CO-TEACHING FOR INCLUSION IN A SUBURBAN MIDDLE SCHOOL: A SOCIO-TECHNICAL PERSPECTIVE

by

Monique Mawhinney

B.S. in Education, Indiana University of Pennsylvania, 1993

M.Ed., University of Pittsburgh, 1999

Submitted to the Graduate Faculty of

Education in partial fulfillment

of the requirements for the degree of

Doctor of Education

University of Pittsburgh

2010

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Monique Mawhinney

It was defended on

December 7, 2010

and approved by

Dr. Sue Goodwin, Professor, Administrative and Policy Studies

Dr. Otto Graf, Professor, Administrative and Policy Studies

Dr. Michael Gunzenhauser, Associate Professor, Administrative and Policy Studies

Dr. Robert Isherwood, Assistant Professor, Special Education

Dissertation Advisor: Dr. Sean Hughes, Associate Professor, Administrative and Policy

Studies

iii

CO-TEACHING FOR INCLUSION IN A SUBURBAN MIDDLE SCHOOL: A

SOCIO-TECHNICAL PERSPECTIVE

Monique Mawhinney, Ed.D.

University of Pittsburgh, 2010

A study occurred of the implementation of a regular education and special education co-teaching model in a suburban middle school to determine the changes in the school system's sociotechnical subsystems. The Socio-Technical Theory describes the complex relationships between people, tasks and technology (Cooper, Gencturk & Lindley, 1996). The subsystems within this theory consist of a human, technical, structural and a task subsystem. A three-year study took place to examine the subsystem variables that affected the implementation of co-teaching. The study happened during the refining/restructuring stage of implementation. I used case study methodology including semi-structured interviews, classroom observations, observations and document analysis.

The results of the study discovered that implementing co-teaching in a school district created changes in all four subsystems. A change in the human subsystem was the need for a shared philosophy of co-teaching between the co-teaching pairs. A change in the technical subsystem included the need for special education teachers to increase their knowledge in the subject area. The need for common plan time was a change identified in the structural subsystem. Finally, a change that occurred in the task subsystem included relative advantage, which Roger (2003) defines as the degree to which the innovation is perceived as better than the idea it supersedes.

School administrators would benefit from understanding that implementation of co-teaching can be a complex series of stages and proper planning must occur for implementation to be successful. Meaningful professional development should be provided to administrators and teachers. A master schedule must be designed to reflect common plan time and consistent co-teachers each year. Teachers should share a common philosophy regarding co-teaching in order to provide a solid experience. Analysis of data revealed that these factors related to the findings of several researchers and were the same factors identified from the four socio-technical subsystems.

School administrators would benefit from using The Socio-Technical Theory when implementing an initiative. They should pay particular attention to specific factors from each of the subsystems that could have an affect on the overall success of the initiative prior to implementation.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

DEDICATION

To my parents for their unconditional love and support throughout my entire life and for

instilling in me a solid work ethic, which is what made me who I am today

To my husband Mike, for his love, patience and faith in me throughout my entire educational

journey

To the love of my life, my son Maddox, who put things into perspective and made me realize

what matters most

ACKNOWLEDGEMENT

There are many people that I wish to acknowledge that helped make the completion of this dissertation possible. Most importantly, I wish to thank Dr. Sean Hughes for accompanying me on my journey through the Masters and Doctoral program. It was his wisdom and guidance that led me to the end of my journey and helped me accomplish all of my goals along the way. Ten years ago I knew Sean as my advisor and professor, but today he has become so much more; a very dear friend and colleague who has made a huge impact on my educational career and I often find myself asking, "what would Sean do?" when I am faced with difficult challenges or decisions. Next, I extend my gratitude to Dr. Sue Goodwin who has always been a positive role model; she so graciously agreed to sit on my dissertation committee even after she was retired. Her knowledge and expertise in guiding me through this process was priceless and greatly appreciated. I wish to extend a sincere thank you to Dr. Mike Gunzenhauser, who joined my dissertation committee late in the game, and provided me with rich and meaningful feedback and many words of encouragement.

I am so grateful to Dr. Robert Isherwood, a dear colleague and friend, who volunteered his time to serve as a committee member because of his dedication to the profession. His knowledge and expertise in the area of education is valuable and helped me develop a better understanding of the topic I was studying. His friendship is priceless and I will always be

appreciative of his support and encouragement throughout this process. I want to extend a sincere thank you to Dr. Jo Welter, a very dear colleague and friend, who took time away from her own family to read and edit this dissertation over and over. In addition, she was my own personal cheerleader who never allowed me to give up and encouraged me to see this process through to the end.

I wish to thank my husband Mike for his constant encouragement and support over the past nine years. No matter how frustrated or defeated I became, he never let me give up and I am so grateful for his love and support. I can now give back family time that he allowed me to sacrifice so that I could accomplish this life-long goal. Finally, I want to thank the love of my life, my son Maddox, for just being him and making me realize that family always comes before work, and in the end, it is what matters most in life. I promise to spend every extra minute of my free time with him to make up for all of the hours lost in order to complete this accomplishment.

1.0   INTRODUCTION

1.1   BACKGROUND

Although co-teaching has been around for many years, it is becoming one of the fastest-growing inclusive practices in school (Sands, Kozleski & French, 2000). Also referred to as collaborative teaching, the general concept of co-teaching is that it occurs when two or more educators jointly deliver substantial instruction to a diverse or blended group of students in a single physical space (Walsh, 2004). Sands, Kozleski, and French (2000) identify collaboration as one of the most important characteristics in schools because it has become a defining characteristic of society in the 21st century.

The implementation of co-teaching in public school settings is primarily a result of the recent trends and legislation promoting inclusive instruction and access to the general education curriculum for students with disabilities (Villa, Thousand, & Niven, 2004). The historical outline of educating students with disabilities has progressed from neglect, placement in institutions, and residential schooling or other isolated classes, to pullout programs within the public school setting.

In the 1950's and 1960's the Federal government, with the strong support and advocacy of family associations, such as *The Association for Retarded Citizens* (ARC), began to develop and validate practices for children with disabilities and their families. These practices, in turn,

1

laid the foundation for implementing effective programs and services of early intervention and special education in states and localities across the country (The Arc, 2006). Recently, educating students with disabilities was often done through mainstreaming and is now continuing in the direction of inclusion for all students with disabilities so that they may have access to the general curriculum (Bradley, King-Sears, & Tessier-Switlick, 1997). As the Director of Pupil Services for a school district of approximately 3,100 students, I have been charged with the task of providing a more inclusive setting for students with disabilities. I have chosen co-teaching as the method in which to accomplish this task. Specifically, the middle school is the first building in the district to implement a co-teaching model.

According to Walther-Thomas (1997) and Isherwood and Barger-Anderson (2008), a need exists to further investigate what can be done to improve current co-teaching systems and practices. The authors identify a number of challenges and barriers that influence the success of co-teaching in schools, including planning time, human resources, scheduling, caseloads, clarity in teacher roles and responsibilities, teacher attitudes, administrative support, and staff development. These challenges are examples of factors related to the socio-technical theory.

The Socio-Technical Theory describes the complex relationships between people, tasks, and technology, and helps determine how these can be used to advantage (Cooper, Gencturk & Lindley, 1996). Furthermore, Owens and Steinhoff (1976) refer to the school as a socio-technical organization and explain that there are four subsystems within the school system: human, technical, structural and task. The *human* subsystem is comprised of superintendents, teachers, administrators and support staff who are typically engaged in *tasks* such as delivery of instruction, development of curriculum, and evaluation of student progress. If schools are going to perform these types of tasks, according to Owens and Steinhoff, they require *structure.*

Structure gives school systems order and helps to define the roles for members by establishing patterns of authority and collegiality; structure dictates the patterns and channels of communication networks that are basic to information flow and decision-making (Owens & Steinhoff, 1976).

Finally, the organization must have *technical* resources to complete tasks and achieve goals. For a school system, these may include hardware, software, textbooks or program inventions like systemic procedures, the sequencing of activities, or other procedural inventions designed to solve problems that interfere with organizational task achievement (Owens & Steinhoff, 1976). These four subsystems are variables that differ from time to time and from one organization to the next. The four subsystems interrelate, with each tending to shape and mold the others. Owens and Steinhoff (1976) believe that these four subsystems are critical elements to be dealt with when initiating change or implementing an innovation in an organization. Because these subsystems are dependent upon one another, a change in one will result in some adaptation on the part of the others.

I have chosen to use the socio-technical theory as a lens through which to view the implementation of co-teaching; because I believe that a school is made up of the two components that Owens and Steinhoff (1976) identify as the fundamental concepts of the term socio-technical: a social system and a technical system. Not only will I examine technical factors that affect the implementation, but also the social and human interaction amongst the co-teachers. More importantly, I want to focus my study on the human, task, structural and technical subsystem variables that may affect the implementation of co-teaching.

1.2   THE STORY OF THE STUDY

In this section I explain the purpose of my study through the *who, what, when, where, why* and *how* questioning process of storytelling. I start with explaining the *why* of my study first. The purpose of this study is two-fold; as a doctoral student from the University of Pittsburgh continuing my journey as a scholar, I need to fulfill the final requirement of the program, which is completing the dissertation process. Finding a topic of interest was a challenge because I wanted to focus on a subject that I was passionate about, but also something that would benefit me and other administrators in the field of education. Hence, as a practitioner, I wanted my study to relate to something that I would be working on in my daily practice as a school administrator. This leads me to the *what* of my story.

As the Director of Pupil Services for a suburban school district, I was given the task of creating a more inclusive environment for students with disabilities. We did some preliminary research on the concept of co-teaching and based on the research findings (which will be discussed in detail in the next chapter), the district decided it might be a successful method to use for including students with disabilities in the regular education setting. After several meetings with other central office administrators and building-level principals, we decided to move forward with the *what*, or co-teaching initiative. This leads me to the *where* of the study.

The district knew we couldn't implement such a huge initiative across all levels at one time, so we had to decide where to begin. After much consideration and debate (this part of the story will be told in detail in the Chapter: In the Trenches), along with the support of the middle school principal and assistant principal, we decided to implement the co-teaching model at the middle school. There were two reasons for our decision. First, the middle school consists of students in grades 6, 7 and 8 and students in grades 6 and 7 are placed on teams. Each grade

consists of two teams comprised of math, English, science, social studies, and reading teachers, along with a special education teacher. We thought this would be a logical place to start since there was a master schedule that already fit the design of the co-teaching model. Secondly, the middle school special education program currently modeled a pull-out program where the students with disabilities went to the special education classroom for instruction in English, math and reading. The middle school was the building in the district that needed a more inclusive setting the most and, as a result, we decided to start here.

Most people would think identifying the *who*, or characters, of a story, would be the easy part. Although the *who* of my study certainly aren't characters, identifying the participants was not easy. I knew that the subjects for my study had to be special and regular education teachers who were going to be co-teaching. The difficult part was knowing that the participants were also the teachers who were being forced to implement an initiative in the district that they really were not excited about. It was difficult for me because I was going to be both the author **and** the director of the story, so to speak. I was concerned that because I was the central office administrator overseeing the co-teaching initiative in the district, the participants, or *who,* of my study wouldn't be as honest as I needed them to be in order to collect accurate data as the researcher conducting the study. How I attempted to solve this dilemma is explained in more detail in the Chapter: In the Trenches.

Deciding the *when* of the study was frustrating for me; not because I didn't know when I wanted to begin the implementation of co-teaching, but because the process was delayed due to reasons beyond my control. Not only did this delay the dissertation process for me, but it also delayed the implementation of the co-teaching initiative for the district. The reason for the delay was due to personnel changes at the district and middle school levels. I foresee this study taking

place over a one-year period. Specifically, I will collect data during this time by conducting classroom observations and interviewing the participants of the study using a semi-structured interview guide. The classroom observations and interview questions will focus on finding patterns and themes related to the socio-technical subsystem variables. In order to assure validity and reliability, I will use data collected from formal and informal conversations with school personnel, consultants, meetings, emails, and memos over a three year time span and compare them to the results I gathered through the classroom observations and interviews. This approach addresses my concern that the participants may not be as honest during the interview process. Much of the data have already been collected through the pre-planning stages of implementation; now I need to move forward with the study by conducting the classroom observations and interviews with the participants.

Finally, we get to the *how* of the study. Basically, the how of the study will be discussed in the Methodology Chapter. This chapter will be more traditional in nature and explain in detail the process for the study. In this chapter the statement of the problem, along with the research questions will be identified. Also, the research design will be identified as well as explanation of how the data will be collected and analyzed. Finally, the chapter ends with an overview of the approaches I used to guarantee the reliability and validity of the results.

1.3   THE FORMAT OF THE STUDY

The format of this study is somewhat unique in nature as it supports the concept that I see myself as both a scholar and practitioner. The reader will find that Chapter 2: Conceptual Framework is

written in a more traditional vein. I am the researcher looking for insights from the literature to help me as a practitioner. The reader will realize my transformation from scholar to practitioner as he or she begins to read Chapter 4: In the Trenches and Chapter 5: Discoveries, Conclusions and Recommendations. These chapters are written in story-like form in an attempt to bring to life the details of the study.

Throughout these chapters, I move from the role of researcher to one of investigator and practitioner. In Chapter 4, I start out as the investigator by providing a description of how I got to the implementation stage. As the story of co-teaching unfolds, I become an active player, and as such, my role becomes more interpretive in nature. I continue the story through the eyes of the practitioner in Chapter 5 by summarizing the outcomes of the study and what I came to understand about the phenomenon. Finally, I resort back to the investigator in the end of Chapter 5 by interpreting my findings, drawing overall conclusions and expressing my thoughts of the study.

1.4   SUMMARY OF CHAPTER I

The background information provided in this Chapter helps the reader understand the philosophy behind co-teaching and why school districts are using this method to provide a more inclusive school setting for students with disabilities. Many researchers in special education and co-teaching identify a number of challenges and barriers to co-teaching and have indicated that for it to be successful various factors must be considered. The factors identified are variables that relate to the socio-technical subsystems: human, task, technical and structural, all of which can be found in a school system.

The Story of the Study and Format of the Study were written in an attempt to help the reader understand my perspective on co-teaching from both a scholar and practitioner's viewpoint. It is critical that the reader recognizes the passion I have for the topic as a scholar and the benefit of the topic to me as a practitioner. I believe this study will provide other school administrators and educators insight on how to proceed with such an important and meaningful initiative by understanding a solid framework for implementing a successful co-teaching model from a socio-technical perspective.

2.0   CONCEPTUAL FRAMEWORK

Specifically, this chapter will focus on the historical outcomes of special education that impacted the adoption of co-teaching in public school systems. For the purpose of this review, the term co-teaching refers to the pairing of one regular education teacher and one special education teacher.

The first part will review Federal legislation, such as the Rehabilitation Act of 1973, the Education of All Handicapped Children Act of 1975, which was reauthorized in 1990 and is now known as the Individuals with Disabilities Education Act (IDEA) and the No Child Left Behind Act of 2001(NCLB) that forced public school systems to redesign the educational system for children with disabilities.

IDEA and NCLB have established solid requirements regarding teacher certification and the idea that all teachers, both regular and special education, must become "highly qualified" in their field within a specified timeframe (PSBA, 2005). Co-teaching is one method for meeting these strict requirements, and as a result, districts are embracing co-teaching and using it as a highly regarded best practice (PSBA, 2005).

The second part of this chapter provides a historical outline of landmark court decisions that increased educational opportunities for children with disabilities (Osborne and Russo, 2003). Cases such as Brown v. Board of Education (1954), Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth (1971), Oberti v. Board of Education of the Borough of Clementon School District (1993), along with several other court precedents specific to children

with disabilities will be discussed in detail, in order to describe why public school settings are adopting co-teaching as a teaching method in order to continue to meet state and federal mandates.

Next, the chapter focuses on an in-depth examination of inclusion and provides a further understanding of how co-teaching fosters this concept. The advantages and disadvantages of inclusion are discussed, along with viewpoints from proponents and opponents. Particularly, teacher's perceptions and attitudes are examined in order to explain how they can affect an inclusive setting. A compilation of various researchers is reviewed and a list of common components of a successful inclusion program is discussed.

The last section of the chapter provides an overview of the history of co-teaching. The five models of co-teaching are reviewed in-depth so as to explain the correlation between the use of the models and how they are implemented to maximize the relationship between the paired teachers.

2.1   FEDERAL LEGISLATION

2.1.1   The Rehabilitation Act of 1973

In 1973 when *The Rehabilitation Act* was passed, the federal government was doing very little to promote participation and equal access to federally funded programs by people with disabilities (Keefe-Martin, 2001). The spirit of the act was to provide job opportunities and training to adults with disabilities, but also address the failure of public schools to educate students with

disabilities. The single paragraph we now refer to as *Section 504 of the Rehabilitation Act* provided that:

> No otherwise qualified individual with a disability in the United States, as defined in section 706 (20) of this title, shall, solely by reason of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by any Executive agency or by the United States Postal Service. The head of each such agency shall promulgate such regulations as may be necessary to carry out the amendments to this section made by the Rehabilitation, Comprehensive Services, and Development Disabilities Act of 1978. [29 U.S.C §794 (a) (1973)]

Particularly for schools, the language in Section 504 focuses on discrimination and broadly prohibits the denial of public education participation or extracurricular activities offered by the public school programs because of the student's disability (Fetter-Harrott, Steketee & Dare, 2008). Congress did not create an additional source of federal funding, but instead, based the receipt of the federal funds on a district's compliance with the new requirements.

The failure of Section 504 to solve the problem of educating students with disabilities resulted in the need for a more forceful law (Keefe-Martin, 2001). Congress, through an unfunded mandate, expected schools to create special programs and individualized educational placements for children with disabilities. In addition, the broad anti-discrimination language of Section 504 made it unclear as to how the schools should provide these services. Almost twenty years later, *The Americans with Disabilities Act of 1990* was established in an attempt to strengthen the regulations set forth by *The Rehabilitation Act of 1973*.

2.1.2 The Americans with Disabilities Act of 1990

The Americans with Disabilities Act (ADA) was passed in 1990 and seemed to pick up where *The Rehabilitation Act* left off. Borrowing from the Section 504 definition of disabled person and using the three-pronged approach to eligibility (has a physical or mental disability, a record of a disability, or is regarding as having a disability), ADA states:

> No covered entity shall discriminate against a qualified individual with a disability because of the disability of such individual in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training, and other terms, conditions, and privileges of employment. [42 U.S.C. §12112 (a) (1990)]

> *The Americans with Disabilities Act of 1990* applied those standards to most private

sector businesses, and sought to dissolve the barriers, thus allowing people with disabilities access to buildings, transportation and communication. The passage of ADA succeeds the employment provisions of Section 504 and adds more specific regulations to the accessibility requirements of Section 504, but it does little to change a school district's obligation to provide educational services to students with disabilities.

Two years after the passage of *The Rehabilitation Act* (1973), more comprehensive legislation that specifically related to schools and inclusive education was introduced. This legislation was known as Public Law 94-142, *The Education of All Handicapped Children Act* which is known today as *The Individuals with Disabilities Education Act* (IDEA). In this legislation two important principles were introduced that would have an impact on inclusive education throughout the world. Yell and Katsiyannis (2004) indicate the first principle of the least restrictive environment (LRE) states that students with disabilities should be educated beside their non-disabled peers to the maximum extent possible. The second principle insists that

a free appropriate public education (FAPE) should be available to students with disabilities that include special education and related services and be provided at public expense to meet the same standards as the state education agency (Yell & Katsiyannis, 2004).

2.1.3 The Individuals with Disabilities Education Act (IDEA)

In 1975, Congress passed Public Law 94-142, *The Education of All Handicapped Children Act*, which today is referred to as *The Individuals with Disabilities Education Act (IDEA)*. Public Law 94-142 and IDEA have been regularly reviewed by Congress (1990, 1997 and 2004) to reflect interpretations from the courts and, according to Keeffe-Martin (2001) IDEA is now regarded as the most important statute that promotes the least restrictive environment and provides protection for students with disabilities in the educational setting.

IDEA is a federal law enacted in 1990 and reauthorized in 1997 and in 2004. It is designed to protect the rights of students with disabilities by ensuring that everyone receives FAPE, regardless of ability. Furthermore, IDEA strives not only to grant equal access to students with disabilities, but also to provide additional special education services and procedural safeguards (The Arc, 2006).

Specifically, the 1997 Amendments of IDEA, P.L. 105-17 guarantees that students with disabilities are provided a "free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for employment and independent living" [20 U.S.C. §1412(c)(1)(A): 34 C.F.R. 300.1(a)]. Wright and Wright (2006) indicate special education services are individualized to meet the unique needs of students with disabilities and are provided in the least restrictive environment. Particularly, IDEA 1997 requires each public agency to ensure:

(1) that to a 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 (2) that special classes, separate schooling or removal of children with disabilities from the regular education environment occurs only when the nature or severity of the child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. [20 U.S.C. §1412(a)(5); 34 C.F.R. 300.550(b)(1)-(2)]

Shortly after the 1997 Amendments of IDEA, Congress enacted Public Law 107-110, better known as *The No Child Left Behind* (NCLB) *Act of 2001*. This law, coupled with IDEA, increased the level of accountability for school districts to meet the needs of all children, including those with disabilities (PSBA, 2005).

2.1.4   The No Child Left Behind Act of 2001(NCLB)

The *No Child Left Behind Act of 2001* signed into law on January 8, 2002, which reauthorizes *The Elementary and Secondary Education Act (ESEA) of 1965*, incorporates the principles and strategies proposed by President Bush. These include increased accountability for States, school districts, and schools. In addition, public school systems are held accountable for providing a rigorous education to all students, including those with disabilities. Under the NCLB, students are required to meet a level of proficiency in accordance with the state standards and assessments. Specifically the NCLB states:

The purpose of this title is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments.

[20 U.S.C. 6301 §1001]

NCLB provides greater choice for parents and students, particularly those attending low-performing schools. Elliot (2003) notes it also provides more flexibility for States and local education agencies (LEAs) in the use of Federal education dollars, and it places a stronger emphasis on reading, especially for our youngest children. NCLB requires that students with special needs have access to the same standards as students in the general education programs. In order for the state to receive grant funding, they must submit a plan to the Secretary that demonstrates compliance with NCLB. The NCLB Act specifies the plan must be in alignment with several other federal laws:

> (1) IN GENERAL.—For any State desiring to receive a grant under this part, the State educational agency shall submit to the Secretary a plan, developed by the State educational agency, in consultation with local educational agencies, teachers, principals, pupil services personnel, administrators (including administrators of programs described in other parts of this title), other staff, and parents, that satisfies the requirements of this section and that is coordinated with other programs under this Act, the Individuals with Disabilities Education Act, the Carl D. Perkins Vocational and Technical Education Act of 1998, the Head Start Act, the Adult Education and Family Literacy Act, and the McKinney-Vento Homeless Assistance Act. [20 U.S.C. 6311§1111(a)(1)]

One of the most prominent requirements of NCLB that affected school districts was in the area of teacher qualifications and measurable objectives (Elliot, 2003). In addition to obtaining a bachelor's degree and certification in special education, new special education teachers must also pass a state test of subject knowledge in order to teach the core subjects.

Teachers holding special education positions prior to the passing of the NCLB are expected to apply for "highly qualified" status by meeting certain criteria based on their college course history and teaching experience. Specifically, NCLB states:

> (1) IN GENERAL. -- Beginning with the first day of the first school year after the date of enactment of the No Child Left Behind Act of 2001, each local educational agency receiving assistance under this part shall ensure that all teachers hired after such day and teaching in a program supported with funds under this part are highly qualified. (2) STATE PLAN.—As part of the plan described in section 1111, each State educational agency receiving assistance under this part shall develop a plan to ensure that all teachers teaching in core academic subjects within the State are highly qualified not later than the end of the 2005–2006 school year. Such plan shall establish annual measurable objectives for each local educational agency and school that, at a minimum—
>
> > (A) shall include an annual increase in the percentage of highly qualified teachers at each local educational agency and school, to ensure that all teachers teaching in core academic subjects in each public elementary school and secondary school are highly qualified not later than the end of the 2005–2006 school year; (B) shall include an annual increase in the percentage of teachers who are receiving high-quality professional development to enable such teachers to become highly qualified and successful classroom teachers; and (C) may include such other measures as the State educational agency determines to be appropriate to increase teacher qualifications. [20 U.S.C. 6319 §1119(a)(1)(2)(A)(B)(C)]

In order to comply with the highly qualified requirements NCLB has placed on special education teachers, districts are creating "co-teaching" classrooms in which the special education

teacher instructs along with the regular education teacher in the regular education classroom (Villa, Thousand & Niven, 2004). This philosophy of teaching satisfies NCLB legislation because the regular education teacher serves as the "highly qualified" teacher. Co-teaching helps meet LRE requirements set forth by IDEA.

Shortly after the passing of the *No Child Left Behind Act of 2001*, IDEA 1997 was reauthorized as *The Individuals with Disabilities Education Act of 2004 (IDEA 2004)*. IDEA 2004 aligns with NCLB and reaffirms Congress's commitment to educating all children, including those with disabilities. Wright (2005) notes that when Congress enacted IDEA 2004, it made many significant changes to the law.

2.1.5   The Individuals with Disabilities Education Act of 2004

The Individuals with Disabilities Education Act of 2004 sent a clear message that students with special needs are no longer the responsibility of the special education teacher alone, but that everyone in the school system is accountable for every student (Lipsky & Gartner, 1998). One of the more prominent changes was the added definition of "highly qualified teachers" that stated:

(B) REQUIREMENTS FOR SPECIAL EDUCATION TEACHERS- When used with respect to any public elementary school or secondary school special education teacher teaching in a State, such term means that—

(i) the teacher has obtained full State certification as a special education teacher (including certification obtained through alternative routes to certification), or passed the State special education teacher licensing examination, and holds a license to teach in the State as a special education teacher, except that when used with respect to any teacher teaching in a public charter school, the term means

17

that the teacher meets the requirements set forth in the state's public charter school law; (ii) the teacher has not had special education certification or licensure requirements waived on an emergency, temporary, or provisional basis; and (iii) the teacher holds at least a bachelor's degree. [20 U.S.C. §1401(10)(B)(i)(ii)(iii)]

(C) SPECIAL EDUCATION TEACHERS TEACHING TO ALTERNATE ACHIEVEMENT STANDARDS-When used with respect to a special education teacher who teaches core academic subjects exclusively to children who are assessed against alternate achievement standards established under the regulations promulgated under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, such term means the teacher, whether new or not new to the profession, may either—

(i) meet the applicable requirements of section 9101 of such Act for any elementary, middle or secondary school teacher who is new or not new to the profession, or (ii) meet the requirements of subparagraph (B) or (C) of section 9101(23) of such Act as applied to elementary school teacher, or, in the case of instruction above the elementary level, has subject matter knowledge appropriate to the level of instruction being provided, as determined by the State, needed to effectively teach to those standards. [20 U.S.C. §1401(10)(C)(i)(ii)]

(D) SPECIAL EDUCATION TEACHERS TEACHING MULTIPLE SUBJECTS- When used with respect to a special education teacher who teaches 2 or more core academic subjects exclusively to children with disabilities, such term means that the teacher may either—

(i) meet the applicable requirement of section 9101 of the Elementary and Secondary Education Act of 1965 for any elementary, middle, or secondary

school teacher who is new or not new to the profession; (ii) in the case of a teacher who is not new to the profession, demonstrate competence in all the core academic subjects in which the teacher teaches in the same manner as is required for an elementary, middle, or secondary school teacher who is not new to the profession under section 9101(23)(C)(ii) of such Act, which may include a single, high objective State standard for evaluation covering multiple subjects; or (iii) in the case of a new special education teacher who teaches multiple subjects and who is highly qualified in mathematics, language arts, or science, demonstrates competence in the other core academic subjects in which the teacher teaches in the same manner as is required for an elementary, middle, or secondary school teacher under section 9101(23)(C)(ii) of such Act, which may include a single, high objective State standard for evaluation covering multiple subjects, not later than 2 years after the date of employment. [20 U.S.C. §1401(10)(D)(i)(ii)(iii)]

As a result of the new "highly qualified" requirements under IDEA 2004, school districts were forced to restructure their special education programs. Special education teachers who always taught the core academic subjects via a pull-out model, where students left the regular education classroom to receive direct instruction in a special education program with a special education teacher, was no longer permissible under the law. This new requirement has required public school systems to rethink the way they provide educational services to children with disabilities. Hence, co-teaching has become a mechanism for meeting the mandates federal legislation has placed on our school systems (Snell & Janney, 2005).

