforcement, and a firm belief that all children are able to learn (Gargiulo, 2012).

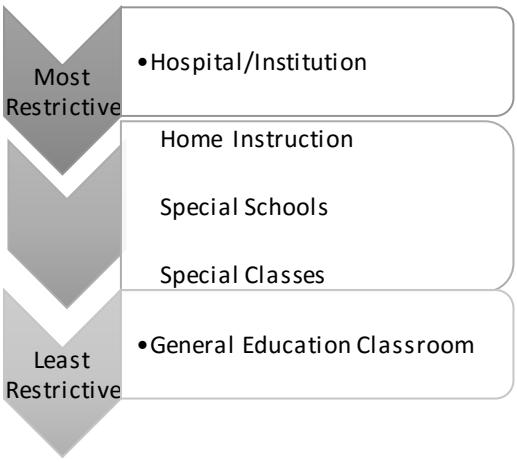
In the United States in the 1800s, there was a movement to build institutions, or asylums, for the care of people with disabilities. These were generally not established for education, but rather care and management (Gargiulo & Kilgo, 2011). These places began as an enlightened idea but descended into places where people were left in neglect, due to prejudice and fear (Shonkoff & Meisels, 2000).

In the late 1800s and early 1900s, public schools began to offer special education classes, though only sporadically. These classrooms were self-contained, that is, students were educated separately from their peers, who didn't have disabilities (Gargiulo, 2012). After World War II, Americans became very interested in public education and the system was greatly expanded, including education for students with disabilities. Between 1947 and 1972, there was a 716% increase in students enrolled in

special education programs but only an 82% increase in total public school education (Dunn, 1973).

Finally, with a variety of laws and acts passed in the United States, starting in the 1970s, education for students with disabilities moved from separation to inclusion. The concept of a least restrictive environment was put into legislation regarding the education of students with disabilities. The first comprehensive special education legislation in 1975, the Education for All Handicapped Children Act, set off the age of inclusion and required a free and appropriate public education for all students (Artiles, 2003; Gargiulo, 2012). This inclusion framework began with the voluntary mainstreaming of students with disabilities (Brantlinger, 1997). In subsequent years and legislative acts, such as IDEA in 1990, and again in 2004, the least restrictive environment has come to mean inclusion in the general education classroom as the ideal location, when appropriate, for a student with disabilities. This progression is shown in *Figure 1.*

Figure 1 (based on IDEA, 2004).



Background of Collaboration in Education

While education is governed by these laws and regulations, realization of those laws are implemented at the local level. One of the important parts of this implantation of practices such as least restrictive environment, is the perception of the teachers doing the work. How teachers perceive their roles and their co-workers' roles has an effect on their ability to collaboration effectively and the successful implementation of practices like inclusion (Vlachou, 2006; York-Barr, Sommerness, Duke, & Ghere, 2005).

Implementation of a least restrictive environment often leads to the inclusion of students with disabilities in the general education classroom, therefore, it is absolutely necessary for collaboration between general education teachers and special education teachers to occur and be effective.

Multiple models of collaboration are in use in schools throughout the United States, such as, professional learning communities, teaming, consultation, and co-teaching. These models have been studied for their effectiveness in increasing student learning but more work needs to be done on what possible barriers there are to the implementation and effectiveness of these models (Schneider, 2007).

Studies have shown how important collaboration is for the growth and learning of students (Leader-Janssen et al., 2012), yet teachers continue to question if they are doing everything possible for their students with disabilities (Swain et al., 2012). Further, while collaboration in theory has been studied, there is a gap in implementation of those theories (Schneider, 2007). Continuing to unravel how to engage in effective collaboration will provide benefits for not only students with disabilities, but all students, as student achievement is the ultimate goal of successful collaboration (DuFour, 2004).

Statement of Purpose

The purpose of this descriptive study was to identify what special education teachers and general education teachers perceived as their role(s) in educating students with a CI in the general education classroom and to highlight any misconceptions or divergent perceptions that may interfere with effective collaboration. I proposed the development of a descriptive study to highlight general and special education teachers' perceptions of their roles as they relate to instructing students with a CI in the general education classroom setting. The survey also asked about their perceptions of the other teachers' roles, in regards to these students. Identifying and addressing misconceptions may lead to better collaboration between general education and special education teachers, resulting in learning benefits for students with disabilities.

Research Questions

This research sought to identify general education and special education teachers' perceptions of their own roles and the roles of their co-workers, in regard to teaching students with a CI in the general education classroom.

1. How do general education teachers and special education teachers view their own roles in promoting and facilitating inclusion for students with a CI?
2. How do general education teachers and special education teachers view the other teachers' roles in promoting and facilitating inclusion for students with a CI?
3. What are the misunderstandings and miscommunications between these perspectives and perceptions?

Design, Data Collection and Analysis

Following approval of the study from GVSU's Human Research Review Committee, a questionnaire of 40-45 questions was sent out to elementary schools within Ottawa and Kent Counties. The questionnaire was sent to 156 total schools, including private, public, and charter. These were the schools with easily identifiable email addresses for principals. The invitation to participate clearly stated that the questionnaire was for schools whose students with a CI spend at least a portion of their school day in the general education classroom. Potential participants were restricted to elementary special education and general education teachers who had taught within the last three years or currently were teaching a student with mild to moderate CI. Potential participants were solicited though a criterion based sampling procedure. The survey was digital and sent in the form of a link to a SurveyMonkey site. Emails were sent to the principal of each school, with instructions to distribute it to the appropriate teachers. These email addresses were obtained from the school websites, however participants were not asked for any personally identifiable information, keeping the survey anonymous.

Survey questions were created and tested for validity, using a small pilot group at my current school of employment and also shared with an expert in the field of CI for feedback on accuracy of items. The questionnaire contained quantitative questions regarding perceptions of roles of the teachers' own responsibilities and in regard to their colleagues' roles. The quantitative data was gathered using Likert Scale questions. Due to the fact that this study was descriptive in nature and therefore exploratory, the quantitative data was analyzed by calculating averages and modes.

Definition of Terms

Cognitive Impairment:

"…a condition resulting in significantly below-average intellectual functioning and concurrent deficits in adaptive behavior that adversely affect educational performance and require special education and related services" (Maanum, 2009, p. 54).

Inclusion:

"The physical placement of students with disabilities in general education classrooms." (Cook, 2001, p. 203). Rather than being in self-contained classrooms with other students with disabilities, students are taught with their normally developing peers, by their general education teacher and possibly the special education teacher or paraprofessionals/aides. For the purpose of this study, inclusion refers to students with CI spending at least a portion of their day in the general education classroom.

Least Restrictive Environment:

"In general.--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." (IDEA, 20 U.S.C. § 300.114, 2004)

Delimitations of the Study

In order to obtain useful results, I chose to limit the scope of my study to teachers who have taught students with CI within the past three years. The reason for this limitation is to obtain the most current data possible. I limited the participants to elementary teachers in two counties in West Michigan, which limits the generalization of results in regards to secondary schools or schools in different areas of the state.

Limitations of the Study

Inherent limitations of this study include the truthfulness of participants regarding the survey questions. While one hopes that participants will answer an anonymous survey truthfully, it cannot be guaranteed. A second limitation is the reliance on school administrators to distribute the questionnaire to the appropriate teachers with accuracy. A final limitation is the size of the population under study as there is a relatively low number of students with a CI in the state of Michigan, which resulted in a low response rate.

Organization of the Thesis

Following this introduction, there will be a review of the literature regarding collaboration and its effects on the learning of students with cognitive impairments. Chapter Three will discuss, in further detail, the research design and Chapter Four will provide the results of the survey. Finally, Chapter Five will discuss the findings, share conclusions drawn from the study and its results and offer further implications for policy, practice and further study.

Chapter Two: Literature Review

Introduction

The key areas of the research base explored in this chapter are the theoretical framework of ecological systems, the theoretical framework of collaboration, the rationale, benefits, and realization of the inclusion of students with cognitive impairments, the collaboration of general education teachers and special education teachers who work with students with a cognitive impairment, and finally, the effect of the collaboration and inclusion on these students' academic achievement. Each of these components plays a role in the study of how teachers understand each other in regards to the inclusion of students with a CI. The literature in these areas frames the need for further exploration of how effective collaboration can impact students with a CI in the general education classroom and how the perceived roles of both general education and special education teachers, in regards to teaching students with a CI, can impact their collaboration.

Theoretical Framework

This study is built upon Bronfenbrenner's (1979) model of ecological systems. This theory consists of four environmental levels: microsystem, mesosystem, exosystem, and macrosystem. These levels move outward from the person or participant, going from personal interactions to shared cultural values. In the context of research, this study falls into the area of meso-research, or the mesosystem ecological level. This simply means that the study involves "research whereby one or more persons, groups, or other living organisms are investigated within the other systems in which he/she/they/it spends time" (Onwuegbuzie, Collins, & Frels, 2013, p. 5).

Participants of this study were asked to give responses related to their interactions with co-workers in the work setting. In general, when conducting quantitative research, such as this study, only one environmental level is studies for information (Onwuegbuzie et al., 2013).

Following this ecological level-system for research are several implications for generalization of the data. Onwuegbuzie, Slate, Leech, & Collins (2009) have identified five generalizations: external, internal, analytic, case-to-case transfers, and naturalistic. For the purposes of the study, analytical and naturalistic generalizations can be made. Analytical generalizations are made based on applying the data generalizations to a larger population, when the cases fit (Onwuegbuzie et al.). While this study is a small study, a generalization of how special education and general education teachers perceive their own role and the role of their colleague will be possible. Naturalistic generalizations are out of the hands of the researcher and instead point to how readers of the study make generalizations and applications to their own experiences (Onwuegbuzie et al.). In this way, other teachers who are interested in this study of role perceptions will be able to see how the data does or does not fit with their view of their own perceptions.

One of the critical elements of this study is the idea of collaboration amongst colleagues. Before moving into collaboration as a function of education, it is important to lay the foundation of collaboration as a general theory. However, there is such a rich and wide variety of perspectives on collaboration that it is difficult to pinpoint a starting place for scholarly research (Thomson, Perry, & Miller, 2007). Following this difficulty, Thomson, et al. devised a theory of collaboration based on five key components: two

structural - governance, administration, two social capital - mutuality, norms, and one agency - organizational autonomy. This study touches on each of these components.

Governance points to collaborators needing to know how to make decisions together and what rules will govern their interactions (Thomson et al., 2007). This study seeks to help clear up the governance problems that may arise between special education and general education teachers by identifying misconceptions around roles and responsibilities. Thomson et al. explain that administration refers to how ideas and collaboration moves into action and achieving goals. There must be a clear system of how implementation of collaborative work will occur or ideas generated in a collaborative setting will never leave the incubation stage. Without the work being achieved, collaboration begins to look pointless and timewasting. This study attempted to uncover areas where teachers felt under-supported in their role, which could hinder identification of mutually shared goals and action plans to achieve those goals.

Mutuality is based in interdependence of parties (Thomson et al., 2007). In this study, this mutuality is particularly based on the shared interests of both general education and special education teachers to help all students succeed, including those with a CI. In order to collaborate effectively, differences must be set aside to focus on a common goal. This study was designed to help identify those differences. Authors note that norms bring into play trust and reciprocity. In this study, barriers to trust were identified so that teachers can use that knowledge to begin to work through those misconceptions of roles and develop a higher level of trust, and therefore, a higher level of collaboration.

Finally, organizational autonomy points to how the collaborative parties both maintain their own identities and yet try to also create a collaborative identity (Thomson et al., 2007). This is particularly evident in the work of special education teachers and general education teachers, as they both have different priorities and identities but must learn to use those to the advantage of everyone involved in the collaborative work. The study was designed to illicit data specifically to define the teaching identities of general education and special education teachers, within a collaborative relationship.

As collaboration is a unique part of education, it is important to note that collaboration does exist between various teaching groups, yet the practice has much room for improvement. As the practice of continually improving inclusion has grown, the work of teaching has become more complex, and the need for greater collaboration between general education teachers and special education teachers has grown. As Welch (1998) notes, collaboration as a term in education has many different misconceptions surrounding it. For the purposes of this study, another framework of collaboration that will be used, in addition to the five components of Thomson et al. (2007), is Welch's theory, based on IDEA, that collaboration needs to include active participation by all parties and result in mutual benefit (1998). This differs from cooperation where some parties can be passively involved, such as an individual who participates by only signing off on an Individualized Education Program (IEP), without participating in the development of the program (Dettmer et al., 2013).