In the United States, *Section 504 of The Rehabilitation Act, The Education of All Handicapped Children Act* and *The Individuals with Disabilities Education Act* are the most

important statutes that are used to challenge procedural issues or resolve claims of discrimination on the grounds of disability (Osborne & Russo, 2003). There are several landmark court cases that provide a historical perspective of the way law has shaped educational decision making toward inclusion. These court cases, coupled with Federal legislation, laid the groundwork for how school systems address special education programming.

2.2   LANDMARK COURT CASES

Landmark court decisions further advanced increased educational opportunities for children with disabilities (Osborne & Russo, 2003). Several significant cases determined in courts in the United States will be discussed in this section. All of the cases demonstrate how the courts have increasingly interpreted the legislation as new and diverse issues arise that relate to the inclusion of students with disabilities in regular school settings.

2.2.1   Brown vs. Board of Education

In *Brown vs. Board of Education* **(1954)**, the Supreme Court struck down state-sanctioned racial segregation because it violated the students' rights to equal protection under the 14th amendment. Osborne and Russo (2003) indicate the decision of *Brown v. Board of Education* (1954) did not relate to a case about disability, instead it established the right to access regular schools rather than segregated settings for students from racial minority groups. *Brown v. Board of Education*

set the stage for later developments, including those leading to the protection of the rights of students with disabilities (Osborne & Russo, 2003).

2.2.2 Pennsylvania Association for Retarded Citizens (PARC) v. Pennsylvania

In the landmark case, the *Pennsylvania Association for Retarded Citizens (PARC) v. Pennsylvania*, 334 F. Supp. 1257 (E.D. PA 1972) 13 children with mental retardation and PARC filed suit against the state of Pennsylvania on behalf of all children with mental retardation in the state (Osborne & Russo, 2003). The courts ruled that states have an obligation to place each child with mental retardation in a free public education program that is appropriate to the child's needs.

2.2.3 Roncker v. Walter

Roncker v. Walter, 700 F.2d 1058 (6th Cir. 1983) addressed the issue of "bringing educational services to the child" versus "bringing the child to the services." Yell and Katsiyannis (2004) explain this is the first case in which a federal court interpreted the LRE provisions of the Act. This case involved a parents' request for a continued placement in the neighborhood school for their son with a disability. The school district argued that the student had not succeeded at the neighborhood school and he needed the special services available at the segregated county school. The case was resolved in favor of integrated versus segregated placement and established a *principle of portability*; that is, " if a desirable service currently provided in a segregated setting can feasibly be delivered in an integrated setting, it would be inappropriate

under PL 94-142 to provide the service in a segregated environment" [Roncker v. Walter, 700 F.2d 1058 (6th Cir. 1983)]. The court found that:

> (1) placement decisions must be individually made and that placing children in a predetermined type of school based only on their classification was a violation of the law; (2) classification decisions themselves cannot be based on a sole criteria classification such as an IQ score. [Roncker v. Walter, 700 F.2d 1058 (6th Cir. 1983)]

2.2.4   Daniel R.R. v. State Board of Education

Daniel R.R. v. State Board of Education, **874 F.2d 1036 (5th Cir. 1989)** was a case brought on behalf of a kindergarten student with mental retardation. The parents appealed the school district's recommendation that the student be removed from his half-day kindergarten class and receive all of his instruction in a segregated classroom (Yell & Katsiyannis, 2004). Although the Court ultimately found for the school district, it enunciated a test for determining whether a recommended educational placement met the LRE requirements of the Act. The Court posed the question:

> Whether education in the regular classroom, with the use of supplementary aids and services, can be achieved satisfactorily for a given child. If it cannot and the school intends to provide special education or to remove the child from regular education, we ask, second, whether the school has included the child to the maximum extent appropriate. [Daniel R.R. v. State Board of Education, 874 F.2d 1036 (5th Cir. 1989)]

To apply the test, the court used three factors to analyze the educational placement:

1. Whether the school system has made attempts to accommodate the student in regular education and if so, whether its efforts were sufficient;

22

2. Whether the student can receive some academic or non-academic benefit from placement in the regular education environment;

3. Whether there are negative or adverse effects to either the student with a disability or to typical classmates. [Daniel R.R. v. State Board of Education, 874 F.2d 1036 (5th Cir. 1989)]

2.2.5   Oberti vs. Board of Education of the Borough of Clementon School District

Oberti vs. Board of Education of the Borough of Clementon School District **(1993)** was another landmark case that established the Least Restrictive Environment for children with disabilities. This is the case that begins the change from The IDEA's mainstreaming approach to the concept of inclusion. Clearly, inclusion is judge-made law, not legislative action (Osborne & Russo, 2003). This case upheld the right of Rafeal Oberti, a boy with Down syndrome, to receive his education in his neighborhood regular school with adequate and necessary supports. The court held that inclusion is a right, not a privilege for a select few. This placed the burden of proof for compliance with IDEA's least restrictive environment requirements on the school district and the state rather than on the family.

   Oberti v. Board of Education of the Borough of Clementon School District, 995 F.2d 1204 (3rd Cir. 1993) found that there are other factors to consider besides educational benefits when considering mainstreaming. Specifically the court held that:

   As IDEA's Least Restrictive Environment is clear, Congress understood that a fundamental value of the right to public education for children with disabilities is the right to associate with nondisabled peers. In determining whether a child with disabilities can be educated satisfactorily in a regular class with supplemental aids and services (the

first prong of the two-part inclusion test we adopt today), the court should consider several factors, including (1) whether the school district has made reasonable efforts to accommodate the child in a regular classroom; (2) the educational benefits available to the child in a regular class, with appropriate supplementary aids and services, as compared to the benefits provided in a special education class; and (3) the possible negative effects of inclusion of the child on the education of the other students in the class. Even if the child with disabilities cannot be educated satisfactorily in a regular classroom, that child must still be included in school programs with nondisabled peers wherever possible. [Oberti v. Board of Education of the Borough of Clementon School District, 995 F.2d 1204 (3rd Cir. 1993)]

Furthermore, the Oberti Court stated:

That education law requires school systems to supplement and realign their resources to move beyond those systems, structures and practices which tend to result in unnecessary segregation of children with disabilities. We emphasize that the Act does *not* require states to offer *the same* educational experience to a child with disabilities as is generally provided for nondisabled children…To the contrary, states must address the unique needs of a disabled child, recognizing that that child may benefit differently from education in the regular classroom than other students…In short, the fact that a child with disabilities will learn differently from his or her education within a regular classroom does not justify exclusion from that environment. Indeed the Act's strong presumption in favor of mainstreaming…would be turned on its head if parents had to prove that their child was worthy of being included, rather than the school district having to justify a decision to

exclude the child from the regular classroom. [*Oberti vs. Board of Education of the Borough of Clementon School District* (1993)]

2.2.6 Sacramento City Unified School District v. Holland

Sacramento City Unified School District v. Holland, **14 F.3d 1398 (9th Cir. 1994)** upheld the district court decision in which Judge David S. Levi indicated that when school districts place students with disabilities, the *presumption and starting point is the regular education classroom*. Rachel Holland, an 11 year old with mental retardation, was tested with an I.Q. of 44. The District contended Rachel was too "severely disabled" to benefit from full-time placement in a regular class. The parents challenged the district's decision to place their daughter half-time in a special education classroom and half-time in a regular education classroom. They wanted their daughter in the regular classroom full-time. The court found in favor of including the child. The 9th Circuit Court established a four-part balancing test to determine whether a school district is complying with IDEA. In considering whether the District proposed an appropriate placement for Rachel, the district court examined the following factors:

(1) the educational benefits available to Rachel in a regular classroom as compared with the educational benefits of a special education classroom; (2) the non-academic benefits of integration with non-disabled children; (3) the effect of Rachel's presence on the teacher and other children in the classroom; and (4) the cost of supplementary aids and services. [*Sacramento City Unified School District v. Holland,* 14 F.3d 1398 (9th Cir. 1994)]

The court concluded that the appropriate placement for Rachel Holland was the regular education classroom with supplemental aids and services. This decision was in accordance with IDEA.

2.2.7   Gaskin v. Pennsylvania

Gaskin v. Pennsylvania, 389 F. Supp. 2d 628 (E.D. Pa. 2005) was the most recent court case that resulted in a formal resolution between the Pennsylvania Department of Education (PDE) and a group of families and advocacy organizations who filed a class-action lawsuit against PDE on behalf of a group of children with disabilities in 1994 (Swanson, 2006). The lawsuit alleged that students with disabilities had been denied their federal statutory right to a free appropriate public education in regular classrooms with necessary supplemental aids and services. Particularly the Plaintiffs claimed that the Defendants violated:

> (1) The Individuals with Disabilities in Education Act ("IDEA"), 20 U.S.C. §§ 1400-1485, by failing to identify disabled students, develop individual educational programs or plans ("IEPs"), and provide a free appropriate public education ("FAPE") in the least restrictive environment ("LRE") to the maximum extent reasonably possible; (2) Section 504 of the Rehabilitation Act, as amended by 29 U.S.C. § 794, by excluding disabled students, solely because of their disability, from participating in or from receiving the benefits of any program that received federal funding; and (3) Title II of the Americans with Disabilities Act ("ADA"), 42 U.S.C. §§ 12131-12134, by excluding otherwise qualified students from access to public programs solely because of their disability. [Gaskin v. Pennsylvania, 389 F. Supp. 2d 628 (E.D. Pa. 2005)]

In September of 2005 the Court approved the Gaskin Settlement Agreement, which is a formal resolution between PDE and a group of families and advocacy organizations. This settlement ends ten years of litigation over Commonwealth programs for the education of school children with disabilities. "The good thing about *Gaskin* is that it gives further incentive for schools to provide inclusive education," says Jerry Tanenbaum, a partner specializing in education rights with the law firm of Schnader Harrison Segal and Lewis" (Swanson, 2006, p.1).

Specifically, the *Gaskin* Settlement outlines the following mutual goals and principles that will guide interpretation of the Settlement Agreement:

(1) The IDEA and related case law, including Oberti v. Board of Education, 995 F.2d 1204 (3d Cir. 1993), require special education students to be educated with students who do not have disabilities to the maximum extent appropriate (2) it is desirable that school districts increase their capacity to provide appropriate specially designed instruction, related services, supplementary aids and services and support to special education students placed in regular education classrooms (3) when the law requires that special education students receive supplementary aids and services in order to be educated with students who do not have disabilities to the maximum extent appropriate, such supplementary aids and services should be: (a) available to all students in need of them; (b) designed to provide meaningful educational benefits; and (c) provided in a manner sensitive to the need to avoid stigmatizing special education students who receive them (4) Pennsylvania school districts educate all children and welcome children with special needs. [Gaskin v. Pennsylvania, 389 F. Supp. 2d 628 (E.D. Pa. 2005)]

Swanson (2006) reports critics worry that school districts' main priority will be to avoid a negative rating, and as a result, will rush to include students with disabilities into the regular

classrooms without first establishing a solid support system to assure success for the students. Tanenbaum states:

Parents have to make sure their children won't be dumped into inclusive settings without the proper support. For many children, successful inclusion is very complex and requires a great deal of trainings for teachers, significant involvement in special education instructors, and possible modifications to the curriculum and classroom, including class size. (Swanson, 2006, p.1)

The goal of the proposed settlement is to ensure that Individualized Education Program (IEP) teams determine whether the goals in a student's IEP can be implemented in the regular classroom with supplementary aids and services before considering a more restrictive placement. *Gaskin v. Pennsylvania, 389 F. Supp. 2d 628 (E.D. Pa. 2005)* states the agreement does not change an individual student's program, placement or IEP. Only the IEP team can make such modifications. The IEP team consists of a team of individuals, including parents, who work together to create a child's Individualized Education Plan.

The IEP is a written document that is developed for each eligible child with a disability. As the name implies, the educational program should be tailored to the individual student to provide maximum educational benefit (Yell & Katsiyannis, 2004). The key word is individual. A program that is appropriate for one child with a disability may not be appropriate for another.

The IEP is the cornerstone for the education of a child with a disability. It should identify the services a child needs so that he/she may grow and learn during the school year. It is also a legal document that outlines "(1) The child's special education plan by defining goals for the school year (2) services needed to help the child meet those goals and (3) a method of evaluating the student's progress" [Gaskin v. Pennsylvania, 389 F. Supp. 2d 628 (E.D. Pa. 2005]. The Part B

regulations of IDEA specify, at 34 CFR §300.320-300.328, the procedures that school districts must follow to develop, review, and revise the IEP for each child.

Yell and Katsiyannis (2004) emphasize the IEP goals, objectives, and selected services are not just a collection of ideas on how the school may educate a child, but rather the school district's legal obligation to educate the child in accordance with the IEP. To develop an IEP, the LEA officials and others involved in the child's educational program meet to discuss education-related goals. By law, the following people must be invited to attend the IEP meeting:

- One or both of the child's parents

- The child's regular education teacher

- The child's special education teacher

- A representative of the public agency (LEA), other than the child's teacher, who is qualified to provide or supervise the provision of special education

- The child, if appropriate

- Other individuals at the discretion of the parent or agency (such as a physician, advocate, or neighbor). [34 C.F.R §300.320-300.328]

Federal statutes do not use the term "inclusion," however, IDEA does require school districts to place students in the least restrictive environment (Banks & Banks, 2004). As previously stated, LRE means that:

> To the maximum extent appropriate, school districts must educate students with disabilities in the regular classroom with appropriate aids and supports, referred to as "supplementary aids and services," along with their nondisabled peers in the school they would attend if not disabled, unless a student's individualized education program (IEP) requires some other arrangement. [20 U.S.C. §1412(a)(5); 34 C.F.R. 300.550(b)(1)-(2)]

This requires an individualized inquiry into the unique educational needs of each disabled student in determining the possible range of aids and supports that are needed.

A framework for deciding LRE for students with disabilities has been provided (see figure 1) that summarizes the questions an IEP team must answer when determining placement (Champagne, 1993). Individualized Education Planning teams are not obligated to have the student try out each level of LRE before deciding on a more restrictive environment. Regardless of the requirements set forth as a result of the Gaskin Settlement, the IEP team makes the final decision regarding LRE for students with disabilities (Champagne, 1993).

LRE Decision Flow Chart

NOT SPECIAL EDUCATION	← NO	Is Student Eligible for Special Education Services?	1

YES ↓

↓ ←	YES	IEP Meeting to define APPROPRIATE Education	2

↓

YES	Can Appropriate Education (determined by the IEP team) be achieved in regular class with services already there?	3

↓ ←

NO

↓

YES	Can Regular Class be modified by providing supplementary aids and services in order to achieve Appropriate Education?	4

↓ ←

NO

↓

YES	Can Appropriate Education be achieved in the next, more segregated setting with services currently there?	5

↓ ←

NO

↓

↓ ← YES	Can the next, more segregated setting be modified by providing supplementary aids and services in order to achieve Appropriate Education?	6

↓ ↓

PRIMARY

NO	Are there additional opportunities for integration, either through extracurricular activities or while achieving some IEP goals?	7

YES ↓

Modified or Split Placement (e.g. primary placement plus secondary placement for some part of the day/week)

Figure 1 A framework for understanding the Least Restrictive Environment levels for IEP team placement decisions for students with disabilities (Champagne, 1993).

Note: IEP team determines LRE. A student is NOT required to "try out" each level of LRE and "fail" before the student moves to a more segregated setting (Champagne, 1993).

2.3   OVERVIEW OF INCLUSION

Many school districts are adopting a philosophy of "full inclusion." "Full inclusion" violates Federal law and regulations, despite some school administrators saying all students with disabilities have the "right" to full inclusion in the regular classroom (Hines & Johnston, 1996).

The "right" in IDEA and the most basic legal concept and very basis of IDEA is a Free Appropriate Public Education. Each of those words has meaning. The schooling of any child with a disability is Free. That schooling shall be individually tailored to the needs of a child and must be Appropriate in meeting the needs of children with disabilities. This right is for schooling paid for with Public taxes. And IDEA's greatest emphasis is on the acquisition of knowledge and skills (Education), not on a whole variety of other subjects (Ringer & Kerr, 1988).

The IDEA regulations use headlines to begin each section. The headline "LEAST RESTRICTIVE ENVIRONMENT (LRE)" comprises seven subparts. The first is "Sec. 300.550 General LRE Requirements". The second is "Sec. 300.551Continuum of Alternative Placements" and it requires under (a) that "Each public agency shall ensure that a continuum of alternative placements is available to meet the needs of children with disabilities for special education and related services." Specifically, this section states the continuum must:

1. Include alternative placements listed in the definition of special education under Section 300.26 (instruction in regular classes, special classes, special schools, home instruction, and instruction in hospitals and institutions) and;

2. Make provision for supplementary services (such as resource room or itinerant instruction) to be provided to support regular class placement. [34 C.F.R. 300.551 (b)(1)-(2)]

Although the term "inclusion" is not defined in Federal legislation, it is a term that is used often in public school systems. "Inclusion can be deeply disturbing because it challenges our unexamined notions of what 'ordinary' and 'normal' really mean" (Forest & Pearpoint, 1997, p. 2). Inclusion is not synonymous with mainstreaming. While mainstreaming is viewed as a benchmark where students "earn" their way back into the classroom, inclusion establishes the students "right" to be there in the first place. Services and supports are brought to the regular classroom as needed. The current inclusion movement challenges educators to look beyond mainstreaming to find inclusive strategies to meet student's individual needs. Inclusion calls for a more complete merger of regular and special education (Hines & Johnston, 1996).

In the relevant research and professional literature, proponents and opponents of inclusion have become more apparent. According to Skrtic (1991), both sides agree that the only justifiable, rational reason for special education is to provide instructional benefits to students with disabilities. Yet, "there is now substantial evidence that most, if not all, children with disabilities, including children with very severe disabilities, can be educated appropriately without isolation from peers who do not have disabilities" (Ringer & Kerr, 1988, p. 6). Skrtic (1991) goes on to state:

> Given the weak effects of special education instructional practices and the social and psychological costs of labeling, the current system of special education is, at best, no more justifiable than simply permitting most students to remain unidentified in regular classrooms and, at worst, far less justifiable than regular classrooms placement in conjunction with appropriate in-class support services. (p. 152)

A primary implication of IDEA is the need for all educators to share in the responsibility for services provided to all students, including those with disabilities. The IDEA Amendments reflect a step beyond compliance in pursuit of quality (Williams & Katsiyannis, 1998).

Today, teachers are facing increasingly greater challenges in meeting the diverse needs of students in their classrooms (Torres-Valesquez, 2000). While the number of students with English as a second language is continually increasing, IDEA promotes the inclusion of students with disabilities in the general education classroom and stresses the importance of providing the core curriculum for all students, including those with disabilities. These factors lead to the creation of a modern educational paradigm for educating children today, as well as, in the future. Classroom teachers must learn new ways to accommodate students with diverse learning needs. This involves a reformation of the entire educational system, especially the methodologies that are embedded in the entire teaching experience of the traditional teacher. Realistically, this type of restructuring can only be successful with the desire and commitment of the classroom teachers. According to Banks and Banks (2004), the goals of quality inclusive education are to teach children to appreciate and value the contributions of others, have respect for perspectives that differ from their own, and accept responsibility for the role they play as members of a larger society. Equity, justice, quality of life and full participation in a pluralistic and democratic society are concerns of special education (Park & Lian, 2001).

Sapon-Shevin (2003) suggested that by seeing beyond inclusion as a special education concern, there is the potential to challenge and transform far more within our schools and society. Inclusion is not only about disability or schools, but also about social justice that can teach important lessons far beyond individual students and help to create an inclusive, democratic society.

It is crucial to invite parents, teachers, administrators, community members and students to join together to be part of a new culture. Every person should be encouraged to participate to the fullness of his or her capacity-as partners and as members (Forest & Pearpoint, 1997). The current paradigm shift to less restrictive models for educating students with disabilities requires collaborative planning, routine modification of instructional materials, and the inclusion of parents and peers as important components of the educational process. According to Bradley and Fisher (1995), programming decisions should be based on individual student needs, attributes of the school, and the expertise of building professionals.

"True inclusion exists in all facets of life" (Schleien & Heyne, 1996, p. 1). All-inclusive schools set an example for students' other areas of life. For example, the parents of a 12-year-old boy with Down syndrome living in a small community have found the community recreation programs to be inclusive for all children in the family. Schleien and Heyne (1996) point out that in the sports programs, the parents feel their son is "treated like a team member, with only subtle differences" (p. 1). The parents see the benefits for their son as being enhanced self-esteem, the building of a habit of physical activity, and a feeling of membership with his siblings and peers. "Children look to do what everyone else is doing. Children with Down syndrome are no different" (Schleien & Heyne, 1996, p. 1).

2.3.1 Advantages of Inclusive Classrooms

Inclusion advocates typically support the argument that the segregation of a child by diagnosis or handicap is not in the best interest of the child (Schleien & Heyne, 1996). Grider (1995) concluded that those who favor inclusion believe that disabled students in the regular classroom will be more accepted by their peers, have balanced relationships, and gain more academic

knowledge through small group and teacher instruction. As a result, teacher and parent expectations will increase as their students become more successful. This in turn, will result in continued higher achievement.

The stigma attached to the more popular pull-out programs common to most schools is removed (Friend & Cook, 1992). Improvement of coordination and relevance of instruction results as the teachers work together (Thousand & Villa, 1991). The students waste less instructional time by not traveling back and forth between classrooms.

Baker, Wang and Walberg (1995) noted that special education students involved in inclusionary teams made small to moderate gains in academic and social settings. Schattman and Benay (1992) found that special education students in an inclusionary setting are exposed to talented teachers, refine new social relationships with the same-age peer group, and experience more quality programs in a regular education classroom. Stainback and Stainback (1990) concluded that inclusion is an appropriate instructional model because students with disabilities are accepted and supported by their peers and other members of the school community while having their educational needs met.

A primary goal of inclusion should be for regular classroom teachers to better meet the needs of all students. This should not only include students with disabilities, but also those students who are identified as at-risk of school failure, students who are struggling both academically and socially, students who are bored because the instruction is too easy and students with attention problems. According to McLeskey and Waldron (1996), improved instruction, a curriculum that is more child-centered, collaboration with other teachers to address student problems, and a range of other features of inclusive classrooms should allow this objective to be met.

Some educators support inclusion simply because it is the law. There are more meaningful reasons to support inclusion. All people, regardless of their ability or disability, share a basic human need of belonging. This sense of belonging is essential to the establishment and fostering of self-esteem that is accepted as a prerequisite to achievement (Knight & Wadsworth, 1993). The selective segregation of children based on their disabilities damages self-esteem because it does not focus on the children's innate abilities. As a result, children with disabilities start to believe that it is because of their differences they are incapable of achieving some of the same goals as their non-disabled peers. According to Baker, Wang and Walberg (1995), considerable evidence from the last fifteen years suggest that the segregation of special-needs students in separate classrooms is detrimental to their academic and social development and that students with special needs perform better in regular classrooms.

Another reason to justify inclusion is that segregation promotes dependence and limits opportunities for interaction between disabled and non-disabled children (Hardman, Drew, Egan & Wolf, 1993). For children with disabilities, establishing friendships is critical to their social and affective development. Research has shown and educators have found that friendship development is more difficult for children with mild, moderate or severe disabilities (Roberts & Zubrick, 1993). Some educators believe that all children benefit from integrated classrooms because they help each other based on individual needs and strengths. As a result, all children can achieve their optimum potential within the inclusive classroom setting (Stoler, 1992).

Inclusion gives both the children with disabilities and those without the opportunity to interact in a more natural and realistic setting. Children need to understand and accept the fact that all individuals are different and unique and that each of us needs to be accepted for who we are (York & Vandercook, 1991).

McLeskey and Waldron (1996) explain their guiding theme for the development of inclusive school programs is "the concept of normalization; that is, the rhythm of the day for students with disabilities is as similar as possible to the rhythm of the day for typical students" (p. 155). This means that schools should prepare students with disabilities to live their lives as independently as possible, in as typical a setting as possible (McLeskey & Waldron, 1996).

2.3.2   Disadvantages of Inclusive Classrooms

Opponents of inclusion have argued that it does not save money and probably costs more to implement than the pullout approach (Woelfel, 1994). The two most prominent opponents of inclusion, The Council for Exceptional Children (CEC) and the Learning Disabilities Association (LDA), have urged schools to keep service options available to students (Gorman & Rose, 1994). The LDA has also argued that inclusion is a violation of the 1990 Individuals with Disabilities Education Act (LDA, 1993). This act mandated that FAPE in the least restrictive environment be provided to students with disabilities based on their individual needs. Critics argue that the regular education classroom is not appropriate for all students with disabilities, and in fact, can be detrimental to some student's academic and social progress (Woelfel, 1994).

Kauffman and Hallahan (1995) suggested that the drive for inclusion focuses on the educational process rather than educational outcomes, on mainstream curricula rather than functional, on advocacy for programs rather than for children, and on rhetoric rather than research evidence.

Further criticism of the inclusion movement in the USA has come from Borthwick-Duffy, Palmer and Lane (1996) and Little and Witek (1996), who suggest that the thinking of inclusion proponents is based more on emotion and philosophy than empirical evidence. These

authors point out that research evidence to date does not support a full inclusion model and therefore suggest that decisions about inclusion should be made on an individual basis as is mandated by the current legislation in the USA.

After completing a 3-year research project related to the study of inclusive school programs, Ferguson (1995) came to a troubling realization. She noted that:

Even when students with disabilities were assigned to general education classrooms full time, their participation often fell short of the kind of social and learning membership that most proponents of inclusion envision. Even to casual observers, some students seemed set apart-immediately recognizable as different- not so much because of any particular impairment or disability but because of what they were doing, with whom, and how. (Ferguson, 1995, p. 284)

Furguson (1995) concluded that a significant factor contributing to the lack of membership in the classroom was the assumptions made by both the regular and special education teachers. Some of the assumptions regarding students and learning remained unchallenged and unchanged. These included:

(1) Inclusion students were viewed as "irregular," even though they were in regular classes full time (2) these students needed specialized instruction that could not be provided by the classroom teacher and (3) the special educator was the designated provider of all things specialized

These assumptions represent a fundamental problem with many inclusive programs. Many schools simply move special education into the regular education classrooms without monitoring what, how and by whom the students with disabilities are taught.

Finally, proponents of inclusion believe if students with disabilities are included from the beginning in the regular classroom, they will be accepted in the learning and social communities of the school and the classrooms will become more diverse. Although this may be true, the challenge to make general education classes the place where a diverse range of students can become part of the learning and social community is more difficult than many proponents of inclusion realize (McLesky & Waldron, 2002). In order to accomplish this task, schools need to implement meaningful change that requires educators to collaborate "to reinvent schools to be more accommodating to all dimensions of human diversity" (Furguson, 1995, p. 285).

2.3.3   Successful Inclusion

The goal of public education is to provide students an academic and social experience throughout their school years in order to mold them into productive members of society. Regardless of a child's ability or disability, this opportunity should be available to all students. According to King (2000), students' success in the outside world directly relates to their understanding of their own strengths and weaknesses.

Several research studies have been conducted over the years on the effectiveness of inclusive programs and what specific factors are needed to ensure a successful program. For example, Lipsky and Gartner (1998) surveyed nearly 1,000 school districts and concluded that there are seven key factors necessary for successful inclusion. These were: visionary leadership; collaboration between everyone involved; refocused use of assessment; support for staff and students; appropriate funding levels; parental involvement; and effective program models, curriculum adaptations, and instructional practices.

As a result of the increase of inclusive practices in the USA, Vaughn and Schumn (1995) conducted an action research project that focused on the implementation of inclusive approaches in three primary schools in large urban areas. This was a two-year study in which the authors worked with teachers, parents, administrators and governors, helping them to reorganize their provision for students with disabilities. The authors concluded that for inclusion to be effective, the inclusive practices needed to include nine components. These were: use the extent to which students with disabilities make satisfactory academic and social progress in regular classes as the major criteria for considering alternative placement; allow teachers to choose whether or not they will be involved in teaching inclusive classes; ensure the provision of adequate resources; encourage schools to develop inclusive practices based on various stakeholders input; maintain a continuum of services for students with disabilities; continue to monitor and evaluate the inclusion program; ensure ongoing professional development to all staff; encourage the development of adaptations and modifications in the classroom; and develop an agreed philosophy and policy on inclusion.

A major goal of today's public schools is to find new and innovative ways to create learning environments that are responsive to meeting the needs of students with disabilities. As a result, schools are developing inclusion programs in an attempt to accomplish this challenging task.

> As learning standards, standardized testing, and mandates for accountability continue to raise the bar for educators throughout our country, it is more important than ever that teachers and administrators work together to create inclusive learning environments that meet the needs of all learners. (Stump, 2000, p. 5)

Stump identifies several key components that are necessary when establishing an inclusion program. The first is to set the tone. This happens when districts articulate a vision, set goals, and develop a plan of action. Administrators should work with staff to articulate the school's vision for the program and identify the types of desired outcomes. According to Stump (2000), the second component is to prepare the school environment for inclusion. This will require some significant changes in school operations. Examples of this restructuring could include: the development of teams of teachers; changes in schedules to accommodate common planning time for regular and special education teachers; major training for all staff on how to work together effectively and allocate resources. More specifically, Stump (2000) identifies teacher collaboration as the most powerful tool to ensure that all students succeed in general education classrooms. "Creating shared planning time, creating schedules that allow special education teachers to be present in general education classrooms on a regular basis, and providing resources (time and materials) that support collaboration are hallmarks of successful and sustainable inclusion programs" (Stump, 2000, p. 3).

McLesky and Waldron (1996) identify three stages in developing successful inclusive programs.

> The first stage is addressing teacher beliefs and values concerning inclusive schooling. We have found that the beliefs of many teachers about students, about how schools should be organized, and about the value of educating students with disabilities are critical factors that must be examined, reflected on, and changed if inclusion programs are to be effective. (p. 155)

The second stage in developing a good inclusion program is planning. These authors report that careful planning takes a full year and involves ongoing meetings, discussions, staff development and visits to positive inclusion sites (McLesky & Waldron, 1996).

The third stage is the actual implementation and maintenance of the inclusive program. According to McLesky and Waldron (1996) "this stage is the most difficult and results in the highest levels of frustration and anxiety for school personnel" (p. 156). Those involved in inclusion programs at this stage experience many changes in the role and function of the teacher and classroom. This can be overwhelming for the teachers because they begin to realize that the process of monitoring and adjusting is ongoing in order to meet the changing needs of students and faculty members. It is during this stage that continuous planning time is available for teachers to collaborate and "adapt their 'work in progress' as they carefully plan changes and improvements" (McLesky & Waldron, 1996, p. 156).

Several researchers indicate specific components that are needed to ensure a successful inclusion program. A framework for identifying these components has been provided (see figure 2) with emphasis on the common factors identified by each researcher.

Researchers	Identified Components
Hord (1992)	Developed and communicated vision Established plan Appropriate resource allocation Training and development Monitor and check progress Ongoing professional development Create a culture for change
Vaughn and Schumn (1995)	Documentation of academic and social progress of students with disabilities Voluntary participation from teachers Adequate resources Input from various stakeholders Continuum of services for students with disabilities Monitor and evaluate inclusion programs Ongoing professional development Adaptations and modifications in the regular

	education classroom established and accepted philosophy of inclusion
McLesky and Waldron (1996)	Teacher beliefs and values acknowledged Developed plan that includes stakeholder's input Ongoing staff development Common planning time for teachers
Lipsky and Gartner (1998)	Visionary leadership Teacher collaboration Refocused use of assessment Support for staff and students Appropriate funds Parental involvement Effective program models Curriculum adaptations Instructional practices
Stump (2000)	Articulated vision Establishment of goals Collaboration amongst teachers Common planning time for Teacher training and resources

Figure 2 A framework for summarizing various researchers' literature review on successful components of an inclusion program

2.4   TEACHER IMPACT ON INCLUSION PROGRAMS

When a school makes the decision to include students with disabilities in the general education setting, there are several issues that educators must face.   The first is to reconfigure the distribution of staff and materials. That involves a shift in the role responsibilities for people, resources and distribution of materials (Bradley & Fisher, 1995). Methods for coordinating curriculum delivery under the new context of a diversified curriculum and techniques for heterogeneous instruction are essential. When developing a plan for such changes, school officials must explicitly address support for individuals. As their role shifts, educators need formal and informal forums in which to share their experiences and increase personal and professional support (Datnow & Castellano, 2001).

2.4.1   Individual Change

Change is primarily about individuals, their beliefs and their actions rather than programs, materials, technology or equipment (Borthwick-Duffy, Palmer & Lane, 1996). To many educators, the idea of change brings to mind thoughts of reform, restructuring of schools, new initiatives and school improvement efforts. Change to inclusive schooling challenges traditional education practices, which sometimes causes educators to react in very personal ways. Including students with disabilities in the regular classes can cause teachers a great deal of anxiety. Hopes are raised, but fears are generated, when schools transition from educating students with disabilities in separate programs to inclusive settings. It is not unusual for educators to question their competence and ability to meet the needs of children with disabilities (Coates, 1989). Many feel overwhelmed by sympathy and sadness for the child. Some resent the fact that they must work with children with disabilities in addition to all their other responsibilities. Even if teachers and administrators are initially enthusiastic, sustaining the change is difficult and requires strong support systems committed to the process (Coates, 1989).

According to Datnow and Castellano (2001), "the implementation of an externally developed school reform model can also dramatically affect the professional lives of teachers" (p. 222). If change in education depends on what teachers do and think, it is crucial for change agents to pay close attention to the thoughts and actions of teachers. According to Fullan (2001), due to being given multiple and contradictory directives, it is common for teachers to resist new programs. However, they hold valuable knowledge about the system and good ideas about what should change and how it should occur. Researchers recognize that in some instances teacher commitment follows, rather than precedes, changes in practice (McLaughlin, 1998). Ultimately, teacher ownership of change is critical to the success of school reform. Educators need to be

supported by one another and their organization as they undergo valid, necessary and uncomfortable reactions to change.

2.4.2   Teacher Perception

Regular education teachers do not necessarily agree with the contentions of inclusionists that traditional special education is ineffective or that they themselves can work successfully with exceptional students (Coates, 1989). General education teachers often report feeling uncomfortable as they move into new roles that include providing meaningful educational and social experiences for students with disabilities. They struggle with special education jargon and paperwork and working with more comprehensive record keeping systems. Some general educators fear a lack of support from administration and special education teachers, and some have expressed concern that these supports will be eliminated all together.

In a review of the research on teacher perceptions of inclusion, Scruggs and Mastropieri (1996) analyzed the results of twenty-eight studies published between 1958 and 1995. The major finding was that, although, on average, 65 percent of teachers supported the general concept of inclusion, only 40 percent believed that this is a realistic goal for most children. Fifty-three percent of teachers reported they were willing to teach students with disabilities and 54 percent considered that such students could benefit from inclusion. However, only 33 percent of teachers believed that the regular education classroom was the best place for students with disabilities. More specifically, only 28 percent of teachers thought there was sufficient time available to implement inclusion and only 29 percent considered they had sufficient expertise. An important finding was that there was no correlation between positive attitudes toward inclusion and date of publication, suggesting teachers' views have not substantially changed over the years.

46

2.4.3   Teacher Attitude

Teacher attitude is one of the most important variables in determining the success of innovative programs in special education (Larrivee & Cook, 1979; MacDonald & Hardman, 1989; Parrish, Nunn, & Hattrup, 1982; Stoler, 1992). Although inclusion is recognized as a recent initiative, few studies have been conducted to consider teacher's feelings about it. Pearman, Huang, Barnahart, and Mellblom (1992) analyzed the results of their attitudinal survey of special and regular education teachers and others involved in the education of students with disabilities. A small sample of administrators was also involved in the study (10 percent of respondents). The 246 respondents were associated with 22 schools in Colorado. The authors found apparent contradiction in the results. Although 70-percent of respondents agreed that inclusion would work in their schools, about 50-percent also disagreed that inclusion is the best way to meet the needs of all students. Specifically, the teachers reported their concern with students with behavior and aggression problems being included in the regular education classroom. The findings also indicated teachers were frustrated by the heavy workload of meeting standards and benchmarks, covering the curriculum, and individualizing work for students with IEPs. The authors also reported 60-percent of respondents disagreed that regular education teachers want children with disabilities in their classes full-time, whereas, 41-percent disagreed special education teachers want their students placed full-time in the regular education classrooms. Twenty-eight agreed that inclusion would be detrimental to the learning of other students, and 53-percent agreed that inclusion classrooms "created too much additional work for staff" (Pearman, Huang, Barnahart, & Mellblom, 1992, p. 180).

A survey of 400 teachers who belong to the American Federation of Teachers reported that their schools either had or were moving toward a full inclusion program. Seventy-seven

percent opposed the inclusion program. These were teachers who had inclusion students in their classrooms and reported problems with discipline and time allocation. Only 22-percent of the teachers surveyed said they had received special training, and just half of those teachers thought their training was good (American Federation of Teachers, 1994).

Stoler (1992) studied the attitudes of secondary school teachers toward the inclusion of all disabled children. Results indicated that teachers with differing levels of education had different perspectives on inclusion. The higher the education level, the more negative the attitudes were toward inclusion. There was also a difference in perceptions based on special education coursework. The more special education coursework the teachers had throughout their college experience, the more positive their attitudes were regarding inclusion. It was also noted that the attitudes of teachers who received professional development on inclusion were more positive than those who did not receive training.

The roles of regular education teachers and special education teachers are redefined in an inclusion classroom. This becomes a role shift in which the regular education teacher primarily assumes the responsibility for educating children with disabilities and the special education teacher is responsible for supporting both the regular classroom teacher and the student.

Philosophically, most regular educators support and believe inclusion is the best answer for delivering special education services. Although this is true, most prefer the traditional "pull out" model. Regular education classroom teachers believe they are not adequately prepared to handle special education challenges within a regular classroom (Hines & Johnston, 1996). Many teachers believe an inclusion classroom would offer unlimited opportunities to develop more flexible and responsive classrooms, but feel they do not have the appropriate training to provide

these opportunities. Favorable opinions are reported more by teachers in qualitative studies than in large-scale teacher surveys (Hines & Johnston, 1996).

Giangreco (1996) suggests ten recommendations for regular education teachers in an inclusive setting:

1) Work with other team members

2) Welcome all students into your classroom

3) Be the teacher for all students

4) Provide the same classroom experiences for all students

5) Be specific about shared expectations with team members

6) Adapt work to the student's needs

7) Provide both active and participatory learning experiences

8) Adapt classroom arrangements, materials and strategies

9) Have appropriate support services, and

10) Evaluate your teaching

Instructional models should stress collaborative planning and problem solving in order to serve the diverse student population. Inclusive support teams can work together to provide meaningful experiences for students with disabilities. Classroom teachers and support specialists can use their complimentary skills and knowledge to plan, implement, and evaluate the benefits of instructional practices for all students in their class (Walther-Thomas, 1997).

Titone (2005) conducted focus groups composed of individuals experienced with inclusion. The purpose was to determine the knowledge perspective teachers need to know, or interventions they must be able to make in order to be successful in K-12 inclusive school settings. Themes from the study suggested adapting curriculum and pedagogy, learning to

monitor one's own attitude, collaborating with teachers, as well as changes in courses and field experiences for teachers in preparation programs. In addition to understanding and caring for the students, the teacher must be successful at teaching the subject-area content. Curriculum development is a critical factor in establishing a successful inclusion program because the curriculum is the map that guides the educational process. Participants in the study agreed that it is not sufficient to develop and adhere to a good curriculum, but teachers must know how to adapt or modify curriculum to meet the needs of all students in the classroom. According to Titone (2005), the best curriculum decisions can be made only through collaboration of special and regular education teachers.

2.5   OVERVIEW OF CO-TEACHING

The demands that special education legislation has placed on school districts have forced a redesign of the educational system for children with disabilities. It has become important for school districts to utilize their resources in more effective and creative ways in order to meet the mandates of NCLB and the even more recent mandates of the newly revised IDEA 2004. Both of these laws define "highly qualified" in new ways, and as a result, schools must find unique ways to meet the requirements these laws set forth. Co-teaching has become one of the many collaborative strategies that schools are looking at in an effort to meet the needs of all students within this educational framework that we call school (Villa, Thousand, & Niven, 2004: Snell &Janney, 2005).

Co-teaching is a "push-in" rather than "pull-out" model of service delivery for students with disabilities. This model is different as special educators come to the regular education

classrooms to co-teach with general educators, and the expertise of teachers is viewed as complementary. The general education teacher shares expertise in all aspects of the curriculum and subject area, along with effective teaching and large-group instruction. The special education teacher contributes his or her expertise in adaptations and modifications to the curriculum, learning styles and strategies, along with clinical teaching and behavior management (Parrott, Driver, & Eaves, 1992). A popular definition of co-teaching has evolved over time and explains the process as:

Co-teaching refers to an educational approach in which general and special educators work in a coactive and coordinated fashion to jointly teach academically and behaviorally heterogeneous groups of students in educationally integrated settings (i.e., general classrooms). Specifically, in co-teaching both general and special educators are simultaneously present in the classroom, maintaining joint responsibility for specified instruction that is to occur within that setting. (Bauwens, Hourcade, & Friend, 1989. p. 18)

According to Gerber and Popp (2000):

The model of co-teaching has recently been used to serve students with disabilities who have been placed in general education classrooms, primarily because they were considered to be academically able. The great majority of these students are students with learning disabilities. These students are cognitively within normal ranges and are thought to be able to compete at approximately their age and grade level. (p. 229)

Co-teaching is most often recommended for students with high-incidence disabilities. These can include students with mild retardation, behavior disorders or learning disabilities whose IEP calls for adapted instruction in the regular education classroom.

51

2.5.1   Models of Co-teaching

Special Education researchers, teachers and practitioners have described methods in which general and special education teachers can co-teach in a single classroom. Friend, Reising, and Cook (1993) identified five options teachers typically use when implementing a co-teaching model. As teams progress through the options, it is important to remember that these are hierarchical across three variables. First, as the co-teachers move down the continuum of models, it must be understood that more and more planning time together is needed. Secondly, as the team progresses, both teachers need to have a solid foundation of content knowledge in order for the model to work effectively. This expectation can be the greatest barrier to co-teaching at the secondary level. Thirdly, as the co-teachers move down the continuum, they must share the same philosophy of inclusion and have a level of trust and respect for each other. It is critical that the co-teachers be established from the onset of the initiative in order to provide the opportunity for beginning to build relationships. Administrators should be cognizant of the teachers they are pairing together, because a positive relationship is critical to the success of co-teaching.

Model 1: Lead and Support

In this model, one teacher takes the instructional lead and the other simultaneously observes, monitors or tutors individual students. Theoretically, the regular or special education teacher can assume either role, but in reality, it is usually the regular education teacher who initiates the instruction and the special education teacher who assists. This model is often preferred in the initial stages of co-teaching because the special education teacher lacks confidence with the rhythm, pacing and content of the general education curriculum (Friend, Reising & Cook, 1993).

52

Model 2: Station Teaching

Co-teachers that utilize this model divide the class into two or three heterogeneous groups. Two groups are supported by teacher-directed instruction while the third group works independently. Within the teacher-directed groups, course content and class work are established. They do not have to be completed in any specific order. Normally, each teacher teaches one lesson and the third lesson (if there are three groups) consists of a seatwork assignment that students complete independently or with minimal assistance. Each group rotates through the two or three teaching stations. The purpose of this model is to allow both teachers to provide more individualized instruction to students (Friend, Reising & Cook, 1993).

Model 3: Parallel Teaching

In this model the class of students is divided into two heterogeneous groups of equal size, both containing students with disabilities. The teachers are expected to jointly plan a lesson that delivers the same content within the same timeframe. This model recognizes that teachers have different teaching styles and allows for that uniqueness when designing the assignments and instruction. Parallel teaching requires that both teachers pace their lessons so that both groups of students finish the unit of instruction at the same time with the same degree of mastery (Friend, Reising & Cook, 1993).

Model 4: Alternative Teaching

This model supports the idea of pre-teaching or re-teaching depending on need. Typically, a larger group of students is engaged in whole-group instruction or an extension activity, while a smaller group of students have concepts re-taught or specific skills re-emphasized. This model requires more planning time to ensure these tasks can be successfully

completed with all students. Either teacher can teach the groups. Sometimes it is beneficial for the regular education teacher to assist the students with the pre-teaching and re-teaching since they are the experts in the content knowledge (Friend, Reising & Cook, 1993).

Model 5: Team Teaching

Both teachers equally share the planning and instruction of students in this model. The teachers are expected to plan lessons jointly, have equal knowledge of the content, and be responsible for the learning of all students in the class, including those with disabilities. This model is typically used with co-teachers who have worked together for at least 2 years. In this type of classroom environment, both teachers finish each other's sentences, clarify each other's comments or answer student questions without the fear of offending the other teacher (Friend, Reising & Cook, 1993).

2.5.2 Benefits of Co-Teaching

Despite the increasing popularity of the co-teaching service delivery model, the field currently lacks a strong empirical database on the overall effectiveness of this model. Research has been limited to case studies, observations, survey research and reports from teachers involved in the process. Nonetheless, from the work currently completed, a number of benefits are presented in the literature including: greater collegial exchanges of strategies between professionals, increased understanding of students' needs, stronger instructional programs for students with disabilities, increased acceptance of students with disabilities by their non-disabled peers and decreased burnout for professionals (Lecompte & Preissle, 1993).

According to Cook and Friend (1995), proponents argue that co-teaching is a viable model for effective inclusion for at least two reasons. First, co-teaching allows the special

education teacher to provide direct instructional support to the regular education teacher. Other consultation models limit the amount of direct support the special education teacher can provide, and as a result, they are unable to offer suggestions or assist with modifications on a consistent basis. Secondly, proponents of co-teaching report this model provides a direct means of special education services in a less obtrusive manner, so that students with disabilities do not feel stigmatized or isolated from their peers. Many feel the co-teaching experience is beneficial as the students with disabilities receive the content expertise of the regular education teacher and the disability expertise of the special education teacher (Stainback & Stainback, 1990).

Other research indicates several benefits of co-teaching. The data reports most students with disabilities made academic gains of some type (Klingner, Vaughn, Hughes, Schumm & Elbaum, 1998). Other research indicates augmented self-esteem, reduced social stigma amongst peers and parental satisfaction with the co-teaching model (Affleck & Lowenbraun, 1990). Walther-Thomas (1997) reported benefits such as teacher satisfaction; professional and personal growth; improved academic performance; and peer relationships. Gerber and Popp (2000) found that administrators, teachers, parents and students were enthusiastic about the co-teaching model and perceived successful academic outcomes and positive effects on self-esteem and behavior management.

2.5.3   Barriers to Co-Teaching

Researchers identify several barriers that impact the success of the co-teaching model. Walther-Thomas (1997) identified planning time, scheduling, caseloads, administrative support and staff development as the most prominent challenges a school system faces when implementing this service delivery model. Similarly, Dieker (2001) reported planning time, student grading, student

readiness, teacher readiness and high stakes testing as challenges. Schumaker and Deshler (1988) identified three significant barriers to co-teaching at the secondary level. First, they noted the large gap in the skill level of students with disabilities. "Research has repeatedly shown that the amount of time necessary to teach the required number of skills exceeds the amount of time that might be allocated to such instruction in a secondary content classroom" (p. 37). Secondly, Schumaker and Deshler argued that research has indicated that individual feedback; high rates of interaction with peers and teachers; high rates of students' responding; and direct skill instruction can repair skill deficit areas in students with disabilities. Finally, the authors described the characteristics of secondary education that inherently pose barriers, including the voluminous nature of the content; the amount of time teachers are in contact with students; the pressures from outside the school; the autonomy and independence of teachers in courses; and the divergent goals of special education and general education as the grade level rises (Schumaker & Deshler, 1988).

Weiss and Lloyd (2002) observed co-taught classes at the middle and high school levels and identified several challenges related to co-teaching. One issue related to a split in instruction within the classroom because of the gaps in academic and behavioral domains between the regular and special education student population. Another issue was the little time that was devoted to special education teachers being able to deliver and modify instruction. Overall, the regular education teachers were regarded as the content specialists and the special education teachers were identified as the classroom assistants.

2.5.4   Components of a Successful Co-teaching Model

Several researchers (Friend & Cook, 1995; Weiss & Lloyd, 2002; Dieker, 2001; Gerber & Popp, 2000; Schumaker & Deshler, 1988) have described similar components that lead to effective co-teaching. The following characteristics surfaced from the literature signifying a "true" co-teaching model: strong positive relationships between the teaching pairs; consistent planning time; equity in the teaching roles for both teachers; and more individualized student instruction.

There has been several research studies related to the implementation of successful co-teaching programs and specific components that make co-teaching effective. Scruggs and Mastropieri (1995) conducted two case studies examining the effective teaching practices for including students with disabilities in the regular classroom setting at the upper elementary, middle and secondary levels. The researchers worked closely with both regular and special education teachers from one semester to two years. Data sources consisted of extensive class observations, field notes, videotapes of classes, interviews with teachers and students, and other artifacts. Data analyses in these cases were qualitative and inductive.

The similarities in the ways in which collaboration and co-teaching occurred between the two teams of teachers were noted through the observational findings. Each team possessed 1) outstanding working relationships 2) strengths as motivators 3) time for co-planning 4) good curriculum 5) effective instructional skills 6) exceptional adaptations for students with disabilities and 7) expertise in the content area (Scruggs & Mastropieri, 1995). According to the results of these studies, the authors found these seven factors critical to the implementation of a successful co-teaching program.

Co-teaching is a developmental process that has stages through which co-teachers proceed. Through extensive experience, classroom observations, and conducting in-service

training with co-teachers on co-teaching over the past decade, Gately and Gately (2001) identify three developmental stages in the co-teaching process.

Stage 1 is identified as the Beginning Stage. At this level, co-teachers are guarded and more superficial in their communication as they develop boundaries and attempt to establish a professional working relationship. "It may be that much of the dissatisfaction that is noted in the literature regarding co-teaching is expressed by teachers who continue to interact at the beginning level" (Gately & Gately, 2001, p. 42).

Gately and Gately (2001) identify stage 2 as the Compromising Stage. As the relationship develops between the co-teachers, the communication becomes more "open and interactive" (p.42). As a result, there is an increase in the professional communication. At this level, teachers use a "give and take" approach in order to build a level of trust that is needed to move toward a more collaborative partnership.

Finally, stage three in the developmental process of co-teaching is the Collaborative Stage. At this level the teachers "openly communicate and interact" (Gately & Gately, 2001, p. 42). The relationship between the teachers is one of trust and mutual respect for each other both as a colleague and a professional. There is a sense of comfort that enhances the co-teaching, collaborative classroom. "At this stage, it is often difficult for outsiders to discern which teacher is the special educator and which is the general educator" (Gately & Gately, 2001, p. 42).

In addition to the developmental stages, the authors also identify several factors that must be addressed in order for co-teachers to move through these stages in order to establish a successful co-teaching model. Gately and Gately (2001) identify these factors as: 1) physical arrangement of the classroom 2) special education teacher's knowledge of the general education curriculum 3) shared responsibility for adaptations and modifications of the curriculum 4)

common planning time 5) shared instructional presentation 6) effective classroom management 7) an established assessment system and 8) interpersonal communication.

Gately and Gately (2001) recommend that co-teachers and supervisors use The Co-teaching Rating Scale (CtRS) to continuously analyze the effectiveness of the co-teaching classrooms. This is an informal instrument that can help teachers monitor and adjust their co-teaching program in order to reach the collaborative level more quickly. There are two forms of the CtRS. One is for the special education teacher and the other is for the regular education teacher. Overall, the CtRS assists in identifying each teacher's strengths and weaknesses. The authors recommend that the teachers complete the forms independently and then compare results with their partners. In addition, they recommend the co-teachers use the CtRS continuously throughout their co-teaching experience in order to create a successful co-teaching model that will "enhance the experience of inclusion for all students and adults in the classroom" (Gately & Gately, 2001, p. 47).