Synthesis of Research Literature

Rationale, Benefits, and Realization of Inclusion

Following the work of Dyson (1999), inclusion as a practice can be viewed in many ways but for the purposes of this study, the review of the literature will follow two paths: the rationale for inclusion and the realization of inclusion. This approach will lead to a discussion as to why collaboration is necessary in both the rationale and the realization.

Rationale for inclusion.

The rationale for a radical shift from students with disabilities, in particular, cognitive impairments, being educated in separate classrooms or facilities to an inclusion of these students in the regular, general classroom, comes, in part, out of a discourse on ethics and rights. In 1994, a large group of representatives from around the world met to create the *Salamanca Statement on Principles, Policy and Practice in Special Needs Education* (Dyson, 1999). In part, this document from UNESCO (1994) states five assumptions regarding students with special needs and inclusive education:

- "Every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning.
- Every child has unique characteristics, interests, abilities and learning needs.
- Education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs.

- Those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs.
- Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system." (par. 2).

These statements show that, based on ethical principles, all children have a right to an education specifically designed to meet their unique needs. Dyson notes that this statement also seems to rise out of the structuralist sociology that began in the 1950s. This sociology was based on the idea that universal education could equalize opportunities and spread economic and social benefits to all of society (Dyson, 1999). This call for ethical inclusive classrooms, where all students are able to participate and learn, led to a need for a new educational paradigm in which segregation of students with disabilities was no longer justified (Danforth & Naraian, 2015). Inclusive schools need to promote all students' learning and presence in the classroom, while also including teachers, parents, and the community in the work of including all students (Angelides, Savva, & Hajisoteriou, 2012).

For the purposes of this study, further rationale of an inclusion program will be viewed through the lens of setting up a program for students with mild to moderate cognitive impairments and will look at the academic benefits of these programs as a justification for the inclusion of these students.

Benefits of inclusion.

Research has shown that students with a CI make greater gains toward achieving their IEP goals, when placed in a general education setting that has been adapted to meet their needs, with supports in place, than counterparts in pull-out programs or separate schools (Moore, Gilbreath, & Maiuri, 1998; Browder, Jimenez, Spponer, Saunders, Hudson, & Bethune, 2012; Jimenez, Browder, Spooner, & Dibiase, 2012; Wood, Browder, & Flynn, 2015). These gains are seen in a variety of subjects, using a variety of different types of support.

These gains are particularly seen in literacy skills (Dessemontet, Bless, & Morin, 2012). Several studies have been done to measure various literacy skills in students with mild to moderate CI who are placed in an inclusion classroom, with appropriate supports, and measured against students in pull-out programs or separate schools. These studies have found results ranging from significantly higher scores for inclusion students in vocabulary and grammar (Laws, Byrne, & Buckley, 2000) to finding that length of time in an inclusion program made the most difference in academic achievement (Peetsma, Vergeer, Roeleveld, & Karsten, 2001). However, in some studies, no significant difference was found between students in a pull-out or special school and inclusion students, in regards to mathematic achievement (Cole, Waldron, & Majd, 2004).

Realization of inclusion.

The gains that can be made in academic achievement further point to the appropriateness of an inclusive education that has been set up to include supports and accommodations to meet the needs of students with a CI. The ethical considerations

and academic gains lead now to a discussion regarding the realization of an inclusion program. This realization can take many forms and is generally based on the culture and type of school that it is being implemented in, rather than on some strict formula for an inclusive program (Rudd, 2002).

The work of Danforth and Naraian (2015) will guide the progression of this study, in regards to the appropriateness of the regular classroom for students with special needs. They set forth the idea that the justifications for inclusion are simply reworked arguments against it and that those arguments must be set aside and a new foundation for inclusive education be laid. This foundation is realized by seeing inclusive education not, "as an *outcome* that must be achieved" but rather "as a *process* that is always ongoing, continual, and by extension, unfinished." (Danforth & Naraian, 2015, p. 72). Inclusion is not simply placing a student with a CI into the general education classroom. Inclusion needs to be a practice of implementing supports for that student to be successful in the general education classroom (Lipsky & Gartner, 2008). This idea that the realization of inclusive education is a process of learning how to implement supports, rather than just saying that a student with disabilities is now in the general education classroom, is what provides the rationale for increased and more effective collaboration between teaching professionals.

Collaboration in Education

A teacher in an elementary school spends a majority of their time working individually and independently in their classroom. In the past, this has caused teaching to be a profession with a lack of collaboration (Dettmer et al., 2013). Teachers were expected to complete their work and not ask for assistance, for fear of looking like they

were incapable of handling their classroom. However, this view has changed in more recent times, especially as the work of education has become much more complex. Teachers are expected to take on more responsibilities in and out of the classroom and are held accountable for their students' performances on standardized tests. They are also asked to teach a student population that may have a wide range of needs, talents, or disabilities (Kritikos & Birnbaum, 2003). As new teachers attempt to meet the responsibilities of the profession, some leave the field after a short time. This pressure has led to a new spirit of collaboration in school systems and has caused a new definition of collaboration to arise. Friend & Cook (2009) describe collaboration as the interaction style between two or more equally certified professionals working together to implement shared teaching, decision making, goal setting, and mutual accountability.

Models of Collaboration

While educators agree that teachers who work together can be far more effective educators, the actual methods of working together can differ widely. Some schools rely on the framework of a professional learning community, which is a model in which teachers work together to improve their teaching, with the main goal being the improvement of academic achievement (DuFour, 2004). DuFour (2007) points to the three main parts of a professional learning community as focusing on how students learn, working collaboratively on that learning, and holding themselves, as teachers, accountable for getting results.

Other schools may use a more informal method of collaboration, known as teaming. This process is also known as collaborative school consultation with teamwork (Dettmer et al., 2013). These teams are generally drawn together to tackle a

specific problem or assist a particular student. Team members are chosen for the specific skills they can offer the team, such as special education services, general education teaching, speech and language therapy, occupational therapy, etc. (Hunt, Soto, Maier, Liboiron, & Bae, 2004). These teams, when focused on a particular student, can also include the parents of the student and the student themselves (Dettmer et al.).

The model of collaborative consultation consists of two parties working together: the consultant, who would be an expert in the field of whatever special needs the case called for, and the consultee, usually the general education teacher (West & Idol, 1990). Both parties share in the work of all stages of consultation, including identifying and assessing the problem, choosing and implementing the strategy to try, and evaluating the work (Kritikos & Birnbaum, 2003). This type of collaboration offers a set framework for solving specific problems in education.

Finally, a fourth model of collaboration, which is used for inclusive education purposes, is the use of co-teaching. Co-teaching allows for "a general educator and an equivalently licensed special educator (i.e., not a paraprofessional) partner to teach a diverse group of learners in a general education classroom for the purpose of ensuring that students with disabilities receive specially designed instruction and supplementary aids and services while accessing the general curriculum in the least restrictive environment" (Muller, Friend, & Hurley-Chamberlain, 2009, p. 1). This type of collaboration sets the roles of the general education teacher as the content expert and the special education teacher as the learning expert (Lindeman & Magiera, 2014). This type of collaboration involves both teachers being present in the classroom for the same

student. The effectiveness of this model of collaboration depends on a high level of trust and time to work together outside of the classroom (Kode, 2014).

Collaboration in Special Education

Inclusive education has brought the worlds of general education and special education together and created a much higher demand for collaboration between the two groups (Eccleston, 2010). It is not appropriate or helpful for these educators to think of these groups as "us" and "them" or to use "my students" and "their students" (Dettmer et al., 2013). The underlying assumption of this change in perspective is the understanding that when teachers work together with a common goal, they are able to implement changes in their practice in meaningful ways that result in greater student achievement (Brownell, Adams, Sindelar, & Waldron, 2006).

Eccleston (2010) notes that there are four traits that a special education teacher should possess in order to be an effective collaborator with general education teachers: thoughtfulness, knowledgeable, compassionate, and a leader. Thoughtful special education teachers reflect on their teaching and critique it. These teachers are always looking for new ways to grow and improve. This trait lends itself to collaboration as these teachers are more willing to set aside egos and engage in the hard work of becoming a better teacher. This study provides a framework for teachers to reflect on their perceptions of their roles and see areas for improvement.

Knowledgeable special education teachers are sought out by their team mates as resources to help solve problems. This knowledge should include a familiarity of the various curricula used by the staff in their building (Purcell & Leppien, 1998). This knowledge and familiarity will be particularly useful when working with students who

spend some or all of their day in the general education classroom. Because IDEA requires students with disabilities to have access to and make progress in the general education curriculum, it is imperative that a special education teacher can teach this curriculum (McDonnell, McLaughlin, & Morrison, 1997; Walsh, 2001; Agaliotis & Kalyva, 2011). In addition to special education teachers needing content knowledge, there is also a need for general education teachers to increase their knowledge in accommodating diverse learners in the general education classroom (Dieker & Murawski, 2003). This study asked teachers to evaluate their confidence levels in delivering the general education curriculum and teaching students with disabilities.

A compassionate attitude toward not only the students and their families, but also toward co-workers is also important. A compassionate and successful collaborator is able to respect the views of teammates but also move the work toward thinking about what is best for a student (Eccleston, 2010). Negativity is bound to occur when working in teams, particularity when roles are misunderstood which can impact a teacher's perceived base of support, but a compassionate special education teacher will seek to understand the root cause of the negativity in order to develop a deeper level of collaboration. This study sought to identify the levels of support they felt from their co-workers.

Finally, Eccleston (2010) suggests that a successful collaborative special education teacher must work on developing leadership skills, particularly communication skills, organizational skills, and courage. In any team, personalities will differ and there may be clashes, however collaboration can still be achieved through careful listening and patient communication. This is especially true when trying to

navigate roles and expectations, as this study shows. Organizational skills can help negate the issue of a lack of collaborative meeting time (Eccleston, 2010). If special education teachers are willing to work smarter and more organized, time constraints can be alleviated, leaving room for better collaboration. Finally, it takes courage to put oneself out there and share ideas and be vulnerable in the interest of collaboration. If teachers are willing to step up and share, greater collaboration, for the good of students, can be achieved more easily.

However, despite knowing that collaboration can have powerful results, barriers to effective collaboration and implementation still exist.

Barriers to Collaboration

Commonly cited barriers to collaboration in education include lack of time or scheduling conflicts, the large number of people needed to make up a team, or a lack of administrative support (Spencer, 2005; Dettmer et al., 2013). Administrative support, particularly, has been found to be a key component of successful collaboration (Lindeman & Magiera, 2014). When educators are given the time needed to have team meetings, successful outcomes for the students are seen (Lindeman & Magiera). However, the current study does not address these barriers.

Several studies have shown that how teachers perceive their role and the roles of their fellow teachers plays a critical part in the outcomes of an inclusion program (Kochhar, West, & Taymans, 2000; McLeskey & Waldron, 2000; Vlachou, 2006; Agaliotis & Kalyva, 2011). Because the understanding of these roles is so important to successful inclusion of students with a CI, further research is needed into how teachers see their roles. Therefore, this study addressed how general education and special

education teachers' perceptions of their roles, in the education of students with a CI, may present a barrier to their collaboration with each other. In addition to understanding teaching roles, successful collaborators also approach the work understanding their own personalities and values and know that they will need to use those personalities and values for the good of the team (Spencer, 2005).

Another of these barriers is a lack of collaborative attitudes. Ryan (1999) found that teachers who held very different views of teaching were the least likely to collaborate with each other. These different beliefs also prevented the teachers from saying that they learned anything from a different teacher. Many studies have been done regarding teacher attitudes toward the inclusion of students with disabilities and found that negative attitudes negatively affect student achievement (Cook, 2001; Cameron & Cook, 2007; Swain et al., 2012; Taylor & Ringlaben, 2012). However, there is less research into teachers' attitudes toward collaboration for the sake of inclusion.