Magiera and Simmons (2005) evaluated the co-teaching program in three high schools within one school district. Their study consisted of 10 classroom observations, 22 teacher interviews and the Magiera-Simmons Quality Indicator Model of Co-Teaching rating form. This rating form offers a different view of reflecting on the co-teaching model. The 25 measurable quality indicators provided by this tool guide co-teachers in the study of their classroom practices. It can also be the basis for a self-study of teacher practices.

The following four instructional process quality indicators from the rating form were selected to emphasize the instructional themes in the co-teaching literature at the secondary level:

    1. Quality Indicator #8- Both teachers clearly are responsible for group instruction

2. Quality Indicator #11- Accommodations for students with disabilities are observed in the classroom

3. Quality Indicator #14- Both teachers provide substantial instruction to all students

4. Quality Indicator #17- The process of learning is emphasized along with the content being learned. (Magiera & Simmons, 2005, p. 5)

In addition to these quality indicators, the authors make the following recommendations to ensure a solid co-teaching model: 1) keep effective co-teaching pairs together 2) provide common planning time 3) encourage special education teachers to become part of content departments and 4) track student outcomes (Magiera & Simmons, 2005).

The review of literature related to co-teaching identifies various factors that contribute to an effective co-teaching model. Many of the researchers identified throughout this section share commonalities among those factors as a result of their research. A framework for identifying the factors that enhance a co-teaching model has been provided (see figure 3) with emphasis on the common factors shared by each of the researchers.

Researcher	Common Factors
LeCompte and Preissle (1993)	Outstanding working relationship
	Strengths as motivators
	Common planning time
	Solid curriculum
	Effective instructional skills
	Exceptional adaptations and modifications for students with disabilities
	Special education teacher's knowledge of the content area
Scruggs and Mastropieri (1995)	Outstanding working relationship
	Strengths as motivators
	Common planning time
	Solid curriculum
	Effective instructional skills
	Exceptional adaptations and modifications for students with disabilities
	Special education teacher's knowledge of the content
Gately and Gately (2001)	Physical arrangement of the classroom
	Special education teacher's knowledge of the general education curriculum
	Shared responsibilities for adaptations and modifications

	Common planning time
	Shared instruction
	Effective classroom management
	Established assessment system
Magiera and Simmons (2005)	Shared Instruction
	Observed adaptations and modifications for students with disabilities
	Special education teacher's knowledge of the content and participation in the department meetings
	Consistent pairing of co-teachers
	Common planning time
	Tracking of student outcomes

Figure 3 A framework for summarizing the common factors that relate to an effective co-teaching model according to the literature review of several researchers

2.6   SUMMARY OF CHAPTER II

This review of literature has attempted to help the reader develop a thorough understanding of the federal legislation related to special education that has forced school districts to restructure the current educational programs offered to students, specifically those students with disabilities.

The Individuals with Disabilities Act requires states and school districts to consider LRE for students with disabilities, which is the regular classroom setting with supplemental aids and services provided to the student. This legislation, coupled with the landmark court case, Gaskin v. Pennsylvania Department of Education, has compelled school districts to redesign the way in which current education is provided to students with disabilities. As a result, many districts have adopted the idea of co-teaching as one method for ensuring the inclusion of students with disabilities in the regular education setting.

The review of literature revealed that although many school districts have implemented co-teaching programs within their inclusive school settings, some have been found ineffective. Research shows that reasons for this failure relate to a lack of core components that are necessary

for establishing a successful co-teaching model. Furthermore, the research has found that there are specific developmental stages of co-teaching, along with various models of co-teaching that co-teachers must experience before reaching the maximum level of co-teaching. If the components are not observed and available to the co-teachers, then the probability of the co-teachers reaching the maximum level is unlikely.

The purpose of this review of literature was to help build a conceptual framework for investigating the implementation of a co-teaching model in various school settings and to study the components that are necessary to design and implement an effective program. As the literature revealed, there are several key components that are necessary for designing and implementing a successful co-teaching environment. The components include a positive working relationship between the co-teachers, common planning time, the special education teacher's knowledge of the general education curriculum, shared responsibilities for adapting and modifying student work, shared instruction, assessment and monitoring student outcomes.

The review of literature conducted by this author revealed that co-teaching can be a successful method for including students with disabilities into the regular classroom setting if key components are established by the administration, faculty and most importantly, the co-teachers. Studying these components more in-depth in a setting that is currently implementing co-teaching is essential in order to maximize the use of co-teaching and to foster the educational learning of all students, including those with disabilities.

3.0   RESEARCH METHODOLOGY

3.1   PURPOSE

The purpose of this qualitative case study is to examine the implementation of co-teaching models in a middle school inclusive setting in Western Pennsylvania. In particular, the researcher wishes to examine the human, task, structural, and technical subsystems of the school to determine what factors will affect the implementation of co-teaching relationships between regular and special educators. Rogers (2003) refers to early adoption as the redefining/restructuring stage of implementation. The grand tour question is: *What socio-technical subsystem variables affect the successful adoption of co-teaching for inclusion in a suburban middle school?*

3.2   BACKGROUND

According to Walther-Thomas (1997) and Isherwood and Barger-Anderson (2008), a need exists to further investigate what can be done to improve current co-teaching systems and practices. The authors identify a number of challenges and barriers that influence the success of co-teaching in schools, including: planning time; human resources; scheduling; caseloads; clarity in teacher roles and responsibilities; teacher attitudes; administrative support; and staff

development. These challenges are examples of factors related to each of the four subsystems found in a school that have been demonstrated to affect co-teaching program adoption. The four subsystems interrelate, with each tending to shape and mold the others (Owens & Steinhoff, 1976). Because these subsystems are co-dependent of one another, a change in one will result in some adaptation on the part of the others. Understanding what specific changes occur in each of a school's subsystems as a result of the implementation of co-teaching and identifying successful resources for supporting these changes may provide valuable knowledge for school personnel planning to implement a co-teaching model.

3.3   AUDIENCE

This investigation is relevant for school personnel such as teachers, school administrators, and special education specialists interested in planning for the implementation of co-teaching. The study focuses on adoption and implementation at the initial stages and how conditions for change are created through co-teaching.

3.4   STATEMENT OF THE PROBLEM

This study is based on the grand tour question, or statement of the problem in its most general form, followed by four sub-questions that serve to narrow the focus of the investigation.

Problem Statement:

What socio-technical subsystem variables affect the successful adoption of co-teaching for inclusion in a suburban middle school?

Research Questions:

1. What changes occur in the school's human subsystem as a result of the implementation of co-teaching?

2. What changes occur in the school's task subsystem as a result of the implementation of co-teaching?

3. What changes occur in the school's technical subsystem as a result of the implementation of co-teaching?

4. What changes occur in the school's structural subsystem as a result of the implementation of co-teaching?

3.5   RESEARCH DESIGN

A case study design using the naturalistic inquiry method will be employed to gain an in-depth understanding of the situation and to gather meaning for the researcher and relevant audience. Merriam (1998) suggests that case studies are different from other types of qualitative research in that they are intense descriptions and analyses of a single unit or bounded system such as an individual, program, innovation, event, group, intervention, or community.

Using the naturalistic approach will allow the researcher to study the implementation and adoption of co-teaching models and relationships as they occur naturally, without constraining, manipulating, or controlling it, and provide a detailed description of the case that is under study. The intent is not to establish a cause-effect relationship, but to offer understanding and generate

patterns inductively from the data. These patterns will be confirmed through triangulation of data sources, which will give credibility to the researcher's judgment.

3.6 CASE

The case or bounded system that will be studied in this investigation is a suburban middle school located in Western Pennsylvania about 10 miles north of Pittsburgh. The district resides within one small township that is approximately six square miles in size with an above average family household income. The school district has earned a positive regional reputation with higher than average student achievement on state assessment tests. The middle school is comprised of grades six, seven and eight with approximately 750 students and 70 faculty and staff members. The school was implementing co-teaching at the onset of this study. Prior to the co-teaching initiative, the special education program functioned as a pull-out program where students with disabilities received direct instruction for primary academic subjects such as English and mathematics in the learning support classroom, the emotional support classroom or the life skills classroom. Students with disabilities participated in regular education classes for some subjects such as social studies, science, physical education and elective courses. No co-teaching relationships existed prior to the co-teaching initiative.

3.7   SUBJECTS

This investigation is using a case study approach and as a result, criterion sampling (a form of purposeful sampling) was the method of choice used for identifying subjects for this study. Because the investigator wished to discover, understand, and gain the most insight possible about this particular phenomenon, a technique known as criterion-based selection was employed to choose the subjects who participated in this study. In criterion-based selection a list of essential attributes is created for the study and then participants are chosen to match the list (Merriam, 1998). The criteria established for subject selection includes being a special education teacher or regular education teacher that is assigned at least one co-teaching period during the school day.

The subjects in this case study include ten regular education teachers and six special education teachers. All teachers included in the study are co-teaching at least one class per day with a colleague with three different partners. Teachers range in career experience from two years to 32 years. The majority of participants in the study are females. Five regular education teachers are male including two science teachers, one social-studies teacher, and two math teachers. No teacher in the study has previous co-teaching experience.

3.8   QUALITATIVE DATA COLLECTION

In a case study there is not one particular method for collecting data or analyzing it. Various methods of data collection consist in a case study such as testing or interviewing. According to Merriam (1998):

Data are nothing more than ordinary bits and pieces of information found in the environment. They can be concrete and measurable, as in class attendance, or invisible and difficult to measure, as in feelings. Whether or not a bit of information becomes data in a research study depends solely on the interest and perspective of the investigator (p. 69).

Merriam (1998) compares the researcher in qualitative studies to a detective in that the researcher spends time searching for clues, following leads, and looking for missing pieces in an attempt to put together a puzzle of the problem under investigation. A qualitative approach is utilized in an effort to find answers associated with the research question posed. The methods for this study included interviewing subjects, observations of co-taught classrooms, and examination of existing documents related to co-teaching. The data collection occurred over a three year period. The following outlines a more specific description of the type of data collection that was implemented during the study.

Semi-structured interviews were conducted with co-teaching partners throughout the study. Merriam (1998) cautions against the use of highly structured interview techniques in qualitative research in that adhering to predetermined questions may not allow the researcher to access participant's perspectives and understandings of the problem at hand. Merriam (1998) suggests using semi-structured interviews. Semi-structured interviews consist of questions that are more flexibly worded, or the interview is a mix of more and less structured questions. According to Merriam (1998) this format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic. In addition, Piantanida and Garman (2009) recommend using semi-structured interviews "when the intent of the study is to probe deeply into the meanings that participants have made of some experience"

(p. 95). I used an interview guide (see Appendix B) containing specific questions. Some open-ended questions were followed up with probes, along with a list of topics and issues that related to the topic of study. Probes are questions or comments that follow up something already asked by the researcher (Merriam, 1998). Probing can come in the form of asking for more details, for clarification, or for examples. I used probes in order to make adjustments in the interviewing and to expand on something significant the respondent said during the interview.

I collected documents related to co-teaching as a source of data. Merriam (1998) uses the term *document* as the umbrella term to refer to a wide range of written, visual, and physical materials relevant to the study at hand. Documents that were inspected in this study include memos, emails, conversations during professional development, logs, formal and informal correspondence, teacher lesson plans, and teacher evaluations.

The researcher's observer activities are known to the group and participation in the group is secondary to the role of information gatherer. Observations took place in identified co-teaching academic classes. The purpose of the observation was to examine the effects of the potential socio-technical subsystem variables on the co-teaching initiative. The researcher used a modified version of Gately and Gately's Co-teaching Rating Scale (CtRS) observation guide (see Appendix C) when conducting classroom observations. Prior to utilizing the form, I matched the socio-technical subsystems to each of the 24 indicators.

3.9   QUALITATIVE DATA ANALYSIS

According to Merriam (1998) qualitative research is not a linear, step-by-step process. It is an interactive process that allows the investigator to produce believable and trustworthy findings.

Data collection and analysis is a simultaneous activity. Analysis begins with the first interview, the first observation, and the first document read. The researcher's emerging insights, hunches, and tentative hypotheses direct the next phase of data collection. This in turn leads to the refinement of questions, and so on.

Data analysis is the process of making sense out of data. Merriam (1998) suggests that all qualitative data analysis is content analysis in that it is the *content* of interviews, field notes, and documents that are analyzed with the communication of meaning being the focus. In this study, the content of interviews, field notes, and documents were analyzed. Piantanida and Garman (2009) use the term raw text because of the various forms of information used to represent raw materials that encompass the experimental, discursive and theoretic texts of the dissertation. Raw data was collected using a wide range of materials including observations, interview guides and archival records. I coded the data using note cards to identify recurring themes. This involved editing for accuracy and analyzing for coding purposes.

Merriam (1998) recommends keeping an interview log as opposed to transcribing interviews. I kept a log that identified specific details of each interview with the teacher. The content of the interview log was coded according to the emerging themes or categories that appeared. Merriam (1998) refers to coding as a process of assigning some sort of shorthand designation to different aspects of data in order to easily retrieve specific pieces of data. Coding was done throughout the data collection process.

Miles and Huberman (1994) suggest beginning the coding process by using descriptive codes. Descriptive coding involves assigning data an initial start code. The list for this study was developed from the research question themes. They include: human subsystems-HS, technical subsystem-TS, structural subsystems-SS, and the task subsystem-TaskS. The second step is

pattern coding. This step is more inferential and explanatory. Rereading of descriptive field notes frequently reveals the discovery of patterns in the data.

During the coding process, the researcher will attempt to bring meaning to the coding through the memo writing. Glasser (1978) defines memos as the theorizing write-up of ideas about codes and their relationship as they strike when coding. As coding occurred, I drafted memos to identify consistent, interesting and poignant findings in the data.

I reviewed the findings, and quality of data supporting the findings, in order to write a synthesis. Once I analyzed the data, I began to summarize the specific factors related to each subsystem in the socio-technical theory that were reoccurring themes throughout the study. I organized the study to represent each of the three school years and then provided a summary of each factor that related to the human, task, technical or structural subsystem. Miles and Huberman (1994) refer to this as a form of data collection and recommend it be completed about one-third of the way through the study.

3.10 VALIDITY AND RELIABILITY OF RESULTS

According to Merriam (1998), validity and reliability are concerns that can be addressed through careful attention to a study's conceptualization and the way in which data are collected, analyzed, and interpreted, and the way in which findings are presented. A number of approaches were utilized to guarantee the data was reliable and valid. Interviews, observation information and documented data were triangulated to identify themes and categories and consistency in results. Merriam (1998) defines triangulation as the process of using multiple investigators, sources of data, or methods to confirm emerging findings. Member checks (Merriam, 1998) is a

technique used as subjects are shown excerpts of tentative interpretations of their interviews to check for accuracy as they are being written up. Another technique known as peer examination will be utilized to check for feasibility of results. This process requires the researcher to ask colleagues to comment on the findings as they emerge (Merriam, 1998).

Merriam (1998) and Piantanida and Garman (2009) suggest identifying the researcher's bias at the outset of the study is a way of ensuring validity and reliability. I am the Director of Pupil Services for the district in which the study will take place. The Director of Pupil Services has been charged with the task of creating a more inclusive school environment for students with disabilities as a result of Federal and State regulations. As such, co-teaching is one method chosen for accomplishing this task.

3.11   REPORTING THE RESULTS

Merriam (1998) suggests that there is no standard format for reporting qualitative research. The content of a case study depends on the audience it was written for and the investigator's purpose for conducting the research study. Most case studies, particularly qualitative studies, provide a description of the context of the study, or where the inquiry took place early in the study. This study provided a description of the school's current special education program and how students with disabilities were serviced. In addition, it provided a history of the earliest stages of adoption and implementation of the co-teaching model, along with information on how co-teaching pairs were established.

The findings of a study are the outcomes of the inquiry and what the researcher came to understand about the phenomenon. Merriam (1998) suggests reporting the findings of a study by

providing the reader with information on the problem of the study and how it was carried out. The most common way findings are presented in a qualitative report is to organize them according to the categories, themes, or theories derived from the data analysis (Merriam, 1998). Typically, a Findings section begins with a brief overview of the findings supported by quotes from the interviews or field notes or references to documentary evidences (Merriam, 1998). A Findings section was included in both Chapter 4 and Chapter 5 of this case study.

A Discussion section may be necessary in order to tell the reader what the investigator makes of the findings (Merriam, 1998). This is where the researcher often identifies any surprises and compares the results of the case study to the existing knowledge base in the field. This section allows the researcher to draw overall conclusions and express his or her thoughts of the study. A Discussion section was included in the Conclusion Chapter of this case study.

4.0   IN THE TRENCHES

4.1   SPECIAL EDUCATION PROGRAM DESCRIPTION

School districts have been forced to rethink the way they provide special education services to children with disabilities as a result of IDEA 2004 and NCLB. Both laws have established detailed requirements regarding teacher certifications and obtaining "highly qualified" status (PSBA, 2005). Co-teaching has become a popular method for meeting these strict requirements of providing highly qualified teachers, and districts are embracing the concept and using it as a well-regarded best practice.

As the Director of Pupil Services for a suburban school district, I was charged with the responsibility of examining our special education program and researching methods for increasing inclusion opportunities for students with disabilities. IDEA was upholding district accountability for providing education to children with disabilities in the least restrictive environment, which in a public school setting, is the regular education classroom. I was fortunate that our district already had a positive reputation for educating students with disabilities in the regular education setting but knew that we could do better.

Prior to the co-teaching initiative, the special education program functioned as a pull-out program where students with disabilities received direct instruction in primary academic subjects such as English and math in the learning support classroom, the emotional support classroom or

the life skills classroom. Students with disabilities participated in regular education classes for social studies, science, physical education and all elective courses. No co-teaching relationships existed prior to the co-teaching initiative.

4.2   INITIATION

Rogers (2003) states that the innovation process in organizations consists of a sequence of five stages: two in the *Initiation* sub process and three in the *Implementation* sub process. The later stages cannot be addressed until the first two stages have been accomplished, either explicitly or implicitly (Rogers, 2003). Agenda-setting and matching are the first two of the five stages and together constitute Initiation. Initiation is defined as all of the information gathering, conceptualizing, and planning for the adoption of an innovation, leading up to the decision to implement (Rogers, 2003).

Because many qualitative case studies present a description of the context early on in the report, I provided a description of the agenda-setting and matching stage to help the reader understand the context and sequence of the innovation process that led to the implementation of co-teaching at our middle school. I will provide a description of the redefining/restructuring stage of the Implementation sub process later in the study so the reader has a clear understanding of the changes that occurred in the socio-technical subsystems at the middle school as a result of co-teaching.

4.3   PART I: THE INVESTIGATION

4.3.1   Agenda Setting

The school district is located north of Pittsburgh and is a flourishing professional community of about 18,000 residents. Easily accessible from the Pennsylvania Turnpike and Pennsylvania Route 8, the Township's 16-square miles include portions of North Park, Hartwood Acres, McCully Road Nature Trail, the Depreciation Lands Museum and an expanding business district. Unique among neighboring districts, the township's boundaries coincide with the school district's, leading to cooperative ventures such as the after-school Latchkey program. The community park, pool and other recreational facilities are maintained through a Joint Recreation Board, which benefits students as well as other residents.

The School District is comprised of three elementary schools grades K-5, a middle school grades 6-8 and a high school grades 9-12. The school district serves 3,109 students, employs more than 400 faculty and staff members, and has an operating budget of $40 million. Specifically, the district serves 328 students with disabilities and operates about a $4 million special education budget.

Shortly after being given the task of investigating our special education program's inclusion practices, I began to contact other local school districts in order to discover what they were doing to maintain or increase their inclusion practices. After contacting more than 10 local districts, I became frustrated to learn that our district was in the forefront of including children with disabilities in the least restrictive environment. Three of the school districts however, were able to talk about the co-teaching models they were utilizing. They explained that co-teaching was a concept in which the special education teacher taught with the regular education teacher in

the regular education classroom. Most of the administrators I spoke with said they were utilizing the co-teaching model in order to comply with IDEA's and NCLB's highly qualified status for their special education teachers. This was due to the fact that the majority of their special education teachers were not highly-qualified, and therefore, no longer legally approved to provide direct instruction in the core academic subjects to children with disabilities. As a result, co-teaching satisfied these requirements and districts were "off the hook."

4.3.2   Matching

The district's special education department began with all special education teachers being highly-qualified. This is a requirement from the No Child Left Behind Act of 2001. All special education teachers have to obtain certification in an academic subject area in addition to the special education certification. The district wasn't being forced to implement co-teaching in order to remain in compliance with Federal law. That being said, co-teaching would address the substitute issues and meet the requirements for any future hires in the special education department that might not have attained highly qualified status. Although I didn't have to implement co-teaching as a result of compliance, I was very interested in its overall philosophy and concept. In addition, research suggested that co-teaching would be an excellent way to increase inclusion for our students with disabilities in the regular education classroom.

Co-teaching immediately sparked my interest and I began researching the topic. I called a colleague who is a professor at Slippery Rock University in the Special Education Department to ask if he could provide me with any information on this concept. He went on to describe the business that he and his colleagues in the Special Education Department had started called Keystone Consulting, Inc. They were providing co-teaching professional development to

teachers in area school districts.   He then sent me literature on co-teaching and information on how his company could serve our school district and move the co-teaching initiative forward.

After reviewing the literature I received, along with conducting my own research on co-teaching, in November of 2005, I decided to share the information at one of our Administrative Council meetings with the superintendent, assistant superintendent and building principals. Of course, none of the building principals were interested in yet another "initiative" involving special education. Fortunately, both the superintendent and assistant superintendent at the time were very supportive of the co-teaching initiative and they encouraged me to move forward with the pre-planning stages.

A decision had to be made as to which building would implement co-teaching. In early January of 2006, I scheduled a meeting with the five building principals and we spent the morning reviewing data in order to make an informed decision. PSSA data, along with other standardized test scores, were used to look at the IEP subgroups in each building. I also used information from Penn Data that identified the percentage of students with IEPs in each building who were receiving instruction in the regular education classroom. The results were glaring, and it was obvious to the entire group that the middle school had the greatest need for improvement of achievement and inclusion for students with disabilities. Therefore, the decision was unanimous in choosing to implement co-teaching at the middle school.

Both the middle school principal and assistant principal were very positive in taking the lead with implementing co-teaching. We surmised that the teachers wouldn't be so positive about the co-teaching initiative. After long discussions and weighing the pros and cons, we decided to meet with Keystone Consulting to see if they were capable of providing the professional development needed to bring the middle school faculty onboard. After serving many years as an

administrator, I learned that when trying to implement a new initiative it is best to hire outside people to provide training. Teachers seemed more willing to accept the advice and expertise from those outside their own organization. In addition to my thoughts the middle school principal explained:

> I am willing to do whatever it takes to make the implementation of co-teaching at the middle school successful but in no way am I an expert on the topic. I will take the lead in bringing my faculty on board, but I need people who are experts on co-teaching and know the research behind it to actually provide the professional development to my faculty. We have to be strategic in our presentation of co-teaching to the faculty and this will require a lot of preparation and planning on all of our parts. (Interview, 2006)

4.3.3   Interpretation of Agenda Setting

Rogers (2003) states that during the agenda setting state of Initiation, needs and problems within the organization are identified and prioritized. This is followed by a search of the organizational environment in an attempt to find the usefulness of innovations. In this case study, as the Director of Pupil Services, I found a need existed to enhance the least restrictive environment opportunities for the students with disabilities so that they could have the same access to the curriculum and learning opportunities that students without disabilities experienced. I also knew that by implementing the co-teaching model, the district would maintain compliance with the Individuals with Disabilities Education Act and the No Child Left Behind Act. After meeting with Keystone Consulting, we decided they possessed the expertise and qualifications required to move the co-teaching initiative forward.

Innovation Champion

Rogers (2003) defines an innovation champion as a charismatic individual who throws his or her weight behind an innovation, thus overcoming indifference or resistance that the new

idea may provoke in an organization. In this case study, there were several factors of resistance that needed to be overcome including teacher attitude, willingness to change and cost.

Research findings from studies of innovation champions have concluded that the important qualities of champions were that they (1) occupied a key linking position in their organization (2) possessed analytical and intuitive skills in understanding various individuals' aspirations and (3) demonstrated well-honed interpersonal and negotiating skills in working with other people in their organization (Rogers, 2003). Findings from this case study support these conclusions. In my experience, the middle school administrators lacked the analytical and intuitive skills in understanding others' aspirations and were not skilled in negotiating with the teachers in their building. They fell short in the leadership skills an innovation champion must possess in order to successfully implement an innovation. This issue will be discussed further in the study.

Several people were identified as innovation champions during this case study. The middle school principal held a key position within the organization and recognized the need for more students with disabilities to be included in the regular classroom setting. At first, he was able to utilize his interpersonal skills to convince a core group of regular education teachers that co-teaching was necessary and would benefit all students. In the end, he struggled with keeping the motivation and momentum going when a larger group of teachers began to challenge the co-teaching initiative. I was able to act as the innovation champion for the special education department. I also held a key position within the organization as the Director of Pupil Services who was responsible for special education programming K-12. I had a very good relationship with most of the special education teachers at the middle school and was able to meet with them over a few months time and convince them that co-teaching would benefit all students, including

those with disabilities. Why of course it wasn't easy to convince them, but I do think that due to the level of trust they had in me and confidence in my support, they were willing to climb on board.

Although the professors from Keystone Consulting didn't hold key positions within the organization, they certainly possessed qualities of an innovation champion. All three consultants were professors from Slippery Rock University in the Special Education Department. Prior to being college professors, the three consultants had been special education teachers in public schools and two of them were previous public school administrators, specifically building principals. Their experience as both scholars and practitioners provided credibility in the eyes of the middle school faculty and the three of them were certainly charismatic and possessed the interpersonal skills necessary to motivate staff members.

Building a Learning Organization

In addition to enhancing Inclusion for students with disabilities, I also recognized the need to begin building learning organizations within the district. I was confident that co-teaching would naturally create a learning organization at the middle school. Fullan (1993) explains that leaders are designers, stewards, and teachers in a learning organization. They are responsible for creating organizations where people continually expand their capabilities to understand complexity, improve shared mental models and clarify vision. My agenda was not simply to provide an easier way for teachers to include students with disabilities in the regular education setting, but rather to make co-teaching a meaningful way of learning for both the students and teachers, and to create a "culture of learning."

Fullan (1993) also suggests that in learning organizations, leaders may start by pursuing their own vision, but as they listen to the visions of others, they begin to realize their personal

vision is part of a bigger picture. I had a vision for co-teaching, which began to grow and include the visions of other school personnel, including the middle school administrators, special education teachers and some regular education teachers. As each educator expressed his or her vision for co-teaching, the potential benefits and positive outcomes for children with disabilities became unlimited.