Summary

The goal of collaboration within inclusion programs should be to promote student success in the general education classroom (DuFour, 2004). Successful implementation of an inclusive education program depends on successful collaboration between general education teachers and special education teachers (Eccleston, 2010; Dettmer et al., 2013). When teachers have the time to meet and administrative support for their collaborative work, successful collaboration is more likely to occur (Spencer, 2005; Dettmer et al). In addition to having time and support, research has shown how important it is that teachers understand themselves, their roles and responsibilities, and

also the roles and responsibilities of their co-workers (Kochhar et al., 2000; McLeskey & Waldron, 2000; Vlachou, 2006; Agaliotis & Kalyva, 2011).

Conclusion

While much is known about why collaboration is important and what components lead to successful collaboration, less is known about how teachers actually perceive their roles and responsibilities. The purpose of this study is to take the knowledge that correct role perception is important and expand on that to learn what teachers actually perceive their roles in their daily work to be. Knowing what teachers perceive about themselves and their co-workers is an important step in improving collaboration for the benefit of students with a CI, who are included in the general education classroom. To this aim, Chapter Three will explain the creation of the study and Chapter Four will present and analyze the results. Finally, Chapter Five will offer discussion of the results and recommendations based on the analysis.

Chapter Three: Research Design

Introduction

This chapter will highlight the purpose of the study & the design of the study, including participants, instrumentation, data collection, and data analysis.

The purpose of this study was to identify what special education teachers and general education teachers perceive as their role(s) in educating students with a cognitive impairment (CI) in the general education classroom and to highlight any misconceptions or divergent perceptions that may interfere with effective collaboration and implementation. I developed a descriptive study to highlight general and special education teachers' perceptions of their roles as they relate to instructing students with CI in the general education classroom setting, as well as their perceptions of the other teachers' roles, in regard to these students. Identifying and addressing misconceptions may lead to better collaboration between general education and special education teachers, resulting in learning benefits for students with a CI.

Guiding this study were three overarching research questions:

1. How do general education teachers and special education teachers view their own roles in promoting and facilitating inclusion for students with a CI?
2. How do general education teachers and special education teachers view the other teachers' roles in promoting and facilitating inclusion for students with a CI?
3. What are the misunderstandings and miscommunications between these perspectives and perceptions?

Participants

The participants of this study were selected through a criterion based sampling procedure. Participants were general education and special education teachers who were currently or had, in the past three years, taught a student with a cognitive impairment. This student had to have spent at least part of the day in the general education classroom. Potential participants taught kindergarten to 5th grade. Participating schools included private, public, and charter schools, located within Kent and Ottawa Counties in Michigan.

Instrumentation

One instrument was utilized for the collection of data for this study. The survey instrument used in this study was developed by the researcher and can be found in Appendix D. The instrument was designed to obtain data related to the role general and special education teachers play in the education of students with a CI within the general education classroom setting. Therefore, the survey questions were generated based on the work that teachers may engage during a typical school day. The sources drawn upon for this included the researcher's observations and experience working within an inclusive school setting as well as the literature related to teaching students with CI and inclusion (Shade & Stewart, 2001; Santoli, S. P., Sachs, J., Romey, E.A., & McClurg, S., 2008; Leader-Janssen et al., 2012).

The questions were developed with the help of both general education and special education colleagues of the researcher. The survey was reviewed by an expert in special education and cognitive impairments, Dr. Amy Schelling, an expert in educational research, Dr. Mary Bair, and an expert in general education, Dr. Ellen

Schiller. After the initial review of the survey questions, the instrument was piloted with 5 teachers known to the researcher. Two questions were changed from open-ended ones to multiple choice questions, per the pilot.

The survey consists of six demographic questions, which do not contain any identifiable data markers. These demographic questions were used determine if the participant was a special education or general education teacher, how long they have been teaching, and what kind of school they teach in currently. The majority of the questions were Likert scale questions, including five questions asking participants to what extent they agree with a statement regarding collaboration (strongly disagree, disagree, neutral, agree, strongly agree). There were eight questions regarding classroom environment tasks, six questions regarding goals, testing, and schedules, five questions regarding adaptive behavior skills, and 19 questions regarding academic content areas. These 38 questions were all Likert scale questions with five possible responses as to what degree a task is a certain type of teacher's responsibility: total responsibility of the special education teacher, mostly the responsibility of the special education teacher, equal responsibility, mostly the responsibility of the general education teacher, or total responsibility of the general education teacher. There were two questions related to confidence in teaching both general education curriculum and teaching students with cognitive impairments (most confident and least confident). Both of these questions included a space for participants to write in an answer different that the ones offered in the multiple choice.

The Reliability of this survey is based on the truthfulness of participants regarding the survey questions. While one hopes that participants will answer an anonymous

survey truthfully, it cannot be guaranteed. A second limitation on the reliability is the reliance on school administrators to distribute the questionnaire to the appropriate teachers with accuracy.

Data Collection

The data was collected through a web-based, anonymous survey tool, SurveyMonkey, with a link sent in an email. The potential participants of the study were contacted through their building principal, via email. The researcher obtained a list of all schools in the two surveyed counties from publicschoolreview.com. The researcher then looked up each school on the list, found the staff list, identified the principal and found their email address on the publically posted school website. The principals were sent the introduction letter, found in Appendix A. In this letter were instructions to forward on the teacher letter, found in Appendix B, and the informed consent letter, found in Appendix C, to the applicable teachers in their building.

One week after the initial email request was sent to school principals, the researcher sent a reminder email to encourage principals to send the survey and consent letter to any applicable teachers in their building if they hadn't done so already. Due to the anonymous nature of the web-based survey, other than the follow-up email to principals, no further action was taken to contact non-respondents.

Data Analysis

The researcher consulted with the Statistical Consulting Center at Grand Valley State University to develop the survey questions and to conduct the initial data analysis. A Chi-Square test was performed on the Likert type questions using SAS. Following the Chi-Square test, a Fischers Exact test was performed in instances where there was not

enough data for a reliable Chi-Square, which was a majority of the data. Data was compared by looking at answers between the special education teachers and the general education teachers.

Summary

In summary, a descriptive study design was utilized, that included a single quantitative survey tool designed to identify the perceived role of educators related to the inclusion of students with CI in the general education classroom. The study was designed so that results may be used to highlight misconceptions among general education and special education teachers, in order to improve collaboration. This survey was also designed to be able to be replicated on a larger scale for future study.

Chapter Four: Results

Introduction

This chapter is divided into three main sections: context within which the data is situated, presentation of survey results, and summary highlighting the findings.

Context

The participants of this survey came from two counties in the western part of Michigan. The research was seeking participation from a specialized group of educators, those who, at the time of the study or recently had worked with students with a CI in their classroom. There were 20 survey respondents: 13 of the participants were general education teachers and seven were special education teachers. All 20 participants answered the questions regarding confidence but after those questions, it appears that one respondent ceased answering questions. The survey was structured so that participants had the ability to skip any question and this accounts for the variation in number of responses for each item in the survey. Although CI (or intellectual disability) is considered to be a high incidence disability category, a relatively small number of students with a CI/ID contribute to the overall number of students with disabilities being served under the federal special education law, IDEA.

According to the Office of Special Education (2016), in Michigan, in the 2014-2015 school year, only 1.25% of the total overall student enrollment (ages 6-21) were students receiving special education services for an intellectual disability (also known as a cognitive impairment). This is 10% of the total population of students receiving services for a disability (OSEP, 2016). Of all students in the state of Michigan receiving special education services for a CI/ID, 15.3% spend 80% or more of their school day in

the general education classroom, 22.5% spend 40-79% of their day in the general education classroom, 43.5% spend less than 40% of their day in the general education classroom, and 17.7% attend a separate school or residential facility (OSEP, 2016).

Of the 154 schools that were contacted, 20 responses were collected, giving a return rate of 12.8%. The response rate is adequate given the very narrow participation criteria of teachers who were currently or had taught a student with a CI in the past three years and small segment of the population of students being targeted for the study.

Findings

Statistical analysis was run by the Statistical Consulting Center at Grand Valley State University, using both SPSS and SAS. When the Chi square test was not reliable, due to low response rates, Fishers Exact Test was used to calculate p-values. In order for the Chi square test to be reliable, each possibility for response needed to have at least five respondents. Without five respondents per category, the p-values were not reliable. Fishers Exact calculates the p-value by extrapolating the data and interpreting it as if there were at least five respondents per category. For this study, $P<0.05$ was determined to be statistically significant.

Percentages for the Tables 3-7, containing responses in regards to perceived responsibility, were calculated as the percentage of each choice out of the total respondents (N) for that question, divided by general education teachers and special education teachers.

*Example: Percentage of general education teachers who perceived responsibility to be shared = ($N_{\text{equal responsibility}} / N_{\text{general education teachers}}$) *100.*

Table 1

Confidence in Delivering the General Education Curriculum in any Given Area

	General Education Teacher		Special Education Teacher	
	N	%	N	%
Not at all Confident	1	7.69	0	0
Neutral	0	0	1	14.29
Somew hat Confident	3	23.08	5	71.43
Very Confident	9	69.23	1	14.29

Pr<=P 0.0300 is based on Fishers Exact test.

Table 1 shows confidence in teaching the general education curriculum. Fishers Exact shows that there is a statistically significant difference between the confidence levels of general education and special education teachers. General education teachers report higher levels of confidence in delivering the general education curriculum.

Table 2

Confidence in Working with Students with a Cognitive Impairment

	General Education Teacher		Special Education Teacher	
	N	%	N	%
Not at all Confident	1	7.14	0	0.00
Not Very Confident	1	7.14	0	0.00
Neutral	2	14.29	1	14.29
Somewhat Confident	7	50.00	2	28.57
Very Confident	3	21.43	4	57.14

Pr<=P 0.6786 is based on Fishers Exact test.

While the difference in confidence levels for teaching or delivering the general education curriculum varied between general education and special education teachers, the difference in levels of confidence related to working with students with a CI varied less and was not found to be statistically significant.

Table 3

Classroom Environment

	Total Responsibility of the Special Education Teacher (SE)		Mostly the Responsibility of the Special Education Teacher (SE)		Equal Responsibility		Mostly the Responsibility of the General Education Teacher (GE)		Total Responsibility of the General Education Teacher (GE)	
	N	%	N	%	N	%	N	%	N	%
Setting up the general education classroom for all students to be able to move around it easily										
GE Teachers	0	0.00	0	0.00	2	15.38	6	46.15	5	38.46
SE Teachers	0	0.00	0	0.00	1	16.67	4	66.67	1	16.67
Helping a student with CI maintain a neat and organized desk in the general education classroom										
GE Teachers	0	0.00	1	7.69	8	61.67	4	30.77	0	0.00
SE Teachers	0	0.00	0	0.00	2	33.33	3	50.00	1	16.67
Assisting a student with CI to learn and practice the general education classroom routines (e.g. lining up, sitting during circle time, etc.)										
GE Teachers	0	0.00	0	0.00	6	46.15	7	53.85	0	0.00
SE Teachers	0	0.00	1	16.67	1	16.67	3	50.00	1	16.67
Helping a student with CI solve conflicts and problems with peers										
GE Teachers	0	0.00	0	0.00	11	84.62	2	15.38	0	0.00
SE Teachers	0	0.00	1	16.67	3	50.00	2	33.33	0	0.00
Teaching a student with CI the general education classroom management/behavioral expectations										
GE Teachers	0	0.00	1	7.69	4	30.77	6	46.15	2	15.38
SE Teachers	0	0.00	0	0.00	4	66.67	1	16.67	1	16.67
Providing both positive and corrective feedback regarding general education classroom behavior for a student with CI										
GE Teachers	0	0.00	0	0.00	6	46.15	6	46.15	1	7.69
SE Teachers	0	0.00	0	0.00	5	83.33	1	16.67	0	0.00
Setting up a general education classroom behavior management system for a student with CI										
GE Teachers	0	0.00	2	15.38	8	61.54	3	23.03	0	0.00
SE Teachers	0	0.00	2	33.33	4	66.67	0	0.00	0	0.00
Enforcing the general education classroom behavior management system for a student with CI										
GE Teachers	0	0.00	0	0.00	5	38.46	7	53.85	1	7.69
SE Teachers	0	0.00	0	0.00	2	33.33	4	66.67	0	0.00

Table 3 shows the responses of the participants in regards to setting up and maintaining the classroom environment. In general, the data show that both general education and special education teachers see this part of teaching a student with a CI as somewhat more the responsibility of the general education teacher. It is interesting to note, however, that, more often, general education teachers see these as shared tasks. One area where this is especially prominent is in helping students with a CI settle conflicts with peers. A large majority of general education teachers saw this as a shared task, while more special education teachers saw this task as mostly the responsibility of the general education teacher. Special education teachers, in general, seem to be more likely to see these classroom environment tasks as mostly the responsibly of the general education teacher. The exception to this is the task of setting up a general education classroom behavior management system. A higher number of special education teachers saw this as a shared task or mostly their responsibility. In regards to possible misunderstandings, the data show some discrepancies as to who bears the responsibility for various classroom environment tasks.