Fullan (1993) states, "visions can die or fail to develop in the first place if too many people are involved at the beginning, when leaders fail to advocate their views, when superficial talk rather than grounded inquiry and action is the method used" (p.30). He cautions against trying to get every individual on board with an innovation before implementation occurs because it does not connect to the reality of dynamic complexity. Fullan (1993) defines dynamic complexity as the real territory of change: "when 'cause and effect' do not produce expected outcomes because other 'unplanned' factors dynamically interfere" (p.20).

I attempted to implement the co-teaching initiative through the lens of both a scholar and a practitioner. This was a very difficult task. From the researcher's viewpoint, I tried to take Fullan's advice by limiting the implementation of co-teaching to one building in the district, which was the middle school. From a practitioner's standpoint, I identified a handful of administrators and teachers, both regular and special educators, who understood from the onset that implementing co-teaching would be a dynamic and complex process because it represented a change in instructional practice and also a change in culture. Keeping this in mind, the key players moved their agenda forward. They recognized there would be roadblocks along the way in efforts made to gain normative consensus about what co-teaching could become; planning strategies to get there; and carrying out incremental experimentation that connected the creativity

of all members to the change effort. Specific details about the strategies and experimentation used to implement co-teaching will be discussed later in this chapter.

Change

One of the areas the agenda setting stage focused on during the innovation decision process was change. Co-teaching was the mechanism the administrative team planned on using to foster a new culture within the school system in which every person could act as a change agent capable of individual and shared inquiry and ongoing renewal. This is important to understand because the agenda setting stage didn't focus only on Inclusion for students with disabilities. It also created a new culture of shared vision in which teachers would be held accountable for differentiating instruction for all students, using a team approach for developing improved learning opportunities for students, and improving curriculum and lesson planning.

4.3.4 Interpretation of Matching

Rogers (2003) defines matching as the stage in the innovation process in which the problem from the organization is planned and designed to fit with the innovation. Conceptual matching of the problem with the innovation during this second stage occurs in order to establish how well they fit. During this stage, the organizational members try to determine the feasibility of the innovation in solving the organization's problems. In this case, the district needed to increase the least restrictive environment for students with disabilities in the middle school. Co-teaching was the innovation selected to solve the problem.

Relative Advantage

The matching stage started when we began to examine various methods for enhancing Inclusion for students with disabilities, specifically the co-teaching model. Factors such as relative advantage, compatibility, and complexity were considered when researching this method. Rogers (2003) defines relative advantage as the degree to which the innovation is perceived as being better that the idea it supersedes. In this case study, co-teaching offered a relative advantage over the current pull-out model the district used to instruct students with disabilities.

Looking back at examining the matching stage of co-teaching, I do not think the administrative team, including myself, initially thought much about the compatibility of co-teaching with the existing values, past experiences and needs of the potential adopters; the teachers. Certainly the co-teaching model was compatible with meeting the needs and wants of school administrators who researched it, and it continued to allow the district to comply with Federal and State laws, but the majority of teachers who were being expected (some feeling forced) to implement co-teaching may have considered it as intrusive or problematic. Data analysis indicates that many teachers perceived co-teaching as an invasion of their classroom as they were expected to "share" their classroom, teaching, and planning time with another teacher. Also perceived was a way for administration to document accountability of instruction by using the new observation form designed specifically for co-teaching. Many teachers immediately become uncomfortable when another adult enters their classroom.

Centralized Diffusion System

According to Rogers (2003) a centralized diffusion system is when an innovation starts from an expert source outside the organization and is brought in by an innovation champion then

spread to the potential adopters using opinion leaders in the system. This case study is an example of the classical diffusion model in the fact that Keystone Consulting introduced the idea of co-teaching to me, one of the innovation champions, who convinced other administrators to adopt it. The co-teaching innovation was then discussed with other potential adopters, such as regular and special education teachers, using the middle school principal and assistant principal as the opinion leaders in the system. Centralized diffusion systems are based on a more one-way method of communication. Diffusion in centralized systems flow from the top down and from experts to users; many innovations in school settings are diffused in this manner (see Figure 4).

```
┌─────────────────────────────────────┐
│     Private Consulting Firm          │
│                                      │
│   KEYSTONE CONSULTING, INC.          │
│                                      │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│      Innovation Champion             │
│                                      │
│   DIRECTOR OF PUPIL SERVICES         │
│                                      │
└─────────────────────────────────────┘
```

Opinion Leader	Opinion Leader	Opinion Leader
KEY SPECIAL and REGULAR EDUCATION	**MS Principal and Assistant Principal**	**CENTRAL OFFICE ADMINISTRATORS**

↓ ↓ ↓

```
┌─────────────────────────────────────────────────────┐
│              Potential Adopters                      │
│                                                      │
│         TEACHING STAFF/OTHER STAFF                   │
│                                                      │
└─────────────────────────────────────────────────────┘
```
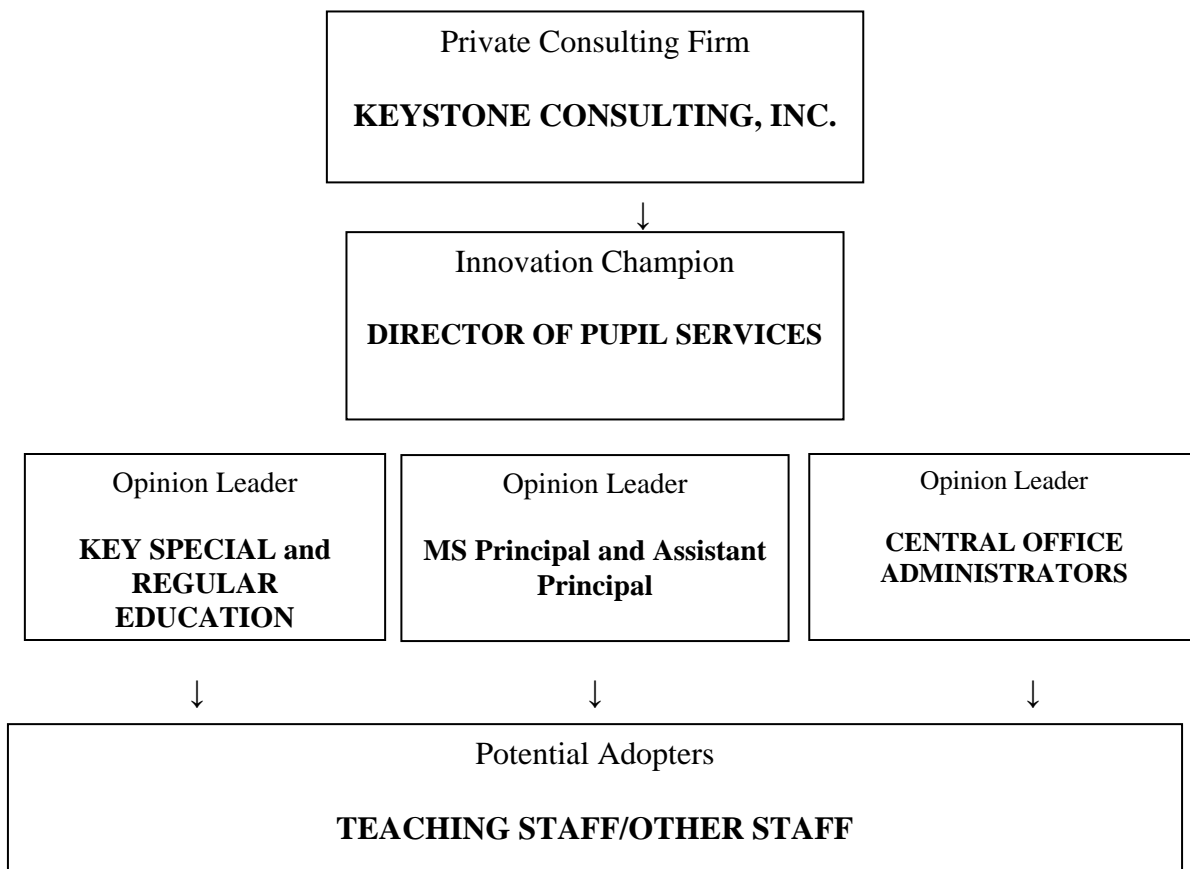
Figure 4 A framework for depicting centralized diffusion system

85

4.4 PART II: PREPARATION

Rogers (2003) defines Implementation as all of the events, actions, and decisions that are involved in putting an innovation into use. Redefining/restructuring, clarifying and routinizing make up the Implementation sub process. This case study research took place during the redefining/restructuring phase of Implementation.

Rogers (2003) indicates that when the organization's structure is modified to fit with the innovation and is reinvented to accommodate the needs and structures of the organization more closely, the redefining/restructuring occurs. Owens and Steinhoff (1976) contend that the implementation of an innovation results in changes in the subsystems of any socio-technical organization. The subsystems consist of a technical, human, structural and task subsystem.

Rogers' Theory of Diffusion supports this notion. Rogers (2003) states: Implementation of a technical innovation in an organization amounts to a mutual adaption of the innovation and the organization. Typically, both change during the sub process of Implementation. Innovations not only adapt to existing organizational and industrial arrangement, but they also transform the structure and practices of these environments. (p. 424)

At this point, the story continues with how the middle school modified the co-teaching initiative to better fit the current structure of the organization and how the middle school had to undergo changes to improve the utilization of the innovation; co-teaching.

4.4.1 Redefining/Restructuring

Scheduling Preparation

The second semester of 2006 was spent planning the redesign of the middle school's master schedule to fit the co-teaching model, establishing co-teaching pairs and planning professional development with Keystone Consulting for the start of the 2006-2007 school year. Both the middle school principal and I agreed that we needed a small committee that consisted of the special education department head, the eighth grade department head and team leaders from grades six and seven to assist with the planning. We offered compensation for any time they spent beyond the contracted work day because we believed that the first step of ownership was to make sure some of the key teachers played a role in the decision-making process. In other words, it wasn't the administration dictating what the changes would be and how co-teaching would be implemented, but rather, a team approach that included leaders from the special and regular education departments creatively developing a plan. These six professionals were willing to devote extra time to this important initiative and appreciated the fact that they were asked to take part in the implementation process.

The first meeting was scheduled in early January of 2006 and initially the atmosphere was negative between the administrators and the team of teachers. The teachers recommended volunteers to pilot co-teaching in classrooms. They felt strongly that this would be an easier transition for the faculty and they would be more willing to accept this initiative if it was implemented slowly. Although we certainly realized this approach had positive aspects, we explained that we needed to increase the least restrictive environment for all students with disabilities at the middle school, not just a small group. We also explained that the master schedule needed to be designed for the entire school year with the same expectations for the following year. If we focused only on a select group of teachers, not all students with disabilities would benefit from the outcomes of co-teaching and the master schedule would most likely need

additional changes the following year. After much debate, we were able to convince the teachers that piloting co-teaching would not be effective in achieving the overall goal, which was to increase inclusion of all students with disabilities in the regular education setting at the middle school level.

The team decided that the special education teachers who currently taught grades six, seven and eight would remain the special education co-teachers for those particular grade levels. The administrators thought this would create an advantage and accelerate the relationship-building process since they already worked with one another in some capacity. There would be one special education teacher to work with two teams in grades six, one to work with two teams in grade seven, and one special education teacher to work with grade eight teachers because 8th grade was departmentalized. The special education teacher who previously taught the life skills program was to provide direct instruction in English, reading and math to those students who needed a more restrictive learning environment. Consequently, she was the only special education teacher who had proper certification in all of these areas. The teacher who previously taught emotional support would co-teach across all grade levels. The speech and language therapist would be scheduled to co-teach with teachers who had students with speech and language IEPs in the regular education classroom.

Once the teaching assignments of the special education teachers were established, we worked on deciding in which academic classes co-teaching would be implemented. The special education teacher and team leaders from the three grade levels were instrumental in assisting us with this decision. A discussion took place about the need to continue the direct instruction classes for reading in grades six and seven. All of the teachers presented their case by explaining that reading is a fundamental skill that all students must acquire in order to be successful in any

academic class. If a child cannot read, then the child would not benefit from being in any of the regular academic classes. Although I didn't completely agree with this philosophy, I realized that the decision-making process needed to be cooperative and collegial; since we already denied their request to pilot the co-teaching initiative, I was willing to concede on this issue. As a result, we decided that the special education teachers assigned to those grade levels would continue to provide direct instruction in reading; co-teaching would not occur in the reading classrooms. With that decision made, the regular education team leaders recommended that co-taught classes be offered in math and English across all three grade levels and in the reading/communication classes at the eighth grade level. This discussion was due to there being no direct instruction reading class for eighth grade students. Math and English were the classes where students with disabilities received the most direct instruction previously, and if the goal was to increase inclusion in the regular education setting, then the students would need the most support in these academic classes.

The valuable insight that this group of professionals provided through the lens of teachers was priceless in designing the co-teaching schedule. Schedules for the sixth, seventh and eighth grade teachers were now established. The special education teachers for grades six and seven would teach one section of direct instruction reading (combining students from both teams) and co-teach one section of English and math per team. In addition they would each be responsible for a structured tutorial where they would provide backup and re-teaching support to students with disabilities from both teams. This gave them six teaching periods, and contractually, their two preparatory periods, totaling an eight period day schedule. The eighth grade special education teacher would co-teach two sections of reading/communications (two periods in length) and two sections of math, along with her two preparatory periods.

Configuring the schedule for the special education teacher who was going to teach the direct instruction classes was the easiest one to complete. She was assigned two sections of direct instruction at each grade level totaling six sections. Deciding where the former emotional support teacher would co-teach wasn't as easy. There was detailed discussion about how to best utilize her time in coordination with others. In fairness to all grade levels, we decided that she would co-teach one section per team in grades six and seven and then two sections in grade eight. This would assign the six teaching periods she was allowed contractually, along with the required two preparatory periods. The next task was deciding in which academic subjects she would co-teach. We felt confident that the English, math and reading co-taught classes at all three grade levels were properly addressed. As a result, the focus was narrowed down to social studies and science. Everyone had differing opinions about which of these two subjects should be co-taught. Some expressed their concerns that the reading level in the social studies classes was challenging and students with disabilities needed more support in the social studies curriculum. Opponents presented a case for co-taught science due to a necessary level of independence for completing science labs and activities. Not only may they need support academically in science, but safety concerns could arise during lab experiments. In the end, the team decided that the sixth grade social studies curriculum, Ancient History, was very challenging and students with disabilities would benefit from co-taught classes. One section per team of co-taught Ancient History was created at grade six. As for Grades seven and eight, the team reviewed both the social studies and science curriculum. Based on the information, we decided the special education teacher would co-teach one 7th grade section per team in science and two sections of science in grade eight. We knew this wasn't an ideal situation for the teacher because she would be responsible for learning

three different curriculums, but our decisions were based on the needs of the students with disabilities.

The next task for the team was to decide on how often professional development would be offered to the middle school faculty. We explained to the teachers that Keystone Consulting. would be providing the majority of professional development on co-teaching. We provided them with an overview of Keystone's qualifications and the consultants' background as special educators, school administrators and college professors. The teachers were very impressed and positive about the services they would receive from Keystone Consulting. They were also relieved when I assured them that the training would not be a two-day training at the beginning of the school year but would be an ongoing effort of training, observation, evaluation and support. I gave an overview of how I envisioned the training to look to the group:

> As a former teacher, I remember how frustrating it was when the administration would inform the teachers of a new initiative that we were expected to implement and then provide us with a one or two day training/workshop and then tell us to being implementation. There was never any ongoing or follow-up training. I carried this memory with me all through my years as an administrator, and as a result, anytime I am put in charge of implementing a new initiative, I focus on the amount and level of training that will be needed in order for the implementation to be successful. With that being said, let me tell you how I see the co-teaching training unfolding. I see the initial training intense. The remaining professional education days this year will be devoted to co-teaching training for middle school faculty. One of those days will consist of Keystone Consulting providing a thorough overview of the philosophy on co-teaching, co-teaching models and the key components of co-teaching. Another day will consist of some type of breakout sessions that faculty can attend on a rotating basis. I am not sure on the specific topics for each session, but I would like to make this particular day more interactive for the faculty. Finally, I see the last professional education day being devoted to planning. I would ask the consultants to come in and spend the day with the co-teachers and administration to work on planning for the start of the school year. This includes, meeting with the co-teachers, assisting with ordering materials and resources and addressing any other issues in order to be prepared for implementation on the first day of the next school year. At the start of next year, I would like to schedule monthly on-site visits with Keystone Consulting, Inc. These visits would be structured for the Keystone team to observe all co-taught classes and then meet individually with the co-teachers to debrief. These observations and debriefing meetings would be used as a vehicle for supporting the co-teachers as they implement co-teaching. They would not be used to evaluate or

91

criticize the co-teachers, but rather as ongoing support while they continue to monitor and adjust their co-teaching practice. I would expect Keystone Consulting to provide any resources, materials or literature on co-teaching that would assist the teachers with transitioning their regular education classrooms into co-teaching classes. In addition to the two day workshops and monthly visits, I would devote all other in-service days throughout the year to continue professional development on co-teaching for the middle school faculty. I will get this commitment from central office administrators and middle school administration. After I made these comments there was complete silence from the group. Deep inside me a panic arose and I thought to myself, "Oh no, what did I say to upset them?" After a few moments of awkward silence, I asked the group what I said wrong.

One of the regular education teachers explained,

> You didn't say anything wrong. In fact, I think we are all dumb-founded by the level of training you are willing to provide the middle school faculty. Never in my 22 years of teaching has any administrator ever provided that type of training. In fact, it was usually the type of training that frustrated you when you were a teacher. I really think the faculty will be appreciative and feel a level of support from administration that we necessarily do not feel.

I asked if anyone else had any recommendations or suggestions related to professional development and training on co-teaching, and surprisingly, they all were in acceptance of the proposal I described above. Several of the teachers agreed with the above statement made from the regular education teacher. It was more than they expected. One teacher asked how I was going to support this financially, and was concerned that down the road there wouldn't be any funds to continue providing this level of training. I assured them that I would be able to financially support the training needed to implement co-teaching by utilizing the School-Based ACCESS funds I generate through the special education program.

Common Planning Time

Through all of the research on co-teaching, one of the consistent recommendations for success was to have common planning time for the co-teachers. In contrast, this was also the most difficult task for administrators due to scheduling. The design of the middle school master

schedule allowed for common planning time for sixth and seventh grade. Each team of teachers had the same two preparatory periods available. This allowed at least one common planning period for the special education teacher with each team. Although this wasn't ideal, it was a start. The team was adamant in arranging a common planning time for the eighth grade special education teacher and the regular education teachers with whom she would be teaching. We were able to arrange a common planning period for all of these teachers. However, it proved impossible to provide consistent common planning periods for the emotional support teacher and her co-teaching partners. This teacher was assigned to all three grade-levels with only two preparatory periods. One sixth grade ancient history teacher and one eighth grade science teacher were available the same period, which required the special education teacher to split her time with them. This was not an ideal situation for her and we knew she would not be happy with her new schedule. In an attempt to be fair and recognizing the added responsibility with learning three different curricula, we decided not to assign any students with disabilities to her caseload. This would alleviate the special education paperwork and allow her more time to focus on the curricula for which she would now be responsible. The team felt good about the proposed master schedule, with the exception of common planning time conflicts. Figure 5 provides a visual representation of the special education teachers' schedules.

SPECIAL EDUCATION TEACHER	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5	PERIOD 6	PERIOD 7	PERIOD 8
Grade 6	Team A Co-Taught Math	Team B Co-Taught Math	Common Plan-Team A	Common Plan-Team B	Tutorial	Direct Instruction Reading Class	Team A Co-Taught English	Team B Co-Taught English
Grade 7	Team A Co-Taught English	Team B Co-Taught English	Team A Co-Taught Math	Team B Co-Taught Math	Tutorial	Common Plan-Team A	Common Plan-Team B	Direct Instruction Reading Class
Grade 8	Common Plan Time (English)	Common Plan Time (Math)	Section 1 English Comm.	Section 1 English Comm.	Section 1 Math	Section 2 English Comm.	Section 2 English Comm.	Section 2 Math

Grades 6-8	Grade 6 Team A Ancient History	Grade 7 Team B Science	Grade 7 Team A Science	Common Plan Time (available teachers)	Grade 8 Section 1 Science	Grade 8 Section 2 Science	Common Plan Time (available teachers)	Grade 6 Team B Ancient History
Grades 6-8 Direct Instruction (D.I)	Grade 6 D.I.	Grade 6 D.I.	Prep	Grade 7 D.I.	Grade 8 D.I.	Grade 8 D.I.	Prep	Grade 7 D.I.

Figure 5: A visual representation of the special education teachers' co-taught class schedules

Transformation and Reassignment of Special Education Classrooms

The next topic of discussion was the reassignment of the special education classrooms. At that point all six special education teachers had their own classrooms. Now that four of the six would be in regular education classrooms the majority of their day, they would no longer need their own individual classrooms. In addition, the middle school was in desperate need of additional space and this transformation would open up some classrooms. Needless to say, the special education department chair was not happy about losing the classroom she had for over 20 years. More importantly, she was not looking forward to informing her colleagues that some of them would no longer have their own classrooms. This type of disruption and change cannot be overlooked in an implementation process. Although she was upset, she portrayed the utmost professionalism and forged forward with the initiative.

In the end, we decided to turn the largest of the special education classrooms into a Special Education Suite. There would be room for four teacher desks, a large round work table and individual filing cabinets. In an attempt to ease the pain, I even promised to get the Special Education Department their own photo copier and paper shredder. In addition to the Special Education Suite, we were going to use two of the special education classrooms for multiple purposes. Teachers would provide the direct instruction reading classes in one of these two rooms and tutorials would take place in these areas. There would be two special education

94

paraprofessionals assigned to these rooms all day in order to service those students who required re-teaching or backup support from their academic classes, alternative test location or who just needed a time out area.

The regular education team leaders and department heads were sensitive to the sacrifices the special education teachers were making and wanted to make sure that they welcomed the special education teachers into their classrooms. They also identified a designated area for them and made sure extra teacher desks would be provided in the co-taught classes for the special education teachers. The middle school administrators made this a priority and promised the desks would be in the rooms on the first day of school.

The Final Step

The last step was to decide when the co-teaching initiative would be introduced to the middle school faculty. The team decided to conduct a faculty meeting to introduce the co-teaching initiative and unveil the plan for implementation. The planning committee would present the information to the teachers. We thought it was important to present the co-teaching initiative as a unified front so that the rest of the faculty would see a team approach was used during the initial planning process. We would allow as much time as needed for this meeting so that the faculty would have ample time to ask questions and address concerns. We did not invite the consultants to this first meeting because we thought there might be some resistance by teachers. We wanted to give them this opportunity to vent their frustration and address any concerns. We held the meeting during a January 2006 professional education day and scheduled it for the entire morning. By introducing the co-teaching initiative and implementation plans early in the second semester, our hopes were that teachers would have the remainder of the semester, along with the summer break to process the co-teaching initiative. They would have

time to read the literature, review resources, and plan for co-teaching so that when the consultants from Keystone arrived on the first day of school, the faculty would be ready to start the training.

The Announcement to the Middle School Faculty

The planning committee was prepared to present co-teaching to the faculty. We had a short PowerPoint presentation and resource folders available for each faculty member. The middle school principal welcomed everyone and was enthusiastic when he introduced the co-teaching initiative. He remained positive as he set forth the expectations. As I observed the facial expressions of the teachers, I recognized this would be a tough transition for many teachers. They already seemed discouraged and frustrated and we hadn't even started the training! I heard one teacher whisper to a colleague, "here we go again, another great initiative dictated from central office administration!" I became a little frustrated, but was not surprised by this comment.

After the presentation on co-teaching the principal opened the conversation up for discussion. The first teacher asked how the co-teachers were paired. One of the team leaders took the question and answered it. Another teacher expressed concern that the on-site training was going to take place simultaneous to implementation. This teacher did not believe this would be the most effective way to implement co-teaching. Several other teachers agreed with this particular person. The principal explained that although this was not the best situation, we needed to move forward with the initiative. I also explained that it wouldn't be effective to add another teacher to the classroom half-way through the year. This would be confusing to the students and it wouldn't be fair to expect the special education teacher to pick up with the instruction mid-year. We went on to assure the faculty that the expectation during the first

96

semester would be for co-teachers to build the relationship and put what they learned from the training into practice. We would not be evaluating the co-teachers as satisfactory or unsatisfactory, but rather on the basis of whether they embraced the co-teaching initiative and began building the co-teacher relationship throughout the school year. We explained that only the Keystone Consultants would be observing the co-taught classes the first semester. We believed that this was important in order to give the teachers a level of comfort before administrators started to observe. With that being said, we also pointed out that the consultants would be sharing the data with administrators so that we could continuously monitor and adjust the co-teaching implementation.

I was very clear in explaining that co-teaching was not an option; it was an expectation and the faculty was encouraged to embrace it. I also explained that the overall district goal was to implement co-teaching district-wide within the next three years. My explanation seemed to eliminate the thinking of many teachers that co-teaching was just another fad. After reviewing both IDEA and NCLB, along with the Gaskin Settlement, teachers began to realize that co-teaching was not unique to our district, but that all school districts were being forced to increase LRE for students with disabilities, and co-teaching was being adopted by several school districts. The overview of Federal and State laws and court cases set the tone for the remainder of the conversation and it seemed that teachers changed their attitudes toward co-teaching and became more positive in their thinking. The remainder of the faculty meeting was spent having productive conversation about the implementation of co-teaching, specifically the professional development they would receive throughout the first year of implementation.

4.5   PART III: PROFESSIONAL DEVELOPMENT

4.5.1   Day One: February 2006

In February of 2006 Keystone Consulting arrived in the middle school to provide the first official professional development workshop on co-teaching. The remaining professional development days of the school year were devoted to training for middle school faculty and staff on co-teaching. Any paraprofessional that worked in the special education program was expected to participate in the training so that the entire middle school faculty as well as any staff who worked with children with disabilities had a clear understanding of co-teaching and the transformation the middle school was about to undergo.

The consultants from Keystone Consulting were excited to begin work with us as the first school district to contract their services. In addition, all of them, who were also college professors and former teachers or administrators, were firm believers in co-teaching and were anxious to put their research into practice.

The day started with an overview of co-teaching; specifically the research and philosophy behind it. The consultants used a PowerPoint presentation as their method of delivery and provided handouts for teachers to take notes. The behavior of the majority of the middle school faculty during this presentation was disrespectful to the presenters. Some teachers were talking, laughing, texting and doing other work. Those teachers who did ask questions or make comments were somewhat rude and condescending in their approach. One consultant even jokingly replied, "Don't shoot the messengers." I was embarrassed and ashamed of these people that called themselves professionals. At one point, I had to remind the faculty that they needed to provide Keystone Consulting their full attention. The middle school administrators and I were

shocked at the level of unprofessionalism the teachers displayed. We could not believe the negativity they displayed in front of the Keystone consultants. It was obvious at this moment that the middle school administrators were not the opinion leaders they needed to be. The principal did not take the lead in addressing the unprofessional behavior of his faculty. He did not take ownership of his building by interrupting the presentation in order to address the faculty, but instead allowed a central office administrator to do it for him. It was apparent he lacked the confidence and skills required to change the behavior of his faculty and move the co-teaching initiative forward.

Although painful, we made it through the morning and it was time to break for lunch. The middle school principal, assistant principal and I took the consultants to lunch. The consultants were somewhat taken aback by the behavior of most of the teachers. We apologized and expressed our concerns on the lack of professionalism that was displayed and assured them it would be addressed with the middle school faculty. They told us not to be too hard on the teachers because they expected a level of resistance from them. They remembered as former administrators how frustrating it was to try to implement an initiative only to get a negative response from the teachers. I explained that I expected frustration and some resistance, but never this level of unprofessionalism. In my eyes, it was unacceptable and the tone needed to be set before we moved forward with co-teaching.

I had a few minutes before the afternoon session and took the opportunity to speak with the assistant superintendent about the behavior of the middle school faculty during the morning presentation. I needed to get her insight and perspective on how I should move forward with the afternoon training. I was concerned that the teachers would continue the inappropriate behavior, especially during the afternoon session. I was not surprised at how the assistant superintendent

reacted when I told her about the morning session. She would be described as someone who portrays the utmost professionalism; giving and demanding respect. A very good listener and considerate of other's feelings, she was naturally angry and shocked at how the middle school faculty represented themselves. She was disappointed for Keystone Consulting's first impression of the middle school faculty. She decided to attend the afternoon session in hopes that it would be a more positive and inviting atmosphere.

It was obvious that things were not going to be better since most of the teachers were late in returning for the afternoon session. We decided to begin the presentation even though the majority of teachers had not returned. We hoped it would send a clear message when they entered and the presentation had started without them. In addition, the assistant superintendent was present to witness the disrespect. Finally, all of the staff returned and Keystone continued the afternoon session with the philosophy of co-teaching. The end of the day was reserved for a question and answer session. We did not anticipate the types of questions and comments the teachers were going to initiate. One teacher asked in a very condescending manner,

> Who was responsible for establishing the co-teachers and was any real thought even put into this initiative before the schedules were designed? I am speaking on behalf of several regular education teachers who expressed the same concerns. First, we are concerned that there is not enough planning time reserved for the co-teachers, especially after listening to the morning presentation. Secondly, we want to know what the administration was going to do in order to prepare the special education teachers for learning the various curriculums they were expected to teach. Regular education teachers are concerned that the special education teachers will not be able to teach the curriculum, and therefore, co-teaching will not be effective.

The middle school principal tried to explain that this was not the time to address those types of questions, but rather the focus needed to be on asking questions related specifically to co-teaching. He went on to clarify that the consultants from Keystone did not design the master schedule or choose the co-teaching pairs. He reminded the faculty that they were there simply to

support the district with implementing co-teaching. The principal informed the faculty that any concerns or issues related to the technicalities of co-teaching should be directed toward administration, not the consultants. I thought the principal was very clear on explaining what the role of the Keystone consultants was, but obviously some of the teachers were not because the interrogation did not stop. Another teacher raised her hand and commented,

> I am offended that I was not part of this conversation from the beginning; rather I learn at a faculty meeting that we are implementing another new initiative, and I am expected to engage in co-teaching starting the first day of school with very little training.

Another teacher interjected her feelings,

> I agree. I find it disheartening that the district would think it was acceptable to implement co-teaching without involving the teachers in the planning stages. I am very concerned that I am going to be expected to change my entire teaching routine and now share my instructional responsibilities with someone who has no clue about the curriculum. This cannot be good for any kids, including those with disabilities.

I realized that the principal's previous statements had little to no effect on the faculty. Recognizing that the faculty did not have confidence in their building leaders, I attempted to reassure the faculty that the administration was not expecting the teachers to fully implement co-teaching from the start of the school year. Rather next year was about "learning as we go" and during the first semester, no one would be held accountable for anything other than being receptive of the co-teaching initiative and working with Keystone Consulting in order to move co-teaching forward. In addition, I had to remind them again that the purpose of this afternoon's session was to focus on questions and concerns related to co-teaching in general. It was imperative that everyone had a clear understanding of the philosophy and research behind co-teaching. We were not interested in continuing conversations about individual's feelings and opinions about how co-teaching should have been implemented, but rather factual and professional discourse about the information that was presented to us today.

The level of disrespect and unprofessionalism the faculty displayed was enough to make the assistant superintendent address the entire middle school faculty in front of the Keystone consultants. In all of my years, I never witnessed her address a large group of teachers in the manner she did with this particular group. Although it was well-deserved, it was out of character for her. She was very direct in indicating her disappointment with the behavior of the majority of people in the room. She went on to say,

> The level of unprofessionalism and disrespect that I am seeing in this room today could be categorized as criminal in my eyes. I have never witnessed this type of behavior in all my years in education. These people (the consultants) are trying to do their job, and I give them credit for the professionalism and positive attitude they are trying to maintain. If I were them, I would have probably left by now. The fact that you have already given up on co-teaching before we have even finished the initial introduction of it is disheartening. I am embarrassed and ashamed of what I witnessed over this last hour.

She finished her speech by informing everyone that she hoped the next professional development day would bring a new outlook and better attitude from everyone so that the district could continue with this exciting initiative that would better meet the needs of all students, including those with disabilities.

I was absolutely speechless after the assistant superintendent finished speaking. Although it was exactly what the middle school faculty needed to hear, again, it was so out of character for the assistant superintendent to express her concerns so openly, that many teachers seemed to be offended. The consultants from Keystone were true professionals and finished out the last half hour of the afternoon as if nothing happened.

At the end of the day we sat down with the consultants to plan for April's professional development event. We were happy to learn that this agenda focused more on breakout sessions, and that individuals would be assigned to sessions that pertained to them. The consultants recognized that not every teacher was going to be co-teaching and that they needed to

differentiate their presentations to benefit all teachers. For those teachers who would not be co-teaching, the breakout sessions consisted of: how to adapt and modify for struggling students, understanding the need to differentiate instruction and how to utilize paraprofessional support in the regular education setting. Those teachers who would be co-teaching would participate in sessions that were more focused and related to components of co-teaching, such as: relationship building, how to use common planning time, shared instruction and using the five co-teaching models. We were impressed with the various sessions Keystone was going to offer and thought they did a thorough job in addressing the needs of all of the teachers.

4.5.2 Day Two: April 2006

It was the April professional development day and we were happy that the consultants came back. We were excited about the sessions they were going to conduct. Each room was set up and prepared with various activities to share with teachers. I was relieved that the consultants had a variety of resources to share with them. When a district is initiating such a powerful program like co-teaching, I have learned that teachers want examples and resources for implementation. Each breakout session came with a folder of resources for each teacher to use as they continued on their journey with co-teaching.

The administrators made it a point to visit each break out session throughout the day to monitor the behavior of the faculty after the previous professional development session. We received a lot of positive feedback from the teachers as we observed the various groups. One of the sessions focused on technology and the consultant demonstrated free websites the teachers could access to find materials and resources for co-teaching and differentiated instruction. One teacher who participated in the technology session commented,

This session was so beneficial as it provided me with the resources I needed to actually implement co-teaching in my classroom. I feel much better about implementing co-teaching after participating in today's breakout sessions. It was obvious that administration recognized the value of providing, in advance, actual resources we need to implement co-teaching and eliminated the task for us to find them ourselves. This will save me so much time and allow me to focus my attention on co-teaching since I already have a library of resources available to start reviewing now.

Another teacher who participated in the session that reviewed various adaptations and modifications for students with disabilities shared her opinion,

I have to say I was very skeptical after the first co-teaching presentation. I was afraid that we were going to be expected to do all of the leg work in preparing for our co-taught classes in addition to just learning about it. I think both administration and the consultants have done an excellent job in providing us with a ton of resources from the start. I am somewhat relieved that I do not have to worry about finding all of these resources just so that I can begin co-teaching. This folder contains a wealth of information on various ways to adapt and modify for students, and I will not have to reinvent the wheel in trying to identify them. Also, I will have the rest of this year and the summer to review it all.

Most of the sessions were positively received by the faculty. As I observed the various sessions, I overheard rich discussions between teachers about how they could utilize the information the consultants were sharing. There seemed to be somewhat of an excitement on the part of the teachers and the atmosphere during the day's activities felt inviting and warm. This was in total contrast to the February professional development day experience.

I visited one of the sessions that the co-teachers were participating in that focused on how to build co-teaching relationships. This was probably one of the most important sessions that we offered because the research behind co-teaching consistently identifies a positive relationship as a factor that makes co-teaching successful. It was interesting to observe the interactions of some of the co-teaching pairs. As a bystander, it was obvious to me which teachers already had some type of relationship or bond, because they were sitting next to each other and were very relaxed and, at times, joked with one another. One the other hand, I was able to identify those co-teachers who were paired together and did not have a pre-established relationship. Their body

language portrayed a sense of anxiousness on both their parts. In addition, they were very cautious in their approach with one another and their posture was observed to be guarded and the conversation seemed to be strained and awkward. The session was extremely well planned by the consultants in that the entire focus was on how to build positive co-teaching relationships. The consultants provided several activities that helped the teachers get to know one another as a person versus a colleague. They did some role playing scenarios with each other that painted a clear picture for the teachers about the importance of a positive relationship and using a team approach to co-teaching. The role play scenarios were real life situations that happened in the consultants' previous experiences as either co-teachers or administrators.

I was able to sit with one of the co-teaching pairs to get their perspective on the session. The special education teacher commented,

> Honestly, if I didn't already know my co-teaching partner and have a good relationship with him, I would be scared to death right now. I can't imagine being forced to co-teach with someone I never worked with before. I think this session was so beneficial for those co-teachers who do not have a pre-established working relationship. I just hope they are able to build from these activities as they move forward with   the   co-teaching initiative.

The regular education teacher shared his thoughts,

> I agree 100%. I couldn't imagine being forced to co-teach with someone I never worked with. I am fortunate that my previous schedule allowed me to work closely with this special education teacher. Thank you for recognizing the importance of the relationship piece and keeping the same special education teachers assigned to the same grade levels. I feel bad for the two special education teachers who have to start from scratch and build relationships with regular education teachers they never worked with before. That will be difficult I think. If I can be frank, today's session was probably more meaningful for those teachers than to us.

I thanked the two teachers for taking the time to meet with me and appreciated their perspectives on the session. I wanted to meet with a co-teaching pair that was going to be working together for the first time, so I asked one of the special education teachers whose role

was changing and one of the Ancient History teachers if they would be willing to spend a few minutes with me in order to reflect on today's session. The special education teacher offered her thoughts,

> I hope I can speak openly without offending anyone. I am very scared about this new role I am expected to take on. I do not feel comfortable at all with my new schedule and am very disappointed with how it was determined. I do not know how I am going to learn three different levels of curriculum in two different subjects. After participating in this last session, I realize how important it is to build a positive relationship with your partner. I have to attempt to build a positive relationship with six different people. How in the world do I do that? I just do not see how my schedule is going to allow my co-teaching experiences to be positive and rewarding for the students with disabilities. Quite frankly, I don't see me ever moving past the one teach, one assist model of co-teaching.

The Ancient History teacher provided his perspective on relationships for co-teaching,

> This session gave me a lot of good ideas on how to build a relationship with my co-teacher. I just don't see me having enough time to do that since she has to work with six different regular education teachers. It takes time to build relationships and I am afraid we will not have an efficient amount of time to spend together in order to do that. I know the co-teaching implementation cannot be perfect, but I do think this special education teacher got the short end of the stick, which means so did the rest of us that have to co-teach with her.

Both of these teachers expressed concerns that the committee recognized and addressed during the initial planning stages. Unfortunately, this was the best schedule that we could design for this particular special education teacher.

The administrators and Keystone consultants reflected on the breakout sessions at the end of the day. We all agreed that the day's activities sparked the interest of several teachers and created a positive working environment that we didn't observe in the previous workshop. We were hopeful that the teachers would continue to move the co-teaching initiative forward in a positive direction.

4.5.3   Day Three- June 2006

It was the last professional development day of the school year in June 2006. The consultants from Keystone met with me and the middle school administrators early in the morning to review the training schedule for the 2006-2007 school year. We secured the first two days of school, four additional professional development days, and established the dates for the on-site monthly visits. We decided that at least one of the consultants would meet with the middle school principals and me prior to their on-site visits. We would collectively create an agenda that would involve the consultants observing a group of co-teachers and then debriefing with them after the observations. Classroom coverage was arranged in advance for the co-teachers. A specific schedule was designated for each co-teaching pair. The goal would be to provide constructive feedback to the co-teachers in order to enhance the co-teaching experience.

The teachers were provided, in advance, a list of the dates each month Keystone Consulting would be on site and, which co-teaching pairs would be working with the consultants each visit. A copy of the schedule is provided in Appendix D. One consultant would observe a section of sixth grade math and English on both teams and debrief after each observation with the co-teachers. The second consultant would observe a section of seventh grade math and English on both teams and debrief with the co-teachers. Finally, the third consultant would observe one section of the eighth grade English communications and math, one section of sixth grade Ancient History and one section of seventh grade science and debrief. This schedule would allow the consultants to observe the majority of co-taught classes during one visit. The only co-taught classes that weren't observed during this particular visit would be the other section of sixth grade Ancient History and seventh grade science, two sections of eighth grade science and a class with the speech language therapist. These classes were observed during the next visit,

allowing   more   time   for   the   consultants   to   work   with   the   co-teachers.

The remainder of the day would be devoted to allowing the consultants to work with the

co-teaching pairs in order to establish the resources that were needed for the start of the school

year. The special education department asked if they could have a meeting with me prior to

meeting with the Keystone consultants and regular education teachers. I asked the consultants to

start working with the regular education teachers while I met with the special education teachers.

The six special education teachers were visibly frustrated. The special education

department head spoke on behalf of the other five. She started by recognizing that she was

involved in the initial planning of co-teaching and appreciated the fact that the administration

offered the invitation. Furthermore, she acknowledged that she was a firm believer in co-

teaching and believes that if implemented correctly, our students with disabilities would

experience success in the regular education setting. With that being said, she went on to explain,

> I am speaking on behalf of all of us when I say that we are concerned that we do not have
> a sufficient amount of resources to begin co-teaching the first day of school with our
> students. Honestly, I neglected to think about the added resources that we need in
> the regular education setting now that we no longer have our own classrooms. For
> example, the special education teachers do not even have a space to call our own in the
> regular education classrooms. Where are we going to put our stuff now that we are
> considered traveling teachers. Will we have a desk and workspace available in each room
> that we co-teach? Secondly, where will we provide re-teaching and small group
> instruction for students? We learned that this type of instruction should happen right
> within the regular classroom when co-teaching. Our regular education classrooms
> currently do not allow for that type of teaching. Also, what about the added
> materials we will need for adapting and modifying work for students. Usually these types
> of materials were available to our students when they came to the resource room. Since
> they will no longer be coming to the special education classrooms, we will need these
> resources accessible to students in the regular education setting.

I patiently listened to everything the special education teacher had to say and appreciated

her directness. It was obvious that this group of special educators wanted to implement a solid

co-teaching program and was attempting to address all of the obstacles that could possibly create

a negative experience. I told them that additional teacher desks would be placed in every classroom that had been identified as a co-taught setting. They were happy to hear that. I also explained that they could order whatever extra materials and resources they felt were needed in order to move ahead with the co-teaching initiative. Those items might consist of round tables to place in the back of classrooms so that re-teaching and small group instruction could be provided or additional software, computers, laptops, or other types of classroom materials. The only stipulation I had was that they needed to sit with their co-teacher and produce a list of items together. Once the list was identified, they could send it directly to me and I would place the order. I then explained that one of the previous classrooms would be transformed into the middle school special education office. A desk would be available for each of the four special education teachers. In addition, each of their work areas would contain a desktop computer, printer and telephone. They could order filing cabinets or whatever they preferred to maintain files and organize their space. The speech teacher and special education teacher who would provide direct instruction would still have their own classrooms.

The women indicated they felt better after meeting with me and thanked me for my support and understanding. They wanted to have this discussion without the regular education teachers because they didn't want to offend their co-teaching partners in any way. I told them I recognized the sacrifices the special education department had to make as a result of the co-teaching initiative, and was willing to support them in any way I could in order to make the transition as smooth as possible.

Another special education teacher expressed her concerns,

> I am really afraid of the amount of curriculum I am expected to learn and really do not have any idea of how I am going to do it. Have extra teacher resources been ordered in the regular education classes that will now be co-taught? I would like to

have a copy of my own so that I can take it home in the evenings and review it over the summer.

Another special education teacher asked,

> Would it be possible to get each of us laptops now that we do not have our own classrooms anymore? I used to do my work in my classroom during my prep and between class periods. Now that I will be sharing classrooms with regular education teachers, it would be great if I had a laptop that I could carry from room to room.

In my opinion, the special education teachers spent time reflecting on how their role as special education teachers would change as a result of co-teaching. I told them that I would order a laptop for each of them and that they needed to meet with the co-teachers to determine what additional resources or materials they will need for co-teaching. I told them to send me the list after their meeting today and I would place the order as soon as I received it.

The special education teachers joined the rest of the group in reviewing resources, materials, software, and other items so that a final list could be prepared and submitted to central office for purchase. The consultants played a key role in identifying appropriate materials that would be needed in order to implement co-teaching for the start of the 2006-2007 school year.

At the end of the day the consultants provided me with a list of several items that needed to be purchased. They reiterated again how pleased they were with the attitude change in most of the teachers toward the co-teaching initiative. They believed that the items requested were essential in starting co-teaching in a positive manner. I assured them that I would submit the items for purchase so that they arrive prior to the start of the school year. Hopefully, the curriculum resources would arrive within the next month so that teachers could have them to review over the summer. I informed the teachers that I would contact them directly when the resources arrived so that they could review them sometime during the summer break, if desired.

Summer arrived and so did all of the materials and resources I ordered for the co-teaching initiative. I made sure the small teacher desks were placed in each of the co-taught classrooms. I called each special education teacher to inform them their materials were ready. All six teachers came the next day to pick up the materials to review over their summer break. I had their laptops ready for them to take with them if they wanted to do any pre-planning. Again, they were very appreciative of the effort I made to support their requests.

As the end of the summer grew near, I felt confident that I had addressed all of the physical requirements needed for the start of school. I took a few minutes to reflect on the progress we made from January and felt good that we were able to accomplish several of the goals the small committee established during the pre-planning stages of co-teaching. The main objective now would be to focus on the actual implementation of co-teaching and really work with the co-teachers to assure the students experienced success with co-teaching.

4.6   IMPLEMENTATION OF CO-TEACHING

4.6.1   Year One: 2006-2007 School Year

Professional Development

The first two professional development days prior to the start of school were devoted to continuing where Keystone Consulting left off with co-teaching for the middle school faculty. The first day consisted of an overview of co-teaching and then various break-out sessions for those teachers who would actually be implementing co-teaching in their classrooms. These

break-out sessions were unique in that each one demonstrated a model of co-teaching: Lead and Support, Station Teaching, Parallel Teaching, Alternative Teaching and Team Teaching. Teachers were assigned to groups of five, and each group rotated through the five stations throughout the day. The consultants from Keystone were outstanding with their presentations, and brought seven additional professionals with them for this particular training so that they could co-teach a lesson using one of the five different models.

The feedback from this training was phenomenal. Almost every teacher who participated in one of the break out sessions reported positively. One co-teaching pair offered their opinion,

> The Keystone consultants are quite impressive. They really know co-teaching and provided practical training that will help us in the classroom. After today's sessions, we feel confident that we understand each model and how each one can be used to achieve various goals based on what the teaching objective was for the day. A reading, English, math, science and social studies lesson was used to demonstrate each model.

Another teacher offered her insight on the sessions,

> I found these sessions to be very meaningful. It is obvious that building a relationship with your co-partner is critical in order to move through the various models of co-teaching. It seems to me that trust is a huge factor in the relationship piece, and if that isn't there, then the co-teaching pair will mostly rely on the lead and support model.

Day two of professional development was spent working with the co-teaching pairs to organize materials and design the first week of lesson plans with the consultants from Keystone Consulting. The teachers were very appreciative of this time and really focused on co-planning lessons that would represent the co-teaching model. Most of the lessons focused on the Lead and Support model since the co-teachers were just getting started. The teachers were excited about the resources that were reviewed over the summer and believed they would be instrumental in moving co-teaching forward. Most of the teachers were still apprehensive about co-teaching, but maintained a positive attitude and were ready for the challenge.

Co-Teaching Activities

Monthly on-site visits were conducted by the Keystone consultants during the 2006-2007 school year. As expected, the co-teachers addressed many concerns during their observation and reflection meetings. The administration debriefed with the consultants after each session to stay abreast of the concerns teachers reported in order to monitor and adjust the co-teaching initiative. The consultants reminded us that in their experience, the first year of implementation teachers were typically skeptical of one another. This skepticism related to many factors that included: teachers having to adjust to a major change; being held accountable for implementing a new initiative and, for some, learning new curriculum; building a relationship with another colleague and feeling vulnerable because they now had to share their classroom with someone else. The results of the monthly on-site visits are presented later in this section and were combined with other sources of data in order to identify the common concerns that were shared consistently by teachers, observed by administrators and consultants, and documented through multiple communication methods throughout the 2006-2007 school year.

Several meetings were held with the building principals, the co-teachers and me throughout the first year in order to maintain communication and address concerns as the teachers moved forward with co-teaching. During a meeting in October of 2006, one of the regular education teachers commented,

> One concern I have noticed as a result of co-teaching, specifically in math, is the discrepancy between what is being taught in the elementary grades and what is being taught in middle school. In the past, most students with IEPs received direct instruction in math, so I really didn't have the opportunity to work with these students in the regular education classroom to see what they knew. Now that I am responsible for teaching them in my classroom, I have concerns with the basic math skills some of these students lack. I just wonder if we need to communicate more with the elementary math teachers to assure the curriculum is properly aligned.

I explained that this was something that would lead to a positive outcome in the future. I assured this teacher I would share these concerns with the Curriculum Director so that she was aware of the situation and could address it through the department meetings she conducted across the district.

Another teacher expressed a concern that several other teachers confirmed,

> I am concerned that some students need lessons or concepts re-taught when they demonstrate difficulty. I am struggling with when to do the re-teaching due to time constraints and the constant pressure to keep up with the curriculum. I do not want to hold the other students back so that I can provide re-teaching, but I do not want to set those students who are struggling up for failure either.

Although I had answers to several of the teachers' concerns, I strategically refrained from commenting. Instead, I listened to their concerns, confirmed they were heard and assured the teachers that the administrators would attempt to address these concerns as we continued with co-teaching. I did, however, remind them that maintaining a positive attitude and making every attempt to better themselves as a co-teacher was necessary in order to experience success with the initiative.

In addition to group meetings, over the course of the school year, the principals and I observed each co-taught class so that we could provide ongoing support and feedback to the teachers. We remained fairly neutral during the first year with observations. Collectively, we decided to put most of the focus on the positive things we observed during observations. We did provide constructive criticism in order to refrain from making it a negative experience for the teachers. The strategy for this method was based on our attempt to get teacher buy-in and make them feel comfortable and confident with co-teaching.

During a debriefing session after observing a co-teaching pair, one of the teachers commented,

Co-teaching is a lot of work. I am struggling with finding the time to meet with my co-partner so that we can plan in advance and be prepared to service the many different types of students I am now being expected to work with. Even though we have a common planning period each day, it is impossible for us to meet everyday because of the additional responsibilities the special education teacher has. She has IEPs to write, meetings to attend, progress monitoring to conduct on each student that limits her ability to meet with me each day to focus on co-teaching. I feel really bad for her and I know it is not her fault, but I find myself getting frustrated with her.

I was impressed that the regular education teacher felt comfortable enough to express her concerns in front of the co-teaching partner. This dialogue proved that they had a positive relationship because the special education teacher continued by saying,

I take no offense to what she said. Actually, I completely agree with her statements. I find myself trying to do ten different things at once as a result of co-teaching. It is like a huge responsibility was added to my job, but none were taken away. The amount of special education paperwork I have to complete, timelines to comply with, IEP meetings to conduct, along with planning for each co-taught class is overwhelming. I just do not know how I am going to do all of this and do it with fidelity. I am somewhat frustrated and need some help with juggling all of these responsibilities.

I acknowledged that their concerns were justified, confirmed that I recognized their struggles and appreciated their honesty and the hard work they were doing in order to make the co-teaching experience a positive one. I noted their concern so that I could discuss it with the consultants and middle school administration.

After observing another co-taught classroom, I decided to debrief with each teacher separately because I didn't get the sense that this particular co-teaching pair had established a positive relationship. During the observation, the special education teacher seemed guarded and refrained from providing input or feedback to the students. The regular education teacher dominated the lesson and was the sole provider of instruction. My interpretation is that the regular education teacher didn't see the co-teacher as an equal and utilized the special education teacher more as an assistant rather than allowing her to share the responsibilities of a classroom teacher.

During the debriefing session with the special education teacher, she reported,

> I feel bad with what I am about to say, but being that we are halfway through the school year and I have seen absolutely no change in my co-teacher's behavior, I feel obligated to defend myself. I truly believe that my co-teaching partner "puts on a show" when the Keystone consultants come into observe each month. I only wish I was able to do as much as I am able to do during that one day a month. I really want to do more in the classroom and am feeling frustrated. There is still that "these are your kids not our kids" mentality. I am not permitted to make the modifications or adaptations I believe are appropriate for the kids. Instead, I am frequently told that I help the kids too much.

The regular education teacher shared this perspective during our debriefing session,

> I feel like the co-teaching is going good so far. I am somewhat frustrated because I think a couple of students are functioning too low below grade level to benefit from the curriculum. I feel like my co-teaching partner provides too many adaptations and modifications that take away from the student's learning. In my opinion, if we are modifying the curriculum that much, then the student should be receiving direct instruction in the learning support classroom. I find it hard to meet and plan with my partner each day. Both of us have other responsibilities that do not allow us to meet each day to focus strictly on planning for our co-taught class. Finally, I do not feel confident in allowing the co-teacher to provide instruction. She is not familiar with the content, and although I know we are only in year one of implementation, I do not see her knowing enough to deliver instruction the way the co-teaching model suggests.

I had several concerns after speaking with these two teachers and made a note to speak to the consultants about this co-teaching pair during their next visit. I knew the co-teaching initiative was still in the early stage of implementation, but I wanted to take a proactive role in providing extra guidance to these teachers. If we didn't find a way to support them early on, then their experience with co-teaching would only get worse.

As the year progressed there were some problems that needed to be addressed with the consultants. By mid-year, based on the reports we received from Keystone, it seemed as though the monthly on-site meetings were becoming unproductive. The co-teachers were spending the majority of the time they had with the consultants discussing administrative issues that were not

relevant to the task at hand. Their sessions with the consultants became complaint sessions versus sessions that focused on enhancing their co-teaching experience.