Table 4

Goals, Testing, and Schedules

	Total Responsibility of the Special Education Teacher (SE)		Mostly the Responsibility of the Special Education Teacher (SE)		Equal Responsibility		Mostly the Responsibility of the General Education Teacher (GE)		Total Responsibility of the General Education Teacher (GE)	
	N	%	N	%	N	%	N	%	N	%
Developing IEP (individualized education program) goals										
GE Teachers	2	15.38	9	69.23	2	15.38	0	0.00	0	0.00
SE Teachers	0	0.00	6	100.00	0	0.00	0	0.00	0	0.00
Conducting testing and evaluation of students with a CI										
GE Teachers	2	15.38	6	46.15	4	30.77	1	7.69	0	0.00
SE Teachers	4	66.67	2	33.33	0	0.00	0	0.00	0	0.00
Providing students with learning tasks to be completed in the general education classroom that align with their IEP goals										
GE Teachers	0	0.00	7	53.85	3	23.08	3	23.08	0	0.00
SE Teachers	0	0.00	1	16.67	5	83.33	0	0.00	0	0.00
Determining needed standardized testing accommodations for a student with a CI										
GE Teachers	3	23.08	8	61.54	2	15.38	0	0.00	0	0.00
SE Teachers	1	16.67	3	50.00	3	33.33	0	0.00	0	0.00
Implementing standardized testing accommodations for a student with a CI										
GE Teachers	3	23.08	7	53.85	2	15.38	1	7.69	0	0.00
SE Teachers	0	0.00	2	33.33	4	66.67	0	0.00	0	0.00
Facilitating student success in non-core academic classes (e.g. art, PE, music, etc.)										
GE Teachers	2	15.38	4	30.77	6	46.15	1	7.69	0	0.00
SE Teachers	0	0.00	3	50.00	2	33.33	1	16.67	0	0.00

Table 4 shows the responses of the participants in regards to the setting of goals for students with a CI, testing of those students, coordination of any accommodations the student may need for testing, and the non-core schedule of a student with a CI.

While the data show agreement between general education and special education teachers that this work falls into the realm of control of the special education teachers, there are some important differences to highlight. The degree as to how much of the responsibility the special education teacher has in the tasks varies between the two types of teachers. For example, while testing and evaluation is mostly agreed to be the task of the special education teacher, a large majority of the special education teachers see it as exclusively their responsibility. A larger percentage of general education teachers see this task as being mostly the responsibility of the special education teacher. Another area of discrepancy is in implementing standardized testing accommodations. Special education teachers see this, mostly, as a shared responsibility but general education teachers see this as mostly the responsibility of the special education teacher.

Table 5

Adaptive Behavior

	Total Responsibility of the Special Education Teacher (SE)		Mostly the Responsibility of the Special Education Teacher (SE)		Equal Responsibility		Mostly the Responsibility of the General Education Teacher (GE)		Total Responsibility of the General Education Teacher (GE)	
	N	%	N	%	N	%	N	%	N	%
Helping a student with CI maintain a neat and organized locker										
GE Teachers	0	0.00	3	23.08	7	53.85	2	15.38	1	7.69
SE Teachers	0	0.00	2	33.33	3	50.00	1	16.67	0	0.00
Helping a student with CI get ready for recess (e.g. winter gear, changing shoes, having friends to play with on the playground)										
GE Teachers	0	0.00	2	15.38	7	53.85	3	23.08	1	7.69
SE Teachers	0	0.00	0	0.00	3	50.00	3	50.00	0	0.00
Making sure a student with CI is able to get their lunch										
GE Teachers	0	0.00	3	23.08	3	23.08	5	38.46	2	15.38
SE Teachers	0	0.00	0	0.00	2	33.33	4	66.67	0	0.00
Helping a student with CI understand the schedule for the day										
GE Teachers	0	0.00	1	7.69	9	69.23	3	23.08	0	0.00
SE Teachers	0	0.00	0	0.00	3	50.00	3	50.00	0	0.00
Helping a student with personal care items (e.g. bathroom, hand washing)										
GE Teachers	2	15.38	4	30.77	5	38.46	2	15.38	0	0.00
SE Teachers	1	16.67	2	33.33	3	50.00	0	0.00	0	0.00

Table 5 shows the responses of the participants in the category of adaptive behavior skills, which are skills a person needs to function in whatever setting they are in, such as school. Within this category, it's important to note that general education teachers seem more willing to take on greater responsibility for these items. According to some of the general education teachers, a few tasks should exclusively be the work of the general education teacher. Conversely, the special education teacher respondents did not indicate that any of the tasks associated with adaptive behavior should be the sole responsibility of the general education teacher. Within these adaptive behavior tasks, special education teachers perceive the need to have some level of responsibility in regards to adaptive behavior skills, while general education teachers see less special education teachers to take responsibility. Yet, in a few areas, the special education teachers are giving more responsibility to the general education teachers than the general education teachers are claiming. Two such areas are helping students get ready for recess and helping students get their lunch. This points to neither group taking responsibility for these tasks and they could be overlooked or not completed by either teacher.

Table 6.1

Academic Content Areas

	Total Responsibility of the Special Education Teacher (SE)		Mostly the Responsibility of the Special Education Teacher (SE)		Equal Responsibility		Mostly the Responsibility of the General Education Teacher (GE)		Total Responsibility of the General Education Teacher (GE)	
	N	%	N	%	N	%	N	%	N	%
Provide access to grade level standards for ELA for a student with a CI										
GE Teachers	0	0.00	2	15.38	10	76.92	1	7.69	0	0.00
SE Teachers	0	0.00	2	40.00	2	40.00	1	20.00	0	0.00
Support the student with a CI in meeting the grade level standards for ELA										
GE Teachers	0	0.00	2	15.38	11	84.62	0	0.00	0	0.00
SE Teachers	0	0.00	2	40.00	3	60.00	0	0.00	0	0.00
Provide access to grade level standards for mathematics for a student with a CI										
GE Teachers	0	0.00	3	23.08	3	23.08	5	38.46	2	15.38
SE Teachers	0	0.00	0	0.00	2	33.33	4	66.67	0	0.00
Support the student with a CI in meeting the grade level standards for mathematics										
GE Teachers	0	0.00	3	23.08	10	76.92	0	0.00	0	0.00
SE Teachers	0	0.00	2	40.00	3	60.00	0	0.00	0	0.00
Provide access to grade level standards for science for a student with a CI										
GE Teachers	0	0.00	2	15.38	9	69.23	2	15.38	0	0.00
SE Teachers	0	0.00	1	20.00	2	40.00	2	40.00	0	0.00
Support the student with a CI in meeting the grade level standards for science										
GE Teachers	0	0.00	3	23.08	9	69.23	1	7.69	0	0
SE Teachers	0	0.00	2	40.00	3	60.00	0	0.00	0	0
Provide access to grade level standards for social studies for a student with a CI										
GE Teachers	0	0.00	2	15.38	9	69.23	2	15.38	0	0.00
SE Teachers	0	0.00	1	20.00	2	40.00	2	40.00	0	0.00
Support the student with CI in meeting the grade level standards for social studies										
GE Teachers	0	0.00	3	23.08	9	69.23	1	7.69	0	0.00
SE Teachers	0	0.00	2	40.00	3	60.00	0	0.00	0	0.00
Ensuring a student with a CI attains their IEP goals										
GE Teachers	0	0.00	4	30.77	9	69.23	0	0.00	0	0.00
SE Teachers	1	16.67	3	50.00	2	33.33	0	0.00	0	0.00

Table 6.2

Academic Content Areas

	Total Responsibility of the Special Education Teacher (SE)		Mostly the Responsibility of the Special Education Teacher (SE)		Equal Responsibility		Mostly the Responsibility of the General Education Teacher (GE)		Total Responsibility of the General Education Teacher (GE)	
	N	%	N	%	N	%	N	%	N	%
Developing accommodations for daily general education classroom activities/assignments										
GE Teachers	0	0.00	0	0.00	13	100.00	0	0.00	0	0.00
SE Teachers	0	0.00	3	60.00	2	40.00	0	0.00	0	0.00
Implementing/providing accommodations for daily general education classroom activities/assignments										
GE Teachers	0	0.00	1	7.69	10	76.92	1	7.69	1	7.69
SE Teachers	0	0.00	0	0.00	5	83.33	1	16.67	0	0.00
Developing accommodations for curriculum-based assignments/classroom tests										
GE Teachers	0	0.00	2	15.38	10	76.92	1	7.69	0	0.00
SE Teachers	0	0.00	3	50.00	3	50.00	0	0.00	0	0.00
Implementing/providing accommodations for curriculum-based assignments/classroom tests										
GE Teachers	0	0.00	4	30.77	8	61.54	0	0.00	1	7.69
SE Teachers	0	0.00	1	16.67	4	66.67	1	16.67	0	0.00
Assigning homework										
GE Teachers	0	0.00	0	0.00	8	61.54	4	30.77	1	7.69
SE Teachers	0	0.00	0	0.00	2	33.33	4	66.67	0	0.00
Providing accommodations for homework										
GE Teachers	0	0.00	4	33.33	7	58.33	1	8.33	0	0.00
SE Teachers	0	0.00	2	33.33	3	50.00	1	16.67	0	0.00
Grading homework										
GE Teachers	0	0.00	1	9.09	3	27.27	6	54.55	1	9.09
SE Teachers	0	0.00	1	20.00	1	20.00	2	40.00	1	20.00
Communicating student progress in the general education classroom with parents										
GE Teachers	0	0.00	0	0.00	9	69.23	4	30.77	0	0.00
SE Teachers	0	0.00	0	0.00	4	66.67	2	33.33	0	0.00
Ensuring a student with CI is making progress in the general education curriculum										
GE Teachers	1	7.69	1	7.69	11	84.62	0	0.00	0	0.00
SE Teachers	0	0.00	1	16.67	5	83.33	0	0.00	0	0.00

Table 6.1 and Table 6.2 show the responses of the participants in the category of the core academic content areas and the perceived responsibility related to teaching those areas. In addition to the core content areas, this section contains questions regarding homework, accommodations, communication with parents, and IEP/general education goals. One note about the change in N values, particularly for the homework questions: this survey was sent to K-5th grade teachers. Lower elementary teachers may have skipped this question because it tends not to be applicable to them. The practice of assigning homework is less frequent in lower grades. While general education teachers and special education teachers seem to generally agree on whose responsibility the teaching of the various subjects is, there are a few exceptions to this agreement. One major difference is in the assigning of homework – a majority of general education teachers saw this task as one to be shared equally, while a majority of special education teachers saw it as mostly the responsibility of the general education teacher. Several areas had more disagreement among the same type of teacher. For example, opinions of general education teachers varied on whose responsibility it is to ensure that a student with a CI is making progress in the general education curriculum, on grading homework, and developing and implementing classroom accommodations. These differences within the same type of professionals highlight the need for cohesiveness among teachers' roles and expectations of themselves and others, if students are to be successful.