As a result of these reports, a meeting was scheduled with the Keystone consultants, middle school administrators and me in order to discuss these concerns. It was an uncomfortable meeting because we had to express our disappointment with how the monthly sessions were evolving. The principals and I explained to the consultants that the district was not spending all of this money basically to allow the teachers to complain. It was communicated to the consultants that the discussions they were having with the co-teachers needed to be on the co-teaching observations. Any issues the co-teachers had that were administrative in nature needed to be discussed directly with the district administrators. We explained that after reviewing the monthly summary reports, we felt mixed messages were being sent to the co-teachers. We explained that some consultants were taking on too much of an administrative role versus the role of a consultant. We provided them with the specific example of a conversation between the building principal and a co-teaching pair that commented,

> The consultant informed us that it is okay to use the Lead and Support model all year but when the Director of Pupil Services observed the class and debriefed with us, she told us we should be trying the different models when the opportunity presents itself in the classroom. We are getting mixed messages from the consultants and district administration. Who is in charge and who are we to listen to?

The consultants recognized our concerns and assured us that they would proceed with caution. They asked that we schedule a meeting with all of the co-teachers in order to clarify their role and establish guidelines for the teachers so they were clear about the purpose of the monthly meetings.

In February of 2007 a meeting was scheduled with the co-teachers to discuss the administrators' concerns with how the monthly on-site sessions were evolving. We explained to

the teachers that after reviewing the monthly summary reports provided by Keystone, we were concerned that the sessions were being used for a time to complain about co-teaching rather than focus on how they could continue to enhance co-teaching in their classroom. A clear directive was given that any administrative issues or concerns were to be directed toward the building principals or the Director of Pupil Services and not the consultants. Furthermore, we explained that the consultants were hired to provide training and assistance with implementing co-teaching. Although each of them had a background in teaching and administration, they were not hired to answer questions or give opinions that should be answered or addressed by district administration. We informed the co-teachers that the focus during the on-site visits must remain on enhancing co-teaching and gaining insight on how to improve it within each of their classrooms.

One teacher made the following statement during the meeting,

I think we felt comfortable sharing our concerns with the consultants rather than the district administration because we didn't want the administrators to feel like we were complaining. We really want to make co-teaching work, but feel like there are a lot of roadblocks that are keeping us from being successful. Many of us are frustrated and I think that we used the consultants because they were non-threatening and weren't the people evaluating us.

We reminded the teachers that any observations during the first year would not be used to complete end-of-year evaluations. Rather, the administration was sensitive to the newness of the implementation and would use the observations to reflect on co-teaching, highlight the positive aspects of it, and discuss areas of improvement in order to continue to enhance classroom instruction utilizing co-teaching. We encouraged the teachers to communicate openly with administration so that the issues could be addressed and the district could move forward with the co-teaching initiative. We informed the co-teachers that an end-of-year meeting would be scheduled sometime in early May to reflect on the first year of implementation and discuss any

changes that needed to occur in order to enhance the co-teaching experience during the second year.

Another conversation revealed a co-teaching pair's inability to establish a common philosophy of co-teaching. The regular education teacher was a veteran teacher who was traditional in his teaching method. However, the special education teacher was new to the teaching profession and excited to use the 21st century skills and teaching methods with children. Their philosophy on education was on opposite ends of the spectrum, which was causing a disruption to the learning environment of the students. The middle school administration received several telephone calls from parents that were concerned because their children were coming home from school informing their parents about the "arguments" these teachers would have during class. These phone calls confirmed the concerns the consultants had expressed earlier in the school year. Whenever the administrators observed this particular co-taught class, it was obvious that the two teachers did not share a common philosophy of co-teaching, but they maintained their professionalism during the observation. As a result of the data collected, the middle school administrators and I scheduled a meeting with the co-teachers to express the concerns.

Both teachers were defensive during the meeting, which created a negative atmosphere. Both teachers refrained from making eye contact with one another. When one teacher spoke, the other would roll their eyes indicating dissatisfaction. The tension in the room was felt by everyone. The administrators and I took the approach that we wanted to help the teachers and provide them with the necessary supports and resources in order to establish some common ground in regard to co-teaching. The regular education teacher commented,

I just do not see co-teaching ever working. The special education teacher is simply not qualified or able to deliver the instruction. Quite frankly, she is just holding me back from teaching.

The special education teacher immediately took offense and commented,

Working with this teacher is impossible. I am treated like an aide in the classroom. I feel like he degrades me in front of the students and makes comments that clearly indicate his lack of confidence in me. I am not saying that I am a math teacher, but I do have a lot of experience in working with students and teaching them how to learn. He doesn't even allow me the opportunity to at least provide adaptations or modifications to the work he presents.

The relationship between these teachers was not going to improve. It was hard for me to maintain an objective opinion because I knew the regular education teacher and had some concerns from the beginning when he was identified as one of the co-teachers. As his former assistant principal, he had a history of being difficult to work with and frequently exhibited a negative attitude, particularly with new initiatives. Unfortunately, he was the only teacher available to teach this particular section of math that required a co-taught setting. The comments made by the special education teacher were accurate and her concerns were legitimate.

We attempted to mediate the disagreement between the two teachers but realized nothing was going to change on the part of the regular education teacher. Understanding that co-teaching is a give and take experience, there was not going to be any giving on the part of the regular education teacher. The administration took a more forceful approach with the regular education teacher and directed him to change how he conducted the co-taught class. We brought the Keystone consultants in to work one-on-one with this particular co-teaching pair to provide more individualized support in the co-taught classroom. Simultaneously, the middle school principals conducted more frequent unannounced classroom observations. This step was necessary in order to assure the co-teaching experience was benefiting the students in the classroom .

The administration knew that this co-teaching pair needed to be changed for the 2007-2008 school year, and in fact, we made a note to exclude this particular regular education teacher from the entire co-teaching experience. This would result in a major schedule change for him and, after we notified him of this change, he retired at the end of the school year. His retirement allowed us to look at the master schedule for the next year and be strategic about pairing teachers for this co-taught math class. The goal was to keep the special education teacher the same but match her with a math teacher whose philosophy of co-teaching was similar. This was going to be a main area of focus for the administrators when assigning the co-teaching pairs for the 2007-2008 school year.

End of Year One

By the end of the school year, the consultants, building principals and I observed all co-teachers. After reviewing the observation notes, conducting debriefing sessions with each co-teaching pair, reviewing data collected throughout the first year, and conducting the end-of-the-year reflection meeting with the co-teachers, some common themes emerged from the data. The following chart highlights those themes:

Table 1 End of Year One- Common Themes Identified

End of Year One- Common Themes Identified
Special Education Teachers lack content knowledge in academic subject areas
Lack of planning for co-taught lessons
Lack of resources
Inability to balance curriculum demands and students' needs
Need for study halls in master schedule to provide re-teaching of concepts to struggling students
Inability to differentiate instruction for all students
Lack of trust between co-teachers
Limited time to allow for consistent planning due to other responsibilities
More focused training
Increase the use of various co-teaching models
Need to hire additional special education teachers
Decrease class size for each co-taught class

Pair teachers together who share a similar philosophy of co-teaching

We knew that it would be a work in progress for many of the concerns identified at the end of the 2006-2007 school year. The special education teachers would need time to gain confidence and knowledge in the various academic curriculums. It would also take time for the co-teachers to establish a relationship. The administrative team decided to focus on the scheduling issues over the summer in order to create a master schedule that was a better fit with the co-teaching initiative. Specifically, we focused on identifying consistent planning times each week for the co-teachers and reducing the class size of the co-taught sections.

Summer 2007

The district faced a minor roadblock in the summer of 2007 when the assistant superintendent announced that she was offered a superintendent's position in another district, and would be leaving at the end of the summer. This was disheartening to hear since she was a big proponent of co-teaching and helped set the expectations with the middle school faculty. The uncertainty of knowing if the next assistant superintendent would value the initiative was unsettling and caused somewhat of a panic on my part. I knew that the new person's support would be vital in continuing forward with co-teaching.

4.6.2   Year Two: 2007-2008 School Year

Obstacles

The second implementation year of co-teaching brought about improvement and new challenges. One obstacle for administration to overcome was to introduce co-teaching to the new assistant superintendent. Fortunately for the district, the assistant superintendent was a former special education teacher and fully supported the co-teaching initiative. She was instrumental in picking

up where the previous assistant superintendent left off as far as holding teachers accountable for implementing co-teaching in order to enhance inclusion for students with disabilities in the regular education setting.

Another obstacle that some of the middle school co-teachers would face for the 2007-2008 school year was a change in co-teaching pairs. Although all the research suggests that it is vital to keep co-teaching pairs together each year in order to enhance the relationship, there are situations that arise that are beyond the control of administration. Two regular education teachers retired who were co-teaching during the 2006-2007 school year. As a result, two of the special education teachers had to build relationships with their new co-teaching partners. In addition, it would be necessary for administrators to ensure that the new teachers received intense training on co-teaching. Individual sessions with the consultants from Keystone were scheduled with the new teachers in order to continue to make progress with the co-teaching initiative.

The middle school administrators were able to design a master schedule that allowed for more common planning time between the co-teachers. Unfortunately, they were not able to secure consistent planning time for the special education teacher who worked with teachers across grade levels. This was impossible due to the make-up of the middle school schedule. They were able to schedule two preparatory periods with two of the three regular education teachers she co-taught with. Specific planning time with the third regular education teacher was identified before and after the school day, two days a week. The middle school administrators did their best at identifying some consistent common planning time for this co-teaching pair. They assured these two teachers that they would not have any additional responsibilities and be excused from any meetings that might occur during these times.

Accomplishments

The co-teachers were satisfied with the size of their co-taught classes. The middle school administrators worked diligently to decrease these class sizes when creating the master schedule. In order to decrease the class size of the co-taught sections, the regular sections had to be increased. This caused concern for the other teachers. The dedication on the part of the administrators to decrease the sizes of the co-taught classes proved their commitment to the co-teaching initiative. This accomplishment made the teachers realize that co-teaching was not just another fad in education and that the district was serious about making it a successful program at the middle school.

In order to confirm our commitment to the co-teaching initiative, the district signed another one year contract with Keystone Consulting. The consultants continued with the monthly on-site visits at the middle school during the second year of implementation. In addition to these scheduled visits, they provided professional development during three professional education days throughout the year and worked individually with all teachers new to co-teaching. The same process was used during the on-site visits; the consultant observed the co-taught class and then debriefed with the co-teachers to reflect on the observation.

Co-Teaching Activities

After the first on-site visit of the 2007-2008 school year, one of the consultants commented,

> I am glad to see that the teachers haven't forgotten the basics of co-teaching. It seems that the co-teachers who are the same from last year have maintained a positive relationship that has moved their co-teaching forward. I am happy to see that a few of the co-teachers used different models during their lesson. Although most of the classes I observed utilized the Lead and Support model, it was encouraging to see the growth in the interaction between the two teachers.

Another consultant shared their thoughts on the first visit,

I am excited with what I observed today. I was concerned that being our first visit was so close to the start of the school year, we would spend the majority of time revisiting the basics of co-teaching. That was not the case at all today. It was as if last school year never ended. These teachers have picked up right where they left off at the end of last year and haven't missed a beat. I agree that the majority of lessons observed today were Lead and Support, but I definitely saw growth in the teacher relationship. The special education teachers seemed to be more comfortable and confident in the classroom.

We were encouraged to hear the positive comments from the consultant so early in the year, but decided that we needed to establish goals for the 2007-2008 school year in order to continue moving the initiative forward. As an administrative team, we collectively agreed upon three goals that Keystone Consultant would focus on when working with the co-teachers. First, we wanted to see an increase in the various co-teaching models used during instruction; second, we wanted to see the co-teachers use the established common planning time consistently and productively; third, we wanted to see the relationships build between the co-teachers.

The consultants were confident they could achieve the three goals and asked that we share them up front with the co-teachers so that everyone was aware of what the tasks were for the year. A meeting was scheduled with the co-teachers the next morning to review the three goals for the school year and answer any questions they had. One teacher commented,

I am concerned that you want us to use the established common planning time to focus solely on co-teaching. I have two other sections that I also must prepare for and am afraid that I will not have enough time to plan if I am expected to utilize the period each day to plan for co-teaching.

A special education teacher commented,

I am also worried about using the common plan period each day to co-plan. I am concerned that I will not be able to keep up with the special education paperwork requirements without the use of this prep period.

The middle school principal explained to the teachers that the established common planning times scheduled in this year's master schedule were a result of the feedback the co-teachers provided at the end of last year. He reminded them that the majority of co-teachers

125

identified "not having enough common planning time with co-teaching partner" as an area of concern from last year's end of the year survey. He was very clear in directing the co-teachers that the identified plan time was to be used to co-plan. The teachers would have to use other plan time available in their daily schedule to complete additional responsibilities.

The middle school administrators gave the co-teachers the schedule for monthly on-site visits with Keystone Consulting. We asked the teachers for suggestions on adjusting the year's visits, but everyone agreed that they would like them to remain the same as the previous year. In addition to the on-site visits, the co-teachers were informed that middle school administrators and the Director of Pupil Services would also be observing the co-taught classes and conducting post-observation meetings with the co-teaching pairs. We explained that the administrators would be evaluating the progress the co-teaching pairs were making on the three goals established for the 2007-2008 school year. We would refrain from using the co-teaching observation as part of the overall evaluation so that the teachers could continue to focus on improving their co-teaching. We told the teachers that administrators would identify areas of weaknesses, and possibly set additional expectations, if co-teachers were not making progress on the co-teaching initiative. The co-teaching expectations were going to increase for the second year of implementation, and teachers would be held more accountable for the success of co-teaching in their classrooms. One of the regular education teachers commented,

> I feel like co-teaching is being rushed. We are only in year two of implementation and the expectations have already been increased. There is still so much to learn about co-teaching and the various models that I do not see me using the different models until I have established a relationship with my co-teaching partner. Additionally, I do not see my co-teaching partner having enough knowledge of the curriculum in order to use some of the different models.

The administration assured the co-teachers that we would be looking for improvement in these areas, not complete mastery. We reminded them that the second year of implementation should bring about enhancement and refinement of co-teaching.

The October 2007 professional education day was designed to allow co-teachers to spend the day creating co-taught lessons and developing lesson plans for specific units. The co-teaching pairs separated into three groups. One of the Keystone consultants facilitated each group. The purpose of providing this type of activity was two fold: (1) the consultants assisted the co-teachers with writing lesson plans using the various co-teaching models and (2) the co-teachers were expected to design a unit's worth of lesson plans. This would allow the co-teachers to review the instruction for upcoming lessons and gain confidence in the content they were expected to teach during their daily planning time.

The professional education day modeled the best way to utilize common planning time in order to design meaningful co-taught lessons. It was a successful activity and many of the co-teachers were appreciative of the day. One special education teacher commented,

> For me personally, this activity forced my co-teaching partner to share the responsibility in writing lesson plans. Many times I was just given a copy of the lesson plans and told to look over them to see if I had any questions. I never sat with him before to design a lesson. I have to say, this activity was very helpful in identifying the parts of the curriculum that I must become familiar with. Now I will review the specific topics prior to that class and be more confident and knowledgeable in what I am expected to teach.

A regular education teacher commented,

> Today was a meaningful experience, but somewhat unrealistic. We simply do not have that kind of time to sit and design lessons with our co-partner. Although we have a common planning period each day, there are many days that time is used to conduct IEP meetings or other meetings that we are required to be at. I am not faulting anyone, but there are times when parents are only available during this specific time of the day. In the everyday hustle and bustle of school, spending that amount of time to plan a lesson is not realistic.

We reminded this teacher that designing lessons as a co-teaching pair was an expectation of administration. The first year would most likely require additional time and effort on the part of the teachers, but in future years the burden should lesson. Although it would be time consuming, we stressed the importance of sharing the planning of lessons and how it was needed to enhance the co-teaching in the classroom. In addition, this would help the special education teachers become familiar with the curriculum so that they could become more of an equal in the classroom.

As the year progressed and classroom observations were conducted, the administrators and consultants started to identify common themes. There was concern that the special education teachers still lacked sufficient knowledge in the content areas, and as a result, there was little use of the co-teaching models. Most co-teaching pairs continued to use the Lead and Support model, in which the special education teacher acted more as an assistant versus an equal teacher providing instruction. After conducting the classroom observations, I noted that there was still a lack of planning on the part of the co-teachers for their co-taught lessons.

End of Year Two

Several common themes emerged after the end-of-year reflection meeting was held with the co-teachers. Some of the themes were a repeat from year one and some were new. The following chart highlights the common themes that were discovered after the second year of implementation through classroom observations, post conferences with co-teachers, discussions with the consultants and the end-of-year meeting:

Table 2 End of Year Two- Common Themes Identified

End of Year Two- Common Themes Identified
Special Education Teachers lack content knowledge in academic subject areas
Lack of planning for co-taught lessons
Inability to balance curriculum demands and students' needs
Inability to differentiate instruction for all students

Lack of trust between co-teachers
Limited time to allow for consistent planning due to other responsibilities
Need to Increase the use of various co-teaching models
Need to hire additional special education teachers
Pair teachers together who share a similar philosophy of co-teaching
Regular education teachers concerned with how their role as classroom teacher is changing
Increase in clerical duties for both regular and special education teachers
Need to keep the co-teaching pairs the same each year

Summer 2008

After reviewing the common themes, we identified three tasks to focus on over the summer in order to refine the co-teaching initiative for the third year. The first task involved designing some type of a co-teaching observation form to use when conducting classroom observations. We thought this would raise the level of concern for the co-teaching pairs since there was still a lack of planning for lessons on the part of the co-teachers. The form would not have a "satisfactory" or "unsatisfactory" component, but rather, a place for the observer to identify areas of need. Again, the strategy behind this method of thinking was to continue to give support to the co-teachers rather than make them feel threatened. We worked with Keystone Consulting to design the co-teaching observation form. This tool was an extensive list of possible teacher behaviors and provided opportunity for specific written feedback in many clearly delineated categories. Administrators met with union representatives to present the new observation form and the representatives accepted and approved it as the observation form to be used for all co-taught classes.

The second task was to design a master schedule that kept the same co-teaching pairs. We were able to do this for the majority of co-teachers except for the special education teacher who worked across all three grade levels. Due to the retirements of previous co-teachers, we were forced to reassign the special education teacher to two new co-teachers. Although we knew this would create a set back in starting the new school year, we arranged for Keystone to provide

more intense training with the two new teachers and the special education teacher in an attempt to expedite the relationship component.

Finally, we decided that the middle school faculty needed a refresher course on differentiated instruction. Even though the district provided a year of intense training for faculty K-12 on differentiated instruction, it was obvious from our work with co-teaching that the teachers needed guidance on how to differentiate the instruction in a co-taught setting. We contracted with a nationally known expert on differentiated instruction to work with the Keystone Consultants for the 2008-2009 school year to provide professional development to our middle school teachers on differentiating instruction in a co-taught classroom. We reserved the first two professional development days of the 2008-2009 school year, along with two other professional development days throughout the year for this necessary and integral component to co-teaching.

The summer of 2008 presented a major challenge for me. Both the principal and assistant principal left the district and I was faced with new administrators leading the co-teaching initiative. This caused a major set back because it was necessary to allow the principal and assistant principal time to become acclimated. As a result, co-teaching was put on the back burner. Due to this situation, I was responsible for planning the majority of professional development on co-teaching for the 2008-2009 school year and had to take the lead in continuing with the progress we had made thus far.

I scheduled a meeting with the new middle school administrators shortly after they arrived in order to bring them up to speed on the co-teaching initiative. I could tell from my discussion with them that they did not share the same philosophy about co-teaching. This was a delicate situation because I knew that if I didn't have the support of the new administrators, all of

the hard work we had completed over the past two years would be forgotten. It was critical that the new middle school administrators understood this was a district-wide initiative, and the overall goal was to implement co-teaching K-12.

I needed assistance from the assistant superintendent and superintendent in order to send a clear message that the expectation was to continue with the co-teaching initiative at the middle school. They made it clear to the middle school administrators that continuing the co-teaching initiative and seeing it through with fidelity was an expectation. This situation put somewhat of a wedge between the middle school administrators and me from the start. It was unfortunate, but necessary, in order for me to assure success with the final year of implementation.

I knew I would be responsible for completing the majority of the leg work since the new principals would be busy acclimating themselves to the middle school. Fortunately, prior to the previous administrators' departure, we had finalized plans for the three tasks established for the upcoming school year. It was just a matter of reviewing the co-teaching observation form with the new administrators to assure consistency in how the observations were conducted. The co-teaching pairs were already established in the master schedule and the consultants were scheduled for four professional education days during the 2008-2009 school year.

During the summer of 2008 the Keystone consultants provided a full day of training on co-teaching for the middle school administrators. This was necessary so that they were on the same page with the expectations of co-teaching for the start of the school year. Since the new administrators had no previous training on co-teaching, it was crucial that they understood it from both a philosophical and practical standpoint. After this training, the principals were more receptive of the co-teaching initiative and one commented,

> I have to admit, I was completely wrong with how I interpreted co-teaching. I am glad I received this training because it really helped me understand the philosophy

131

behind the initiative. I definitely think co-teaching will benefit the students with disabilities. In fact, I think it will also benefit those students who may not be identified, but are struggling in certain subjects. I am more onboard with co-teaching now than I was when I was first told about it.

The consultants from Keystone met two more times over the summer with the middle school administrators so that they were prepared for the third year implementation of co-teaching. They reviewed with them, in depth, the co-teaching observation form and how it should be used with the co-teaching pairs in order to improve instruction. They also reviewed the five models of co-teaching and identified scenarios of when it would be appropriate for the co-teachers to use each model. We reviewed the lesson plans that were developed during the end of last year by the co-teaching pairs and explained how the teachers were expected to implement these lessons during the upcoming school year.

I have to admit, it was frustrating, because we had to teach the basics of co-teaching to the new middle school administrators. Although it slowed down the progress, in the end it was well worth it. Both principals were impressed with the level of support they were provided and the level of support the teachers had been given over a three year period. Both commented that they have never experienced this level of training and support given to teachers for one initiative.

Once the middle school administrators had a handle on the co-teaching initiative, I moved forward with planning for year three implementation. I scheduled a meeting near the end of the summer with the middle school administrators, Keystone consultants and the consultant for differentiated instruction. The purpose of the meeting was to design a tentative agenda for the four professional education days that would be shared between the co-teaching and differentiated instruction consultants.

4.6.3   Year Three: 2008-2009 School Year

Professional Education Days

The first professional education day for the middle school teachers was devoted to a half day refresher course on co-teaching in the morning and a half-day refresher course on differentiated instruction in the afternoon. All middle school teachers were expected to attend this workshop. The purpose of this refresher training was to remind all of the teachers that co-teaching and differentiated instruction must be understood by the entire faculty whether they are currently co-teaching or not. In addition, we reminded the faculty that differentiated instruction was an expectation in all classrooms, not just co-taught ones.

The co-teachers identified for the 2008-2009 school year were required to participate in the second professional education day that focused on differentiating instruction in a co-taught classroom. This workshop was a hands-on learning experience that provided the teachers with sample lessons taught by the consultants. The consultants were strategic in demonstrating a lesson in each of the academic subject areas. They first demonstrated a lesson for the teachers and then conducted a debriefing session in which they walked the teachers step by step through the planning process. Overall, the feedback from the teachers was positive. They appreciated the practical approach to the training, and the fact that they were able to take something away from the training. One of the regular education teachers commented,

> Today was really beneficial. I was able to observe a lesson conducted by the consultants that was realistic in the sense that it provided me with a lot of great ideas on how to differentiate instruction in my subject area. I will definitely use pre and post assessments prior to each unit in order to gauge students' knowledge and then plan according to their needs. This will require a lot more plan time upfront, but in the end I think it is what is needed in order for all students to experience success.

The special education co-teacher commented,

This session was excellent. It was so great to have the consultants demonstrate lessons that involved both differentiating and co-teaching. I really think it helped us understand that the two do go hand in hand and that if we differentiate instruction, then naturally we will be forced to use the various co-teaching models based on what we are differentiating for the students.

All the co-teachers who participated in this training received a packet of resources to use when planning differentiated instruction in their co-taught classroom. Again, one teacher commented,

The one thing that continues to impress me about the consultants is the amount of practical resources they give us. I can honestly say, I have used something from every resource packet they have provided since they started working with us. They continue to be accessible and genuine in their desire to make co-teaching successful here.

The day ended on a positive note and most of the co-teachers walked away feeling ready to tackle year three of co-teaching. For some, their level of confidence increased from the prior year, but for others, there was still that look of fear and uncertainty on their faces. We conducted a debriefing meeting at the end of the day with the consultants to reflect on the last two days and prepare for the upcoming school year. We planned to maintain the monthly on-site visits with Keystone, but this year we decided that the visits would be unannounced. The administrators and consultants identified the specific dates for each month, but these dates would not be shared with the co-teachers upfront. Instead, co-teachers were notified the day of the visit that the consultants were on-site and would be conducting observations and debriefing sessions. The process remained the same, but the actual date of the visit remained unknown.

The reason for this decision was that it seemed the feedback we received from the consultants on the progress of the co-teaching was consistently positive. In the previous years, I believed that what the administrators observed in the co-taught classes and what the consultants observed were completely at opposite ends of the spectrum. I related this to the fact that the visits

134

from Keystone were announced and all of the classroom observations conducted by the administrators were unannounced. Quite frankly, we felt as if the co-teachers were putting on a show for the consultants. We believed that the types of co-taught classes observed by administration were happening more frequently than what was observed by the consultants. In order to confirm or reject this suspicion, we decided to be consistent and make all observations unannounced. Both the consultants and administrators would observe a true co-taught setting and get a better snapshot of a typical co-taught lesson. Everyone was in agreement that this type of observation was necessary now that we were entering our third year of implementation.

A middle school faculty meeting was held on the third professional education day in order to review with the teachers the three established goals for the year in regard to co-teaching and also to inform them that the on-site visits from Keystone Consulting would be unannounced. The middle school principal and assistant principal opened the meeting by welcoming everyone back and introducing themselves. The first item of discussion on the agenda was co-teaching. The principal made it very clear to the faculty that he intended to pick up with co-teaching where the previous principals left off and that it was still a number one priority of the middle school. I was impressed with his commitment to this initiative and respected the message he sent to the faculty. He then went on to review the three goals for the year: 1) use the co-teaching observation form 2) keep the co-teachers the same as last year and 3) provide additional training on differentiated instruction and how it can be utilized in a co-taught classroom. He explained in detail how these goals were accomplished over the summer with the perseverance of administration and the consultants. He talked about how we strived to maintain the same co-teaching relationships, but that there were natural roadblocks that caused us to separate one co-teaching pair. Finally, he reviewed the schedule for differentiated instruction and described how

135

the teachers would work with Keystone Consulting on two more occasions throughout the school year.