Table 7

Collaboration with Co-Workers

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	N	%	N	%	N	%	N	%	N	%
My co-worker (either the general education teacher or the special education teacher), whom I work with to teach my student with CI, and I have established a high level of collaboration										
GE Teachers	0	0.00	0	0.00	3	23.08	5	38.46	5	38.46
SE Teachers	0	0.00	0	0.00	2	33.33	3	50.00	1	16.67
I understand my co-worker's (either the general education teacher or the special education teacher) role in working with students with CI										
GE Teachers	0	0.00	1	7.69	0	0.00	7	53.85	5	38.46
SE Teachers	0	0.00	0	0.00	2	33.33	3	50.00	1	16.67
I understand my role in working with students with CI										
GE Teachers	0	0.00	1	8.33	0	0.00	5	41.67	6	50.00
SE Teachers	0	0.00	0	0.00	1	16.67	3	50.00	2	33.33
I was given a clear job description, when hired, as to my role in working with students with CI										
GE Teachers	1	7.69	6	46.15	3	23.08	2	15.38	1	7.69
SE Teachers	1	16.67	2	33.33	2	33.33	1	16.67	0	0.00
I feel supported by my co-worker in working with students with CI										
GE Teachers	0	0.00	0	0.00	0	0.00	7	53.85	6	46.15
SE Teachers	0	0.00	1	16.67	1	16.67	2	33.33	2	33.33

Table 7 shows the responses of the participants in regards to how they work with each other and how well they understand themselves. Both general education teachers and special education teachers feel that they have a high level of collaboration with the other, to varying degrees (from neutral to strongly agree). There is greater variety in answers when asked about the job description of the other teacher in regards to students with a CI. In general, general education teachers feel they understand the special education teachers' role to a stronger degree than special education teachers understand general education teachers' role. It is particularly interesting to note how teachers see their understanding of their own role in regards to teaching students with a CI. While one might expect to see strong agreement from special education teachers, this is not the case: only 33% strongly agreed and 50% just agreed. While both general and special education teachers agreed to some extent that they understood their role in regards to students with a CI, very few felt strongly that they were given a clear job description in regards to this aspect of their jobs. A final note is that general education teachers feel that they are supported by the special education teachers in their work with students with a CI but the responses to this question by the special education teachers are more varied, with some not feeling very supported or feeling neutral.

Summary

The collected data show a wide range of perceptions related to the teaching of students with a CI, with trends appearing in the various categories. In certain areas, such as classroom environment, general education teachers are willing to take responsibility for related tasks. Yet others have special education teachers taking responsibility. It is interesting to note that, while general education teachers are willing

to say that a variety of tasks are solely the responsibility of the special education teachers, there are very few tasks the special education teachers are willing to say are solely the responsibility of the general education teacher. The potential for misunderstandings comes when there is a difference in opinion over whose responsibility a task really is and how that responsibility gets decided and delegated. Furthermore, there is an interesting discrepancy in how supported the teachers feel by their coworkers when working with students with a CI. These perceptions, feelings, and opinions will be looked at in depth in Chapter Five.

Chapter Five: Conclusion

Introduction

This chapter is divided into nine sections: the summary of the study, the conclusion drawn from the study, discussion of the theoretical frameworks of the study, a discussion of each of the five sections of the survey, and final recommendations arising from the study.

Summary of Study

Teaching students with a CI, who are included in the general education classroom, is a complex task and that task must be shared amongst the professionals who work with them. The general education teacher and the special education teacher must be able to work collaboratively in order to provide the best possible education for students with a CI. Unfortunately, effective collaboration can be a challenge to achieve (Schneider, 2007). One possible explanation for this difficulty is the lack of understanding teachers have of their own roles and each other's roles when it comes to teaching students with CI in the general education classroom.

This study was created to find out what teachers in two counties in Michigan think about their roles, their co-workers' roles, and their level of confidence and collaboration, all in regards to working with students with a CI who spend at least part of their school day in the general education classroom. The following three research questions framed the study:

1. How do general education teachers and special education teachers view their own roles in promoting and facilitating inclusion for students with a CI?

2. How do general education teachers and special education teachers view the other teachers' roles in promoting and facilitating inclusion for students with a CI?
3. What are the misunderstandings and miscommunications between these perspectives and perceptions?

The quantitative survey asked questions about confidence in teaching both the general education curriculum and teaching students with a CI, questions regarding various aspects of a school day (classroom environment, goals/testing/schedules, adaptive behavior, and academic content areas), and finally, questions regarding the level of collaboration and support from their co-workers. All of these questions were asked in the form of Likert scale questions. The demographic questions were all multiple choice.

Results of the survey came from 20 respondents, an adequate number due to the narrow participant criteria and the low prevalence rate of students with a CI in the state of Michigan. Results show a variety of perceptions regarding whose role it was to complete classroom tasks related to teaching students with a CI. These results will be further explored in this chapter.

Conclusion

The first purpose of this study was to find out how special education teachers and general education teachers perceive their roles in regards to students with a CI. The survey found a variety of differences and results regarding how general education and special education teachers viewed their own roles in facilitating inclusion for

students with a CI. The study also found differences in how teachers perceived the responsibilities of their co-workers in the same areas of teaching.

This study confirms that misunderstandings exist in regards to the various tasks of teaching, particularly in the areas of goals and testing, teaching adaptive behavior skills, and the teaching of language arts and mathematics. This study also found areas of consensus and commonality, such as many of the classroom environment tasks and a strong desire to work more collaboratively, that can be used as foundations for building more collaborative partnerships and offering a place to begin to work on the misunderstandings.

Discussion

Theoretical Frameworks

In light of Bronfenbrenner's (1979) ecological systems theory, this study highlighted the ways teaching professionals interact with co-workers and how they see themselves and their co-workers fitting into the system of their school setting, at the meso-system level (Onwuegbuzie et al., 2013). Even when a teacher is not actively part of a situation, that situation can have an effect on that teacher because of how perceptions play out among general education and special education teachers. For example, if a general education teacher makes a decision in their classroom and doesn't inform the special education teacher, this may be because the general education teacher thought the decision was their responsibility. However, the special education teacher could perceive that decision as a joint one and is now affected in a negative way by the general education teacher making assumptions and taking action.

Two generalizations of the data can be made: analytical generalizations and naturalistic generalizations (Onwuegbuzie et al., 2009).

From an analytical perspective, while the sample size is small, it can be concluded that misunderstandings exist between general education teachers and special education teachers and these misunderstandings can be applied to other schools, similar to the ones where the study was conducted.

Naturalistic generalizations can be drawn, individually, by readers of this study. When general education teachers and special education teachers review the findings presented here, they will be able to see how the data fits their own understandings and experiences. They will be able to draw their own conclusions as to how teaching students with a CI in their school and classroom is working and be able to see areas in which improvement can be made in their collaborative practice.

This study also helps to identify misunderstandings related to the five components of collaboration, which were presented in Chapter Two: governance, administration, mutuality, norms, and organizational autonomy (Thomson, Perry, & Miller, 2007). These areas of collaboration will be highlighted in the discussion of the sections of the survey.

Confidence Levels & Collaboration

This study began by asking participants how confident they feel delivering the general education curriculum in any given area. A majority of the general education teachers said they felt very confident and a few chose somewhat confident. This is not a surprising result, as elementary general education teachers train to be able to deliver content in all academic areas. Lapses in confidence could come from being asked to

take on a brand new curriculum or perhaps sharing teaching responsibilities with another teacher and not actually teaching all the core academic areas. Special education teachers, for the most part, chose somewhat confident. This is generally to be expected as special educators also need to know the curriculum that is being taught in the general education classroom; IDEA that requires all students with disabilities have access to and progress in the general education curriculum (McDonnell et al., 1997; Walsh, 2001; IDEA, 2004). Being able to confidently assist or teach these core subjects is critical in a time when students with disabilities are being included in the general education classroom (Purcell & Leppien, 1998). However, it is not surprising to find that general education teachers generally perceive a higher level of confidence, as their teacher preparation programs focus more heavily on specific content delivery. Teacher preparation for special education teachers tends to focus to a greater extent on instructional delivery techniques and strategies. This can be problematic, as general education teachers may have the perception that they do more of the work of planning lessons and delivering content, even in a co-teaching situation (Austin, 2001; Keefe & Moore, 2004).

Participants were asked to rate their confidence level in terms of teaching a student with a CI. Here, differences between general education teachers and special education teachers were not statistically significant. This is surprising, as one would expect to find general education teachers less confident and special education teachers very confident. Instead, 50% of the general education teachers said they felt somewhat confident. This study was sent to teachers who have worked with students with a CI, which may result in the higher levels of confidence in the general education teachers.

Having taught a student with CI has given them the knowledge and ability and confidence to know they can do it. It would be interesting to survey pre-service teachers or teachers who have never taught a student with a CI as to their confidence levels. It is also possible that general education teachers are taking more professional development or learning more in their pre-service classes, due to the increasing need to teach students of all abilities in their classroom (McDonnell et al., 1997).

However, only 57.14% of the special education teachers said they felt very confident in their abilities to teach a student with a CI. Several possibilities could exist for this seeming lack of confidence, in comparison to the general education teachers. One possibility could be training: special education teachers are asked to pick an area of focus during their college courses. A teacher who chose to study learning disabilities or emotional impairments may not feel as confident teaching a student with a CI. In this survey, special education teachers were not asked what endorsements they hold. However, all of the special education teachers who responded to the survey have recently worked with a student with a CI, which leads to another possible explanation.

The lack of confidence could come from working with a student with a CI who is included in the general education classroom. Their lack of understanding of how their role is supposed to look in regards to supporting a student with a CI in the general education classroom could be hindering their confidence. If they do not feel comfortable in the general education classroom because they don't know what the general education teacher is expecting of them, they may feel less confident as a teacher. This is highlighted later in the survey when participants were asked if they understood their own role in working with a student with a CI. Only 50% of special

educators agreed they understood and only 33.33% strongly agreed. While these two categories form a majority, there is still room for doubt. Research has shown that special education teachers often leave their college programs undertrained in how to co-teach or work in a classroom with a general education teacher (McHatton & Daniel, 2008). This highlights deficiencies in organizational autonomy of the special education teachers, as they do not seem to have a clear picture of their role. There was also less agreement when asked if they had been given a clear job description.

Furthermore, when asked if they understood their co-worker's role in working with a student with a CI, around 50% of both special education teachers and general education teachers answered that they agreed and 33% of special education teachers were neutral on this question.

While special education teachers generally agree they understand their co-worker's role, the results were mixed as to how supported they felt by the general education teacher. This lack of support could be another cause of feeling less confident, particularly because, in comparison, the general education teachers all agreed or strongly agreed that they felt supported by the special education teacher. When a teacher feels supported in his or her work, confidence increases, mutuality increases, and norms based on trust increase, resulting in higher levels of collaboration.

Yet, when asked if the respondent and their co-worker had a high level of collaboration, each teacher answered neutral, agree or strongly agree. This shows that the teachers did have a sense of administration in the way that they worked together. In general, special education teachers were more likely to select neutral or agree and general education teachers were more likely to answer strongly agree. The reasons for

the disconnect between feelings of support and perceived levels of collaboration will be presented in the discussion of various teaching tasks.

Classroom Environment Tasks

As noted in Chapter Four, these tasks were generally seen as the responsibility of the general education classroom teacher. Yet, disparities between the two groups of teachers do exist. For example, more special education teachers felt these tasks to be the sole responsibility of the general education teacher than general education teachers did. Meanwhile, general education teachers were more likely to see these tasks as ones that should be shared equally. These differences could be a cause for breakdowns in communication, collaboration, and trust. If a general education teacher perceives a task to be a shared one, yet a special education teacher sees the task as one that should be the sole responsibility of the general education teacher, there may be cause for a teacher to view the other teacher as not performing their duty, which may affect the collaboration process and ultimately have a negative effect on the success of the student's experience in the inclusive setting. For example, 84% of general education teachers saw this as a shared task, while only 50% of special education teachers saw it that way. Possible conflict could arise when a general education teacher doesn't think their co-worker is doing enough to help teach the student with a CI to settle conflicts and the special education teacher thinks their co-worker is trying to pass off a task that should mostly be their responsibility. Governance must be established through the clarification of roles in order to increase collaboration.

Goals, Testing, and Schedules

These tasks were interesting in that special education teachers saw them as their responsibility. Yet, general education teachers were more likely to say that the tasks should be shared or even mostly the responsibility of the general education teacher.

One area of significant difference is in the realm of testing and evaluation of a student with a CI. Sixty-six percent of special education teachers said this task was theirs alone and 33% said it was mostly their task. In contrast, 30% of general education teachers saw this as a shared task and 7.69% saw it as mostly their task. This misunderstanding could arise from what each group perceives as "testing and evaluation." Special education teachers generally think of testing and evaluation as measuring cognitive ability or testing for conditions like Attention Deficient Disorder. They are also responsible for continuously monitoring and reporting student progress toward IEP goals and conducting yearly assessments to determine a student's Present Levels of Academic and Functional Performance, which is necessary data to report during the IEP process (Overton, 2012). However, perhaps the general education teachers saw these words and assumed they meant regular classroom tests. Regardless, this is an area of confusion. Perhaps general education teachers are more willing to take on some of this work and special education teachers need to see this as an area where they could be more supported by their co-workers. As the system currently stands, general education teachers note when a student is not making progress in the general education curriculum, they try various interventions, meet with an intervention team for more ideas, and finally, if no interventions are successful, more

formal testing is turned over to the special education teacher or assessment team (Overton, 2012).

Data from the study show that special education teachers perceive a high level of responsibility for the development of students' annual IEP goals, however some of the general education teachers indicated this to be a shared responsibility. One hundred percent of special education teachers perceived this to be mostly their responsibility but 15% of the general education teachers saw it as a shared task. There is another side to this, though. Fifteen percent of general education teachers also saw this task is only the responsibility of the special education teacher. Differences in perceptions related to who is responsible for developing these goals could lead to ineffective collaboration between teaching parties and represents an area of possible misconception.

A third area where differences in perceptions are apparent from the data are in the determination and implementation of standardized testing accommodations. While determination of the accommodations is generally agreed to be primarily the responsibility of the special education teacher, implementation is a different story (Mastropieri, Scruggs, Graetz, 2005). None of the special education teachers saw this as their task alone, yet 23% of the general education teachers did indicate the responsibility laid solely with the special education teachers. In addition, 53% of the general education teachers perceived the implementation to be mostly the responsibility of the special education teacher while 66% of the special education teachers saw implementation of accommodations as a shared responsibility. However, according to IDEA (2004), general education teachers must be aware of the contents of a student's IEP, including accommodations, and they are responsible for implementing those listed

accommodations. This is an area of concern as special education teachers may be looking for support, collaboration, and the taking of responsibility from their co-workers, and general education teachers may think their co-worker should be on their own for the implementation of accommodations. It is also very problematic if a special education teacher is assuming their co-worker is implementing accommodations from the IEP and this is not occurring because of a misunderstanding as to whose responsibility that task is. Yet, research has shown that general education teachers are not always taught, during their teacher preparation program, how to review IEPs and determine accommodations (McHatton & Daniel, 2008).

Setting goals and implementing testing accommodations are critical to the effective education of a student with a CI and it is alarming to see some significant disparities between the perceived responsibilities of the two teacher groups in such an important part of inclusive education.

Adaptive Behavior Skills

According to the American Association of Intellectual & Developmental Disabilities (2013), "adaptive behavior is collection of conceptual, social, and practical skills that all people learn in order to function in their daily lives" (Definition section, para. 4). Tasks related to the teaching of these skills at the elementary level include cleanliness of space, recess activities, eating skills, understanding the daily schedule, and clothing and bathroom tasks.

Data from this study suggest that general education teachers showed a willingness to take on a greater level of responsibility for teaching adaptive behavior skills to students with a CI. For example, tasks such as helping a student maintain a

neat locker and desk, helping with recess tasks, and helping with lunch had responses from the general education teachers that the responsibility for these tasks lay completely in the realm of the general education teachers' work. This could be due to the fact that, particularly in the younger grades of elementary school, the general education teacher is teaching, modeling, and reinforcing these tasks for all of the students in the classroom. Yet, none of the special education teachers indicated that any of the adaptive behavior tasks are the sole responsibility of the general education teacher. This could be due, in part, to the fact that deficits in adaptive behavior are prevalent in students with CI (Gargiulo, 2012). Limitations of adaptive behavior skills are one of the key criteria in diagnosing a CI or intellectual disability (American Association on Intellectual and Developmental Disabilities, 2013). The teaching of a functional curriculum or life skills curriculum has been a large part of the education of students with a CI and these skills rely heavily on adaptive behavior skills (Gargiulo, 2012). This emphasis of these skills in IEPs may be part of the reason special education teachers see the responsibility for teaching adaptive behavior to students with a CI as their responsibility.

The data showing that special education teachers did not indicate a high level of feeling supported by their general education co-workers, and the difference in perceptions related to whose responsibility it is to teach adaptive behavior skills highlight a possible problem. These differences in perception may contribute to the perception of lack of support overall. Perhaps, if special education teachers were willing to give up some of their responsibility in these areas, they would feel like they had more

support and help from their general education co-workers, especially if these general education teachers are willing to take on greater responsibility in these tasks.

Academic Content Areas

The data related to the perception of roles in the academic content areas were diverse. While there is lack of consensus between general education teachers and special education teachers regarding responsibility of many of the tasks, perhaps the more striking issue is the lack of consensus among the separate groups. For example, when asked about providing access to grade level standards for mathematics for a student with a CI, general education teachers answered in the following ways: 23% saw this task as mostly the responsibility of the special education teacher, 23% as shared responsibility, 38% as mostly the responsibility of the general education teacher, and 15% as the total responsibility of the general education teacher. It raises the question as to how collaboration can be effective among general education teachers and special education teachers if the same type of teachers cannot agree on their role. Some of this could be due to differences in which subjects the student with a CI is present for in the general education classroom. Conversely, in response to providing access to grade level standards in mathematics, the data from the special education teachers in this same category show a difference in perception from the general education teachers. Thirty-three percent of special education teachers saw this task as a shared task and 66% saw it as mostly the responsibility of the general education teachers. This is in line with the research showing that general education teachers generally feel more responsible for teaching content (Mastropieri et al., 2005).

Other areas show results of a similar nature. When it comes to providing access to grade level standards for English language arts, general education teachers overwhelmingly saw it as a shared task, with 77% agreement with the equal responsibility statement. Yet special education teachers had differing opinions: 40% believing it is mostly the responsibility of the special education teacher, 40% seeing it as a shared task, and 20% perceiving it as mostly the responsibility of the general education teacher. If special education teachers and general education teachers do not have a clear understanding of their own roles in this area, it could have a negative impact on their ability to clearly articulate their role and collaborate with their counterpart on planning how best to provide access to grade level standards (Dettmer et al., 2013).

Recommendations

There are several recommendations for teaching practice, based on the results of the current study. The data suggest that each type of teacher's roles are not clearly known by the other teacher, which leads to misconceptions around whose responsibility it is to perform certain tasks or support students with a CI in the general education classroom. General education teachers and special education teachers should engage in discussion to determine responsibility for the various tasks associated with effectively implementing inclusive practices for a student with a CI. Ideally, these conversations should occur before a student with a CI is placed in a general education classroom. Based on the lack of role definition upon hiring, principals should put in the work of helping define the role before an inclusion situation is presented. If administrators are able to help define roles, there will be less room for ambiguity as teachers try to navigate an inclusive situation.

The data also suggests that special education teachers feel under-supported by their general education teaching co-workers. Special education teachers should examine their practice and identify the areas in which they feel under-supported and articulate these in a collaborative manner. If they are able to express these areas to their general education teaching co-workers, both parties can work together to form a plan to address the issues and increase the feelings of support for the special education teacher.

The data also suggest that general educations teachers have tasks for which they feel they could take on a greater level of responsibility. General education teachers should examine their practice and identify these areas and articulate them to their special education counterpart. This willingness to take on new or greater responsibility could also help increase how supported the special education teachers feel. In addition to being willing to listen to the general education teachers, the special education teachers may need to work on letting go of some of their responsibility and trusting the general education teacher to be able to assume that responsibility.

According to the data, general education teachers and special education teachers could both benefit from additional training in the areas of expertise of the other person. Special education teachers could benefit from gaining knowledge and confidence in the teaching of the general education content areas. General education teachers could benefit from learning more about how to read, interpret, and implement IEPs.

Furthermore, several opportunities for further study emerged from this study. Further study could involve the development of a tool to be used by schools to gauge

understanding of roles of the general education and special education teachers in regards to inclusion of students with a CI. This tool could then be used to determine professional development topics and methods of collaboration among teachers.

Further study could also include implementation of a specific method of collaboration, which could be compared with the results of the current study, to determine if implementation of formalized collaboration affects the perception of roles.

Further study could be done, as mentioned previously, into confidence levels of teachers who haven't worked with students with a CI. Further study could also involve studying the confidence levels of special education teachers, broken down by what endorsements they hold for teaching various disabilities. This could also extend to general education teachers and compare those with formal training in inclusive education and those without that training.

Finally, this study could also be replicated on a larger scale to produce further results.

Appendix A
Transcript of Principal Invitation Email for Study

Hello,

You are being contacted because some of your teachers are being cordially invited to participate in a research study that will provide valuable information and knowledge related to the how special education teachers and general education teachers view their own roles and each other's roles in regards to the inclusive education of students with cognitive impairments in the general education classroom. By assisting in distributing this email to the appropriate employees, you will be helping to provide valuable information to the field of special education that is currently lacking. Your assistance in participation will also provide insights into the collaboration of special education teachers and general education teachers.

Please distribute the attached letters and link to your staff members who meet the requirements:

1. Classroom teachers who are currently teaching or have taught a student with a cognitive impairment within the last three years.
2. Special education teachers who are currently teaching or have taught a student with a cognitive impairment within the last three years.

The questionnaire is a web-based questionnaire that can be accessed by clicking on the link contained in this email. The questionnaire will take 15-25 minutes to complete online and is comprised mostly of questions your staff can respond to by clicking a check box. The questionnaire can be completed in one session or several shorter sessions.

Please be sure to forward the invitation, Informed Consent Letter, and link to the questionnaire.

Please consider helping with this study, by distributing the web-based questionnaire. The information your staff can provide is critical for increasing and deepening our understanding of how teachers collaborate to help all students succeed in the classroom.

Sincerely,

Justine Keuning-LaFrence
Grand Valley State University

Appendix B
Transcript of Invitation Email for Study

Hello,

You are being cordially invited to participate in a research study that will provide valuable information and knowledge related to the how special education teachers and general education teachers view their own roles and each other's roles in regards to the inclusive education of students with cognitive impairments in the general education classroom. By completing the questionnaire, you will be providing valuable information to the field of special education that is currently lacking. Your participation will also provide insights into the collaboration of special education teachers and general education teachers.

The questionnaire is a web-based questionnaire that can be accessed by clicking on the link contained in this email. The questionnaire will take 15-25 minutes to complete online and is comprised mostly of questions you can respond to by clicking a check box. The questionnaire can be completed in one session or several shorter sessions.

If you choose to participate, please be sure to thoroughly read through the Informed Consent Letter, prior to submitting your questionnaire responses. The Informed Consent Letter contains details about your participation in the study, and is attached to this email.

Please consider participating in the study, by completing the web-based questionnaire. The information you can provide is critical for increasing and deepening our understanding of how teachers collaborate to help all students succeed in the classroom.

Sincerely,

Justine Keuning-LaFrence
Grand Valley State University

Appendix C
Informed Consent Letter

Title of Study: Perceptions of Roles of General Education Teachers & Special Education Teachers in Regards to Inclusion
Researcher: Justine Keuning-LaFrence, graduate student, College of Education, Grand Valley State University

You have been invited to participate in a research project titled "Perceptions of Roles of General Education Teachers & Special Education Teachers in Regards to Inclusion". 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 via email to Justine Keuning-LaFrence (keuningj@mail.gvsu.edu) if you need additional clarification.

Purpose
This research seeks to explore the collaborative nature of general education teachers and special education teachers, in regards to students with mild to moderate cognitive impairments who participate for at least a portion of their school day within the general education classroom setting. The study will help identify what special education teachers and general education teachers perceive as their role(s) in educating students with CI and to highlight any misconceptions or divergent perceptions that may interfere with effective collaboration. Identifying and addressing misconceptions may lead to better collaboration between general education and special education teachers, resulting in learning benefits for students with special needs.

Reason for Invitation
You have been invited to participate in this study because the investigator wishes to gain a better understanding of how general education teachers and special education teachers view their own roles and their colleagues' roles in regards to various facets of teaching students with cognitive impairments in the general education classroom.

How Participants will be Selected
Teachers from from public, private, and charter schools in Ottawa County, MI will be invited to participate. Potential participants will include two categories: elementary general education teachers who currently, or in the last 3 years, have taught students with mild to moderate CI in their classroom and elementary special education teachers who currently or in the last last 3 years or currently have had students with mild to moderate CI on their caseload, who have participated in the general education classroom setting for at least a portion of their school day.

Procedures
This study includes a questionnaire that will be completed online, through the use of a secure web-based survey link, called Google Forms. Potential participants will be

contacted via email and invited to participate in the study. The link to the questionnaire will be included in the invitation email.

The questionnaire is a web-based questionnaire that can be accessed by clicking on the link contained in this email. It is comprised mostly of questions participants can respond to by clicking a check box. The questionnaire can be completed in one session or several shorter sessions. There are four sections: demographics, defining roles, collaboration, and short answer. The questionnaire may take up to 30 minutes to complete online. Your responses will be completely anonymous; there are no questions on the questionnaire that will personally identify you, your school, or your students. Please do not put your name anywhere in the text boxes provided on the questionnaire. You are asked to voluntarily provide specific information to this web site. You may skip any question or stop participating at any time. The information collected will be used for the stated purposes of this research project only and will not be provided to any other party for any other reason at any time except and only if required by law. You should be aware that although the information you provide is anonymous, it is transmitted in a non-secure manner. There is a remote chance that skilled, knowledgeable persons unaffiliated with this research project could track the information you provide to the IP address of the computer from which you send it. However, your personal identity cannot be determined.
If you choose not to participate in the study, you will not go to the questionnaire link provided and can disregard the email invitation and consent letter.

When you accept the invitation to participate in this study, after reading the informed consent letter, you will click on the link to the questionnaire provided in the invitation email. By clicking on the link, you will be directed to the questionnaire. Upon completion of the questionnaire, you will click the submit button. Clicking the submit button of the questionnaire, indicates your consent for use of the responses you supply to be reported as a summary.

Risks
We do not think there is any risk to you from participating in this research. There are no costs associated with participation in this study.

Potential Benefits to You
I believe this study will help you see where your own thoughts are in regards to your teaching practice, both with students with special needs and with your colleagues. This survey could spark some conversation as to how you could implement better collaboration within your school. When the results are published, you may find more information that would be helpful to improving collaboration.

Potential Benefits to Society
Hopefully, the results of this study will be useful to those who help schools become more collaborative environments. It may also be helpful to those who teach pre-service teachers as to how best to begin collaborating with their new colleagues. Summarizing

and sharing the results with a boarder audience could contribute to the knowledge base regarding collaboration and special education.

Voluntary Participation
Your participation in this research study is completely voluntary. You do not have to participate. You may quit at any time without any penalty to you.

Privacy and Confidentiality
Your name will not be given to anyone other than the research team. All the information collected from you or about you will be kept confidential to the fullest extent allowed by law. In very rare circumstances specially authorized university or government officials may be given access to our research records for purposes of protecting your rights and welfare.

Justine Keuning-LaFrence will be the only individuals that will have access to the raw data collected.

Research Study Results
Upon completion of the study a summary of the results will be published as a finished thesis with Grand Valley State University. The results may also be published in a journal article or presented at a conference in the state of Michigan. Due to the fact that the questionnaire is completed anonymously, there is no potential that your identity would be compromised in any way.

If you wish to learn about the results of this research study you may request that information by contacting: Justine Keuning-LaFrence at keuningj@mail.gvsu.edu or 616.723.5359

AGREEMENT TO PARTICIPATE

- The details of this research study have been explained to me including what I am being asked to do and the anticipated risks and benefits;
- I have had an opportunity to have my questions answered;
- I am voluntarily agreeing to participate in the research as described on this form;
- I may ask more questions or quit participating at any time without penalty.

Your consent is indicated when you submit the questionnaire electronically, by clicking the submit button at the end of the web-based questionnaire.

If you have any questions about this study you may contact the lead researcher as follows: NAME: Justine Keuning-LaFrence PHONE: 616.723.5359
E-MAIL: keuningj@mail.gvsu.edu

If you have any questions about your rights as a research participant, please contact the **Research Protections Office** at Grand Valley State University, Grand Rapids, MI Phone: 616-331-3197 e-mail: HRRC@GVSU.EDU

Appendix D
Survey Questions

Perception of Roles

Preamble

This survey is intended for general education and special education teachers, who currently work or have worked with students with a cognitive impairment (CI). You are asked to voluntarily provide specific information to this web site. You may skip any question, or stop participating at any time. The information collected will be used for the stated purposes of this research project only and will not be provided to any other party for any other reason at any time except and only if required by law. You should be aware that although the information you provide is anonymous, it is transmitted in a non-secure manner. There is a remote chance that skilled, knowledgeable persons unaffiliated with this research project could track the information you provide to the IP address of the computer from which you send it. However, your personal identity cannot be determined.

Perception of Roles

Section 1

1. Please indicate your current position

General education teacher

Special education teacher

2. Please answer to the best of your ability

How confident do you feel delivering the general education curriculum in any given area?

How confident do you feel working with students with add cognitive impairment (CI)?

Not at all confident

Not very confident

Neutral

Somewhat confident

Very confident

3. In what areas of the general education curriculum are you

Most confident?

Least confident?

Math

Language Arts

Science

Social Studies

Other (please specify)

4. Do you believe you have been adequately trained to provide instruction for students with CI in your classroom?

Yes

No

Please indicate in what areas would you like additional training or support

Perception of Roles

Section 2

Defining the Roles

5. Please indicate to what extent you believe, ideally, each item is the responsibility of the special education teacher or the general education teacher in a **Classroom Environment.**

Total responsibility of the special education teacher

Mostly the responsibility of the special education teacher

Equal responsibility

Mostly the responsibility of the general education teacher

Total responsibility of the general education teacher

Setting up the general education classroom for all students to be able to move around it easily

Helping a student with CI maintain a neat and organized desk in the general education classroom

Assisting a student with CI to learn and practice the general education classroom routines (e.g. lining up, sitting during circle time, etc.)

Helping a student with CI solve conflicts and problems with peers

Teaching a student with CI the general education classroom management/behavioral expectations

Providing both positive and corrective feedback regarding general education classroom behavior for a student with CI

Setting up a general education classroom behavior management system for a student with CI

Enforcing the general education classroom behavior management system for a student with CI

6. Please indicate to what extent you believe, ideally, each item is the responsibility of the special education teacher or the general education teacher in **Goals, Testing, Schedules, etc.**

Total responsibility of the special education teacher

Mostly the responsibility of the special education teacher

Equal responsibility

Mostly the responsibility of the general education teacher

Total responsibility of the general education teacher

Developing IEP goals for students with CI Conducting testing and evaluation of students with CI

Providing students with learning tasks to be completed in the general education classroom that align with their IEP goals

Determining needed standardized testing accommodations for a student with CI

Implementing standardized testing accommodations for a student with CI

Facilitating student success in non-core academic classes (art, PE, music, etc.)

7. Please indicate to what extent you believe, ideally, each item is the responsibility of the special education teacher or the general education teacher with **Adaptive Behavior Skills.**

Total responsibility of the special education teacher

Mostly the responsibility of the special education teacher

Equal responsibility

Mostly the responsibility of the general education teacher

Total responsibility of the general education teacher

Helping a student with CI maintain a neat and organized locker

Helping a student with CI get ready for recess (e.g. winter gear, changing shoes, having friends to play with on the playground)

Making sure a student with CI is able to get their lunch Helping a student with CI understand the schedule for the day

Helping a student with personal care items (e.g. bathroom, hand washing)

8. Please indicate to what extent you believe, ideally, each item is the responsibility of the special education teacher or the general education teacher in **Academic Content Areas.**

Total responsibility of the special education teacher

Mostly the responsibility of the special education teacher

Equal responsibility

Mostly the responsibility of the general education teacher

Total responsibility of the general education teacher

Provide access to grade level standards for ELA for a student with CI

Support the student with CI in meeting the grade level standards for ELA

Provide access to grade level standards for mathematics for a student with CI

Support the student with CI in meeting the grade level standards for mathematics

Provide access to grade level standards for science for a student with CI

Support the student with CI in meeting the grade level standards for science

Provide access to grade level standards for social studies for a student with CI

Support the student with CI in meeting the grade level standards for social studies

Developing accommodations for daily general education classroom activities/assignments

Implementing/providing accommodations for daily general education classroom activities/assignments

Developing accommodations for curriculum-based assignments/classroom tests

Implementing/providing accommodations for curriculum- based assignments/classroom tests

Assigning homework

Providing accommodations for homework

Supporting student in completing homework

Grading homework

Communicating student progress in the general education classroom with parents

Ensuring a student with CI attains their IEP goals and objectives

Ensuring a student with CI is making progress in the general curriculum

Perception of Roles

Section 3

Collaboration

9. Please indicate how strongly you agree with the following statements

strongly disagree

disagree

neutral

agree

strongly agree

My co-worker (either the general education teacher or the special education teacher), whom I work with to teach my student with CI, and I have established a high level of collaboration.

I understand my co-worker's (either the general education teacher or the special education

teacher) role in working with students with CI

I understand my role in working with students with CI

I was given a clear job description when hired as to my role in working with students with CI

I feel supported by my co-worker in working with students with CI

Perception of Roles

Section 4

Demographics

10. Please indicate how long you have served in your current position Less than one year

1-3 years, 4-6 years, 7-10 years, More than 10 years

11. In what type of school do you currently teach?

Public, Private, Charter

12. Please indicate when you have worked with a student with a mild to moderate cognitive impairment (as defined by an IEP) in your classroom or on your caseload.

Current School Year, Within the last 3 school years

13. How much time did/does the student with CI spend in your classroom?

80% of day or more

79%-40% of the day

Less than 40% of the day

14. For what subject areas did/do you have the student with CI in your classroom? Check all that apply.

Language Arts, Math

Science, Social Studies, Other (please specify)

Appendix E
GVSU HRRC Permission Letter



DATE: May 5, 2016

TO: Justine Keuning-LaFrence

FROM: Grand Valley State University Human Research Review Committee

STUDY TITLE: [899556-1] Perception of Roles of General Education Teachers and Special Education Teachers, Regarding Inclusion of Students with CI in the General Education Classroom

REFERENCE #: 16-161-H

SUBMISSION TYPE: New Project

ACTION: EXEMPT

EFFECTIVE DATE: May 5, 2016

REVIEW TYPE: Exempt Review

Thank you for your submission of materials for your planned research study. It has been determined that this project:

IS COVERED human subjects research* according to current federal regulations and MEETS eligibility for exempt determination under category 2, 45 CFR 46.101. No research involving prisoners may be exempt.

Exempt protocols do not require formal approval, renewal or closure by the HRRC. Any revision to exempt research that alters the risk/benefit ratio or affects eligibility for exempt review must be submitted to the HRRC using the Change in Approved Protocol form before changes are implemented.

Any research-related problem or event resulting in a fatality or hospitalization requires immediate notification to the Human Research Review Committee Chair, Dr. Christine Yalda, 616-331-7135 AND Human Research Protections Administrator, Dr. Jeffrey Potteiger, Dean of The Graduate School, 616-331-7207. See HRRC policy 1020, Unanticipated problems and adverse events.

Exempt research studies are eligible for audits.

If you have any questions, please contact the Research Protections Program at (616) 331-3197 or rpp@gvsu.edu. The office observes all university holidays, and does not process applications during exam week or between academic terms. Please include your study title and reference number in all correspondence with our office.

*Research is a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge (45 CFR 46.102 (d)).

Human subject means a living individual about whom an investigator (whether professional or student) conducting research obtains: data through intervention or interaction with the individual, or identifiable private information (45 CFR 46.102 (f)).

Scholarly activities that are not covered under the Code of Federal Regulations should not be described or referred to as research in materials to participants, sponsors or in dissemination of findings.

References

Agaliotis, I. & Kalyva E. (2011). A survey of Greek general and special education teachers'' perceptions regarding the role of the special needs coordinator: Implications for educational policy on inclusion and teacher education. *Teaching and Teacher Education, 27*, 543-551.

American Association on Intellectual and Developmental Disabilities (2013). Definition of intellectual disability retrieved July 15 from http://aaidd.org/intellectual disability/definition.

Angelides, P., Savva, K., & Hajisoteriou (2012). Leading inclusion: Special teachers as leaders in the development of inclusive education. *International Studies in Education Administration, 40*(1), 75-88.

Artiles, A. J. (2003). Special education's changing identity: Paradoxes and dilemmas in views of culture and space. *Harvard Educational Review, 73*(2), 164-247.

Austin, V. L. (2001). Teachers' beliefs about co-teaching. *Remedial and Special Education, 22,* 245-255.

Brantlinger, E. (1997). Using ideology: Cases of nonrecognition of the politics of research and practice in special education. *Review of Educational Research, 67,* 425-459.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Browder, D. M., Jimenez, B. A, Spooner, F., Saunders, A., Hudson, M., & Bethune, K. S. (2012). Early numeracy instruction for students with moderate and severe developmental disabilities. *Research & Practice for Persons with Severe Disabilities, 37*(4), 308-320.

Brownell, M. T., Adams, A., Sindelar, P., Waldron, N., & Vanhover, S. (2006). Learning from collaboration: The role of teacher qualities. *Exceptional Children, 72*(2), 169-185.

Burstein, N., Sears, S., Wilcoxen, A., Cabello, B., & Spagna, M. (2004) Moving toward inclusive practices. *Remedial and Special Education, 25*(2), 104-116.

Cameron, D. L. & Cook, B. G. (2007). Attitudes of preservice teachers enrolled in an infusion preparation program regarding planning and accommodations for included students with mental retardation. *Education and Training in Developmental Disabilities, 42*(3), 353-363.

Clark, C., Dyson, A., Millward, A., & Robson, S. (1999). Theories of inclusion, theories of schools: Deconstructing and reconstructing the 'inclusive school.' *British Educational Research Journal, 25*(2), 157-177.

Cole, C., Waldron, N., & Majd, M. (2004) Academic progress of students across inclusive and traditional settings. *Mental Retardation, 42*(2), 135-144.

Cook, B. G. (2001). A comparison of teachers' attitudes toward their included students with mild and severe disabilities. *The Journal of Special Education, 34*(4), 203-213.

Cook, B., Tankersley, M., & Landrum, T. J. (2013). Evidence-based practices in learning and behavioral disabilities: The search for effective instruction. *Advances in Learning and Behavioral Disorders, 26*, 1-19.

Danforth, S., & Naraian, S. (2015) This new field of inclusive education: Beginning a dialogue on conceptual foundations. *Intellectual and Developmental Disabilities, 53*(1), 70-85.

Dessemontet, R. S., Bless, G., & Morin, D. (2012). Effects of inclusion on the academic achievement and adaptive behaviour of children with intellectual disabilities. *Journal of Intellectual Disability Research, 56*(6), 579-587.

Dettmer, P., Knackendoffel, A., & Thurston, L. P. (2013). *Collaboration, consultation, and teamwork for students with special needs.* United States: Pearson.

Dieker, L. A., & Murawski, W. W. (2003). Co-teaching at the secondary levels: Unique issues, current trends, and suggestions for success. *The High School Journal, 86*(4), 1-13.

DuFour, R. (2004). What is a "professional learning community"? *Educational Leadership*, *61*(8), 6-11.

DuFour, R. (2007) Professional learning communities: A bandwagon, an idea worth considering, or our best hope for high levels of learning? *Middle School Journal, 39*(1), 4-8

DuFour, R. (2014). Harnessing the power of plcs. *Educational Leadership, 71*(8), 30-35.

Dunn, L. (1973). *Exceptional children in the schools* (2nd ed.). New York: Holt, Rinehart & Winston.

Dyson, A. (1999) Inclusion and inclusions: Theories and discourses in inclusive education. *World Yearbook of Education, 1999: Inclusive Education* (pp. 36-53).

Eccleston, S. (2010). Successful collaboration: Four essential traits of effective special education. *Journal of the International Association of Special Education, 11,* 40-47.

Friend, M. & Cook, L. (2009). Interactions: Collaboration skills for school professionals (5th ed.). Boston, MA: Person Education, Inc.

Gargiulo, R. M. (2012). *Special education in contemporary society: An introduction to exceptionality.* (4th ed. Thousand Oaks, CA: SAGE Publications, Inc.

Gargiulo, R. M. & Kilgo, J. (2011). *An introduction to young children with special needs* (3rd ed.) Belmont, CA: Wadsworth/Cengage Learning.

Early childhood intervention: A continuing evolution. (2000). In J. P. Shonkoff & S. J. Meisels (Ed.), *Handbook of early childhood education.* (pp. 3-17). New York, New York: Cambridge University Press.

Hunt, P., Soto, G., Maier, J., Liboiron, N., & Bae, S. (2004) Collaborative teaming to support preschoolers with severe disabilities who are placed in general education early childhood programs. *Topics in Early Childhood Special Education, 24*(3), 123-142.

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).

Jimenez, B. A., Browder, D. M., Spooner, F., DiBiase, W. (2012). Inclusive inquiry science using peer-mediated embedded instruction for students with moderate intellectual disability. *Exceptional Children, 78*(3), 301-317.

Kavale, K. A., & Forness, S. R. (2000). History, rhetoric, and reality. *Remedial and Special Education, 21*(5), 279-296.

Keefe, E. B., & Moore, V. (2004). The challenge of co-teaching in inclusive classrooms at the high school level: What the teachers told us. *American Secondary Education, 32*(3), 77-88.

Kochhar, C.A., West, L. L., & Taymans, J. M. (2000). *Successful inclusion: Practical strategies for a shared responsibility.* Upper Saddle River, NJ: Prentice Hall.

Kode, K. (2014) Effective general ed-special ed collaboration. *Association for Middle School Education,* 46-47.

Kritikos, E. P. & Birnbaum, B. (2003). General education and special education teachers' beliefs regarding collaboration. *Learning Disabilites, 12*(3), 93-100.

Lane, H. (1979). *The wild boy of Aveyron.* Cambridge, MA: Harvard University Press.

Laws, G., Byrne, A., & Buckley, S. (2000). Language and memory development in children with Down syndrome at mainstream and special schools: a comparison. *Educational Psychology, 20,* 447-457.

Leader-Janssen, E., Swain, K. D., Delkamiller, J., & Ritzman, M. J. (2012). Collaborative relationships for general education teachers working with students with disabilities. *Journal of Instructional Psychology, 39*(2), 112-118.

Lindeman, K. W. & Magiera, K. (2014) A co-teaching model: Committed professionals, high expectations, and the inclusive classroom. *Odyssey,* 40-45.

Lipsky, D. K. & Gartner, A. (2008). *Inclusion: A service, not a place: A whole school approach.* Port Chester, NY: Dude Publishing.

Maanum, J. L. (2009). *The general educator's guide to special education* (3rd ed.). Thousand Oaks, CA: Corwin Press.

Mastropieri, M. A., Scruggs, T. E., Graetz, J., Norland, J., Gardizi, W., & McDuffie, K. (2005). Case studies in co-teaching in the content areas: Successes, failures, and challenges. *Intervention in School and Clinic, 40*(5), 260-270.

McDonnell, L. M., McLaughlin, M. J., & Morrison, P. (1997). *Education one and all: Students with disabilities and standards-based reform.* Washington, DC: National Academy Press.

McHatton, P. A., & Daniel, P. L. (2008). Co-teaching at the pre-service level: Special education majors collaborate with English education majors. *Teacher Education and Special Education, 31*(2), 118-131.

McLeskey, J. & Waldron, N. L. (2000). *Inclusive schools in action: Making differences ordinary.* Alexandria, VA: Association for Supervision and Curriculum Development.

Moore, C., Gilbreath, D., & Maiuri, F. (1998). Educating students with disabilities in general education classrooms: A summary of the research. Retrieved from the Western Regional Resource Center website: http://interact.uoregon.edu/wrrc/AKInclusion.html.

Muller, E., Friend, M., & Hurley-Chamberlain, D. (2009). *State-level approaches to co teaching.* Project Forum at NASDSE. Available from *http://www.nasdse.org/Projects/ProjectForum*.

Office of Special Education Programs (2016). Part B Data Display: Michigan. Retrieved July 14 fromhttp://osep.grads360.org.

Onwuegbuzie, A. J., Collins, K. M. T., Frels, R.K. (2013). Using Bronfenbrenner's ecological systems theory to frame quantitative, qualitative, and mixed research. *International Journal of Multiple Research Approaches, 7*(1), 2-8.

Onwuegbuzie, A. J., Slate, J. R., Leech, N. L., & Collins, K. M. T. (2009). Mixed data analysis: Advanced integration techniques. *International Journal of Multiple Research Approaches, 3,* 13-33.

Overton, T. (2012) *Assessing learners with special needs: An applied approach (7th edition).* Upper Saddle River, New Jersey: Pearson.

Peetsma, T., Vergeer, M., Roeleveld, J., & Karsten, S. (2001). Inclusion in education: Comparing pupils' development in special and regular education. *Educational Review, 53*(2), 125-135.

Purcell, J. H. & Leppien, J. H. (1998). The challenge of implementing collaboration between general and special education. *Exceptional Children, 56*(3), 232-235.

Rudd, F. (2002). Grasping the promise of inclusion. *ERIC Clearinghouse on Disabilities and Gifted Education,* 1-26.

Ryan, S. P. (1999). *Examining the impact of collaborative structures on teachers' work: Contexts, characteristics, consequences, and complications.* Unpublished doctoral dissertation, University of California, Los Angeles.

Santoli, S. P., Sachs, J., Romey, E.A., & McClurg, S. (2008) A successful formula for middle school inclusion: Collaboration, time and administrative support. *Research in Middle Level Education, 32*(2), 1- 23.

Schneider, F. J. (2007) Teaching collaboration to education majors. *The Community College Enterprise, 13*(2), 7-25.

Shade, R. A. & Stewart, R. (2001). General education and special education preservice teachers' attitudes toward inclusion. *Preventing School Failure, 46*(1), 37-41.

Spencer, S. A. (2005). Lynne Cook and June Downing: The practicalities of collaboration in special education service delivery. *Intervention in School and Clinic, 40*(5), 296-300.

Swain, K. D., Nordness, P. D., & Leader-Janssen, E. M. (2012). Changes in preservice teacher attitudes toward inclusion. *Preventing School Failure, 56*(2), 75-81.

Taylor, R. W. & Ringlaben, R. P. (2012). Impacting pre-service teachers' attitudes toward inclusion. *High Education Studies, 2*(3), 16- 23.

Thomson, A. M., Perry, J. L., Miller, T. K. (2007). Conceptualizing and measuring collaboration. *Journal of Public Administration Research and Theory*, 1-34.

UNESCO (1994) *The Salamanca Statement on Principles, Policy and Practice in Special Needs Education*, UNESCO, Paris.

Vlachou, A. (2006) Role of special/support teachers in Greek primary schools: A counterproductive effect of inclusion: Practices. *International Journal of Inclusive Education, 10*(1), 39-58.

Walsh, J. M. (2001). Getting the "big picture" of IEP goals and state standards. *Teaching Exceptional Children, 33*(5), 18-26.

Welch, M. (1998). The IDEA of collaboration in special education: An introspective examination of paradigms and promise. *Journal of Educational and Psychological Consultation, 9*(2), 119-142.

West, J. F. & Idol, L. (1990). Collaborative consultation in the identification of mildly handicapped and at-risk students. *Remedial and Special Education, 11,* 22-31.

Wood, L., Browder, D. M., & Flynn, L. (2015). Teaching students with intellectual disability to use a self-questioning strategy to comprehend social studies text for an inclusive setting. *Research & Practice for Persons with Severe Disabilities, 40*(4), 275-293.

York-Barr, J., Sommerness, J., Duke, K., & Ghere, G. (2005) Special educators in inclusive education programmes: Reframing their work as teacher leadership. *International Journal of Inclusive Education, 9*(2), 193-215.