The final discussion was informing the faculty that the visits from Keystone would be unannounced. It was during this conversation that I interjected the reasoning for this decision. I was frank with the teachers and told them that we felt the co-taught lessons that Keystone observed were embellished. I explained further that the lessons observed by the consultants were not the typical lessons that administrators were observing on a daily basis. One teacher commented,

> I feel like now you are trying to catch us doing something wrong. Why wouldn't we be provided the dates of the on-site visits? In the past, I was able to prepare for the visits in advance by having my questions ready to ask in the short amount of time we had with them to debrief.

I acknowledged this teacher's concerns but explained that the visits would be unannounced and that the teacher's should continuously note any questions they have as they proceed with co-teaching, so that they would be readily available when the consultants were on-site. We further explained that accountability would be increased as we enter year three of implementation. The observation form was designed to provide specific feedback to the co-teachers regarding their progress. The teachers were reminded that the form did not identify a satisfactory or unsatisfactory rating, but most likely would change as we finished the school year. The co-teachers were told up front that the expectations for co-teaching had increased and we anticipated seeing an increase in the use of the various co-teaching models, lesson plans that reflected shared planning between teachers, differentiated instruction and more teaching from the special education teachers. A frustrated teacher commented,

> I would like to know how you expect these things to happen when there is not enough time in the day to plan with the special education teacher. I do not know how I am going to manage finding the time to plan lessons with my co-teacher. In addition, I just do not

136

see this person being able to take on more of the teaching responsibility. They just do not have a handle on the curriculum.

Many teachers acknowledged this statement by nodding their heads. I reminded the teachers of the professional development they received over the past two years and the resources they were provided. We also reminded them of the professional education day at the end of last year in which they were given time to create lesson plans to use this year. The middle school principal gave his opinion from an outsider's perspective,

> I have to interject here for a moment. I am somewhat surprised to hear this level of concern even after the amount of training the district has provided. I have been in several school districts throughout my career, and I have never experienced a school district that provided this level of support and training for teachers on one initiative. I say this from a neutral party's perspective since I am new to the district. With the amount and intensity of training you all have received up until this point, there should be no apprehension moving into the third year of implementation. First year is completely understandable; second year I can understand the fear and uncertainty still, but entering year three should be a breeze. In my opinion, we should be tackling other obstacles than the ones we continue to tackle year after year.

This was a powerful statement sent by the new middle school principal and it set the tone for moving forward with co-teaching. The message was clear that accountability and expectations had increased for this school year.

Co-Teaching Activities

As the school year moved along, progress continued to be made with the majority of co-teachers. Through the on-site visits and observations, we saw an increase in the level of planning between the co-teachers and, as a result, the various models of co-teaching were being utilized more often. There was a small improvement in the lesson plans submitted, but not enough to consider it a success on the part of administration. There was still resistance from most of the co-teaching pairs to allow the special education teacher to provide more instruction. This seemed to be an ongoing concern of both the regular and special education teachers.

Some unique challenges arose during the third year. As the teachers began to utilize the co-teaching models more frequently, there was a need to physically rearrange classrooms, which resulted in a cost increase. Many teachers began asking for additional resources such as, round tables, individual chairs, white boards, smart boards and dividers. Although this was an additional cost to the special education department, I honored the requests and adjusted the budget.

Since the special education teachers were consistently using their preparatory period to plan with their co-teaching partner, one in particular started to fall behind with special education paperwork. Her paperwork was out of compliance and timelines were not met. When confronted with these issues, the teacher in question reported that it was due to the fact that she now uses that preparatory period to plan with her co-teacher. Administration took a different approach dealing with this particular teacher who was beginning to use co-teaching as an excuse for not fulfilling other job responsibilities. It was an unfortunate situation, but one that we had to deal with in order to maintain compliance with special education paperwork.

In an effort to be supportive of the additional time the special education teachers had to put in as a result of being directed to use one preparatory period to plan with their co-teachers, administration decided to provide each special education teacher with additional IEP writing days. They were able to request, in advance, an IEP writing/paperwork day and utilize the building substitute to cover their classes. The middle school principals were fairly supportive of these requests and flexible with honoring them for all special education teachers. Depending on the number of co-taught classes they had, some teachers were granted an additional three days throughout the school year. This process seemed to relieve the stress and anxiety of the teachers and they were appreciative of the support from administration.

Data collected by the consultants over the year confirmed the district's concern that the scheduled visits with Keystone were not the typical lessons presented day-to-day by the co-teachers. The consultants reported that the co-taught lessons they observed this year were not as good as the ones observed in previous years. They agreed that this was a result of the unannounced visits and proved that teachers were not using common planning time to thoroughly plan their lessons. This issue was something that needed to be examined more in-depth for the upcoming school year.

In June of 2009, the school year came to a close. A final debriefing meeting was held with the consultants, administrators and co-teachers. Consistent themes continued to emerge that were similar to past years. The following chart highlights those themes and brings conclusion to the three year implementation of co-teaching.

Table 3 End of Year Three- Common Themes Identified

End of Year Three- Common Themes Identified
Special Education Teachers lack content knowledge in academic subject areas
Lack of planning for co-taught lessons
Inability to balance curriculum demands and students' needs
Inability to differentiate instruction for all students
Lack of trust between co-teachers
Inability to maintain other special education paperwork as a result of using common planning time consistently
Need to Increase the use of various co-teaching models
Increase in clerical duties for special education teachers

4.6.4   Summary of Chapter IV

Complete implementation of co-teaching had not occurred by the end of the third year. However, common planning time, a co-teaching observation form, and a master schedule that maintained

co-teaching pairs were becoming institutionalized. Other factors related to co-teaching, such as the special education teachers' increase in content knowledge, use of various co-teaching models, consistent use of co-plan time and open and honest communication between the co-teachers were still undergoing modifications to make utilization more of a possibility and to assist in creating a better fit between co-teaching and the middle school.

Although implementation of co-teaching was still incomplete, enough of the components were embedded in the routines and practices of school personnel that district administration felt the initiative was a success. The goal was to now extend co-teaching into the high school and elementary schools in the upcoming school years. The middle school would continue to make progress with co-teaching and the co-teachers would become the internal experts for assisting other district faculty through the initial stages. The district would continue to request the services of Keystone Consulting in order to expand co-teaching across the district.

Interpretation of Redefining/Restructuring

Understanding of the innovation process in organizations can be gained from this case study research of the implementation of co-teaching in a middle school. One might have thought that co-teaching would be so beneficial for students that diffusion would have been rapid and implementation effortless, but this is not the case. The co-teaching initiative created overwhelming changes in human and organizational behavior. In addition, it required a great deal of monitoring and adjusting on the part of both the innovation and the school organization. All four of the socio-technical subsystems: task, human, technical and structural, were affected in some way from the implementation of co-teaching.

Re-invention

As stated previously, the redefining/restructuring stage marks the early stage of implementation. Typically during this stage, innovations are reinvented to accommodate the structure of the organization adopting it and the organization itself undergoes some changes to better utilize the innovation. Analysis of data in this case study indicates more changes had to take place for the middle school (the organization) in order to create a better fit with co-teaching (the innovation). Some technical changes within the building that occurred include: the regular and special education teachers differentiate instruction for students with disabilities within the regular education classroom; co-teachers share instruction of the curriculum and classroom management; and both teachers create adaptations and modifications within the regular education classroom for students with disabilities. All of these changes increase the amount of planning and clerical work, particularly for the special education teachers, in some way.

Reinvention of the task and structural subsystems within the middle school appeared to be necessary to better utilize co-teaching. These changes included redesigning the master schedule to include common planning time for co-teachers, eliminating special education classrooms as a result of the change in how services were delivered to students with disabilities, and creating the concept that the classroom was now shared equally between the regular and special education teachers. These changes were also direct consequences of implementation. Rogers (2003) defines a direct consequence as a change to an individual or social system that occurs as a result of the immediate response to adoption of an innovation.

Consequences of Implementation

The unpredictability of an innovation's consequence is an important type of uncertainty in the diffusion process. This uncertainty can cause difficulty during implementation and must be

141

studied in an effort to understand the implementation sub process. As implementation was occurring consequences were emerging. The consequences of co-teaching had to be examined to truly understand its impact on the school system.

According to many diffusion scholars, innovation champions, change agents, and opinion leaders give little thought to the consequences linked with an innovation (Rogers, 2003). Too often they assume that the adoption of an innovation will produce mainly beneficial results. This assumption was made by the administrators in this case study who believed that co-teaching would not only increase the least restrictive environment for students with disabilities, but also help to foster a new learning organization within the middle school, create more collegial relationships and increase the differentiated instruction students were receiving within the regular education setting.

There were some incidental consequences that occurred from the adoption and implementation of co-teaching that were unforeseen by the school administration. These include: the discovery of inconsistency with delivery of the curriculum at the elementary level resulting from students with disabilities being instructed in the regular education classroom at the middle school; retirement of a regular education teacher as a result of being directed by administration to change his teaching practices to coincide with the co-teaching philosophy; and redesign in lesson plans and observation forms to increase accountability for co-teachers. These unanticipated consequences represent a lack of understanding of how an innovation will affect individuals or a social system and are often just as important as the anticipated consequences.

Opinion Leaders and Re-invention

A factor that may have delayed the implementation sub process in this case study was the limited role that the opinion leaders (middle school principal and assistant principal) within the

organization played in gaining the support for co-teaching from the adopters (teachers) and their inability to develop reinvention strategies in the various subsystems in order to maximize co-teaching. According to diffusion scholars, in systems with more traditional norms such as school districts, opinion leaders play a critical role in influencing the behaviors of others. When reflecting on the agenda setting and matching stages of Initiation, it appears the middle school principals lacked the interpersonal skills needed to bring their teachers on board with co-teaching. Instead, they relied on the consultants from Keystone to motivate the teachers to embrace co-teaching. In retrospect, the middle school principals needed to take more of a lead in moving the innovation forward from the beginning instead of relying on me and the consultants.

One critical role that opinion leaders play within a social organization is to help reduce uncertainty about an innovation for their adopters. In this case study, the opinion leaders may have contributed to the sense of uncertainty through their inability to take an active leadership role in the co-teaching initiative from the start. One example of this came from the incident at the very initial stage of implementation where the former assistant superintendent had to take the lead in addressing the inappropriate behavior of the middle school faculty during the first professional education day presented by Keystone Consulting. The principal should have immediately addressed the faculty and took ownership of the innovation being implemented in his building. Instead, he relied on central office administration to handle the situation, hence demonstrating the lack of leadership qualities an innovation champion should possess. This was a reoccurring theme throughout the course of the study.

Conclusions

In conclusion, when studying the implementation of co-teaching at the middle school, it appears that during the Implementation sub process a state of disequilibrium occurred. Rogers

(2003) defines disequilibrium as a state in which the rate of change is too rapid to permit a social system to adjust. Disequilibrium brings about social disorganization which makes it an inefficient and a negative way for change to occur in a system. Evidence of disequilibrium can be found throughout the chapter in the voices of many teachers that provided their personal experiences and thoughts on co-teaching during the first year of implementation.

When the rate of change in a social system occurs at the rate that is commensurate with the system's ability to cope with the change, a sense of dynamic equilibrium is achieved. This middle school struggled to accomplish this state of dynamic equilibrium in the first two years of implementation. This is evidenced in the numerous changes within the socio-technical subsystems that were necessary to help create a fit between co-teaching and the middle school. It wasn't until year three that a sense of dynamic equilibrium was felt and then by only a select number of co-teaching pairs.

5.0 DISCOVERIES, CONCLUSIONS, AND RECOMMENDATIONS

This study attempted to explain changes that may occur within a socio-technical organization as a result of the implementation of co-teaching. Specifically, the four socio-technical subsystems were examined in a suburban middle school in Western Pennsylvania that included the task subsystem, the human subsystem, the technical subsystem and the structural subsystem. The investigation used qualitative approaches such as interviews with school personnel, classroom observations, professional development forums and meetings, and document analysis in order to glean information.

Chapter Four told the story of implementation of co-teaching and the various changes in each of the subsystems that occurred as a result of the implementation. Particular emphasis was placed on the various factors that affected the co-teaching relationships between the teachers that related to each subsystem. Many strategies were utilized by the school district to help create a better match between co-teaching and the middle school. Most of these strategies impacted one, if not all, of the subsystems. Throughout the study, unexpected situations effected the implementation of co-teaching, which in turn had an effect on the co-teaching relationships and subsystems as well. The story helped answer the questions posed by the four sub-questions of the study:

- What changes occur in the school's human subsystem as a result of the implementation of co-teaching?

- What changes occur in the school's task subsystem as a result of the implementation of co-teaching?

- What changes occur in the school's technical subsystem as a result of the implementation of co-teaching?

- What changes occur in the school's structural subsystem as a result of the implementation of co-teaching?

This chapter uses a combination of the qualitative findings to create a clear understanding of the reality of implementing co-teaching into a socio-technical setting. Specifically, discoveries from the study, along with reflections and recommendations about the implementation of co-teaching, provide valuable insight into this topic. The overall purpose of this synthesis was to address the grand tour question of the research investigation:

- What socio-technical subsystem variables affect the implementation of co-teaching relationships between regular education and special education teachers in a suburban middle school?

5.1   DISCOVERIES AND CONCLUSIONS

Socio-Technical Subsystems

Findings from this case study were based on semi-formal interviews conducted with ten regular education teachers and six special education teachers, classroom observations, analysis of hundreds of documents and observations/interactions with teachers, administrators and consultants. Details about co-teaching were uncovered as school personnel shared many of their thoughts and experiences throughout the course of the study. The interviews and classroom

observations conducted with the individuals who were co-teaching provided valuable insight to the findings as they pertain to the issues explored by the four sub-questions. The report is broken into four sections representing the subsystems and the specific factors that emerged in the data in each that affected the co-teaching relationships.

5.2   HUMAN SUBSYSTEM

There were three common themes that continuously emerged when examining the impact co-teaching had on the human subsystem. The themes were: establishment of a common philosophy between co-teachers, maintaining co-teaching pairs from year-to-year and the need to hire an additional special education teacher. Throughout all of the classroom observations, teacher interviews and daily interaction with administrators and consultants during the study, these three themes consistently surfaced and intertwined with one another.

5.2.1   Common Philosophy

The success of the co-teaching relationship depended on whether or not the co-teachers shared a common philosophy of co-teaching. When a common philosophy was established between the teachers, open communication and trust were observed. This in turn led to students exhibiting positive interactions with both teachers and peers. The classroom environment in these settings felt warm and inviting. Students seemed comfortable and addressed both teachers equally. This confirms Stump's (2000) research finding that teacher collaboration is the most powerful tool to ensure all students succeed in the regular education classroom.

McLesky and Waldron (1996) identify three stages in developing successful inclusion programs. The researchers identify the first stage, addressing the teachers' beliefs and values about inclusion, as the most critical and explain that they must be examined, reflected on and changed in order to maintain success. This notion was confirmed when administration was forced to address the regular education teacher who did not share the same beliefs and values of inclusion as the special education teacher. After several discussions with the co-teaching pair and classroom observations, I recognized that the teachers' philosophy of co-teaching was incongruent and no matter what type of support administration tried to provide them, the regular education teacher was not going to examine or change his beliefs. As a result, the co-teaching experience did not have a positive effect on the students. The administration came to realize that co-teachers must be paired based on their philosophy of co-teaching in order to ensure a successful co-teaching environment.

5.2.2   Maintaining Co-teaching Pairs

The need to maintain co-teaching pairs from year-to-year was another factor that consistently emerged when discussing the impact co-teaching had on teacher relationships. Administrators need to commit to maintaining co-teaching pairs at the onset of a co-teaching initiative. Every teacher confirmed during their semi-formal interview that keeping the same co-teacher from year-to-year is critical in building a positive co-teaching relationship and classroom environment. This can be heard in the voice of a regular education teacher that was interviewed,

> I have had the same co-teacher since this process began. It helps that we had a prior relationship and were able to continue to build on that relationship year after year. I couldn't imagine having to start from scratch with a new co-teacher like some of my colleagues had to do throughout this experience. I know that some of the situations were outside the control of administrators, but I hope they know how important it is to keep

the co-teachers the same each year. Personally, I think the relationship established between the two teachers is the most critical element in making co-teaching a positive experience for the students. Kids are smart, and they know if the adults aren't getting along.

In addition, the co-teaching pairs who remained the same during the three-year study received better evaluations than those co-teachers who were changed during the course of the study.

5.2.3   Hire One Additional Special Education Teacher

Overwhelmingly, all co-teachers expressed the need to hire an additional special education teacher in order to implement a successful co-teaching model. Interviews, meetings, discussions and analysis of various documents confirmed that both regular and special education teachers believe an additional special education teacher is necessary in order to continue the success of the co-teaching initiative. They believe that an additional teacher would lessen the responsibilities of the special education teachers. This would also eliminate the current situation for the special education teacher that has to work with all three grade levels. With one more special education teacher, the middle school could assign one special education teacher per team in grades six and seven and two special education teachers in grade eight. This would limit the number of regular education teachers the special education teacher has to co-plan with and allow them more time to focus on specific content knowledge and co-planning for classroom instruction. These findings suggest that implementation of co-teaching into a school system will create conditions for change in the human subsystem. Unfortunately, due to budgetary reasons and appropriate teacher case loads at present, the District will not add special education staff.

5.3 TECHNICAL SUBSYSTEM

Four themes emerged from the data when examining the impact co-teaching had on the technical subsystem of the socio-technical system: special education teachers lack content knowledge in academic subject areas, limited use of co-teaching models, inability to differentiate instruction and professional development.

5.3.1 Special Education Teachers Lack Content Knowledge

The special education teachers' lack of content knowledge had the biggest effect on the other three identified themes. According to the findings, because the special education teachers lacked knowledge in the subject area they co-taught, there was a lack of co-planning for differentiated instruction and limited use of the various co-teaching models. According to Dieker (2001), teacher readiness is one of the major barriers to a successful inclusion program. All teachers who were interviewed agreed that the professional development was sufficient and thorough, but did not enhance the special education teachers' content knowledge. This could only be done over time, and the special education teachers' time was limited in getting to learn the various curricula that co-teaching demanded. Keystone consultants confirmed that the lack of content knowledge on the part of the special education teachers was a factor that affected the implementation of co-teaching.

5.3.2 Professional Development and Differentiated Instruction

Although the teachers perceived the professional development to be effective, the administrators and consultants both confirmed, through teacher interviews and classroom observations, that the actual training should have put more of an emphasis on how to utilize common planning time and differentiate instruction for students with special needs. In retrospect, administration should have brought the consultant for differentiated instruction into the district earlier in the implementation process. In addition, the on-site visits should have been unannounced much sooner in the process. It wasn't until after the classroom observations were unannounced that teachers' level of concern was raised and they started to use their allotted common planning time more efficiently.

5.3.3 Use of Co-teaching Models

Friend, Rising and Cook (1993) identified five options teachers typically use when implementing a co-teaching model. Their research shows that as the team progresses through these five options, it is important to remember they are hierarchical across three variables. First, as the teachers progress through the continuum of models, more and more planning is needed. In addition to more planning, both teachers must have a solid foundation of content knowledge. Finally, both teachers must share the same philosophy and have a certain level of trust and respect for one another; this study supports Friend, Rising and Cook's (1993) research findings. The teachers who were able to establish a shared philosophy of co-teaching, learn the content knowledge and effectively utilize common planning time, moved quickly down the continuum of models. By year two of implementation, these co-teaching pairs were methodically utilizing the five co-

teaching models. This was evidenced through classroom observations, discussions and interviews by the administrators and consultants. Lesson plans confirmed that common plan time was used to examine the individual needs of students in the co-taught class and based on those particular needs, various co-teaching models were used to address the needs of the students at that particular time of instruction.

Findings support that the co-teaching pairs who struggled lacked one, if not all, of the three variables that Friend, Rising and Cook (1993) discovered. Some of the co-teaching pairs did not utilize the common plan time assigned to them. One teacher summarized their struggle by explaining during an interview,

> There just isn't enough time to plan with my co-partner. She has too many other responsibilities that limits her time with me. Most of the time we fly by the seat of our pants to plan a lesson. As a result, we mostly use the Lead and Support model.

The majority of co-teaching pairs that limited the use of the various models related it to the fact that the special education teachers lacked the content knowledge that was required in order to effectively utilize some of the models. Specifically, they reported rarely using Station Teaching, Parallel Teaching and Team Teaching because these models required equal knowledge on the part of both teachers in order to meet the needs of students with disabilities. A special education teacher spoke on behalf of her partner during a discussion,

> We rarely use Station, Parallel and Team Teaching because I am not confident with the content knowledge of the course yet. It is going to take me a long time to become familiar enough with the content to utilize these models effectively. Most of the time we use the Lead and Support model, and occasionally, we will use Alternate Teaching when we have a group of students who require re-teaching or pre-teaching of skills.

Results of the study confirmed the research of Weiss and Lloyd (2002) in that overall, regular education teachers were seen as the content specialists and special education teachers were viewed as the classroom assistants.

152

The findings pertaining to the technical subsystem indicate that implementing an innovation, such as co-teaching, into an organization may require additional time and resources committed to building the foundation to support the innovation. Not allowing a sufficient amount of time for the organizational members to become acclimated to the change may result in a sense of uncertainty about the initiative, which leads to difficulties with implementation and utilization.

5.4   STRUCTURAL SUBSYSTEM

Findings from analysis of data, interviews, classroom observations and discussion with various stakeholders related to issues involving the co-teaching and structural subsystem of the middle school confirmed the research of Gately and Gately (2001) and Magiera and Simmons (2005), by identifying three emergent themes over the course of the study. Common plan time, shared responsibility in the planning and delivery of instruction, and consistent pairing of co-teachers were consistent factors that led to the success of a co-taught classroom. Those teachers who co-taught together over the three-year course of the study, had common planning time identified in their daily schedules and shared in both the planning and delivery of instruction were able to establish more successful co-taught classrooms.

A significant discovery when analyzing data from the structural subsystem was that common plan time wasn't the most important factor that made co-teaching effective; rather, it was how the co-teachers utilized that common planning time. The teachers that actually planned for pedagogy of instruction by identifying the student's needs first before planning their instruction or deciding what co-teaching model to utilize were the co-teaching pairs that developed more successful co-taught classrooms. They were methodical in their lesson designs

and were cognizant of the fact that both of them needed to share the responsibility of not only planning for instruction, but also delivering the instruction to the students. I noticed through viewing lesson plans and then observing the co-taught class that both teachers spent equal time planning for instruction and delivering it.

The findings indicated that those teachers who were co-teaching together for more than one year were able to utilize their common plan time more effectively and share the responsibilities of planning and delivering instruction. Evidence from this study supports many research findings that recommend maintaining co-teaching pairs from year-to-year.

Gately and Gately (2001) suggest co-teaching is a developmental process that consists of three stages. The Beginning Stage is when co-teachers are guarded and superficial in communication. During the Compromising Stage the relationship develops and communication becomes more open and interactive and teachers begin to use a give and take approach to build that level of trust. When co-teachers reach the final stage, Collaborative, they openly communicate and interact and exhibit trust and mutual respect for one another as colleagues and professionals.

Evidence from this study supports Gately and Gately's (2001) research and confirms the need for administrators to strategically assign co-teachers and be mindful to maintain those co-teaching relationships so that the co-teaching pair can reach the Collaborative Stage. Thorough analysis of the data indicates those co-teaching pairs who remained the same over the three-year process were able to reach the Collaborative Stage by year three. Results indicate that it took almost a full year for the co-teaching pairs to move through each stage. During year one co-teachers started in the Beginning Stage and most of the pairs remained there until the end of the year. It wasn't until the end of the first year or beginning of the second that the pairs moved into

154

the Compromising Stage. As the relationship started to build between the co-teachers, they began to communicate more openly and became less guarded in their approach with one another. For those co-teachers who remained the same in year three of the study, some of them reached the Collaborative Stage by the second semester of the third year. Administrators and consultants witnessed the trust and mutual respect between the co-teachers, along with open communication. If a stranger were to observe these co-teachers, they would have a hard time determining who the regular education teacher was and who the special education teacher was.

A significant discovery unfolded when examining the structural subsystem of this study. Not only did the findings of this case study support Gately and Gately's (2001) research regarding the three stages of the co-teaching process, but there was also a connection made between these three stages and Friend, Reising and Cook's (1993) theory that the five co-teaching models are hierarchical across three variables. The results indicate that when co-teachers entered the Beginning Stage of co-teaching, they almost always relied on the Lead and Support model of co-teaching. There was a connection between their guardedness and lack of trust in each other to allow for the planning and sharing of instruction.

As the co-teachers moved to stage two, the Compromising Stage, classroom observations, interviews, lesson plans and other documentation showed an increased level of trust and communication, which led to the use of different co-teaching models such as Alternative Teaching and Parallel Teaching. These models require both teachers to know the content knowledge and be capable of providing instruction to two groups of students. Parallel Teaching recognizes that teachers have different teaching styles and allows for uniqueness when designing assignments and instruction.

Although there were few co-teaching pairs that reached the final stage, The Collaborative Stage, the results of those that accomplished this level were significant. These co-teaching pairs utilized Team Teaching the majority of the time and had confidence and trust in each other that allowed for equal sharing of responsibilities. Not only did they share in planning and instruction, but they also shared classroom management, parent communication and the physical space of the classroom as well. It was observed that students were equally responsive to both teachers; ultimately, a goal to provide additional and deliberate instruction to students.

5.5   TASK SUBSYSTEM

5.5.1   Relative Advantage

Relative advantage was one theme that continuously emerged when examining data pertaining to issues related to the task subsystem. Relative advantage is the degree to which an initiative is perceived as better than the idea it supersedes. According to Rogers (2003), it is not important whether an innovation actually has a great deal of objective advantage, but rather that the individual or social system perceives the innovation as being advantageous.

The group of administrators and teachers who were responsible for adopting and implementing co-teaching believed it would be better than the traditional pull-out model the district currently utilized. It was specifically adopted to increase the Least Restrictive Environment for students with disabilities. After thorough analysis of the content of the interviews and observations, it appears that, initially, the teachers implementing it did not perceive co-teaching to be an objective advantage. Many of them found co-teaching to be

intrusive or problematic. Data analysis indicates that many teachers perceived co-teaching as an invasion of their classroom and a way for administration to document accountability or lack thereof by using the new co-teaching observation form. Many regular education teachers did not feel comfortable sharing their classroom with another teacher. Several of the special education teachers felt isolated and discouraged by the fact that they no longer had individual classrooms.

Based on the findings, it wasn't until year three of implementation that most of the teachers began to see the relative advantage co-teaching had over the traditional pull-out model the district used to educate students with disabilities. Interviews and analysis of documentation indicate that teachers' perceptions began to change during year three of implementation of co-teaching. They began to see the positive effects co-teaching had on the students and themselves as teachers. A regular education teacher summarized the thoughts of many of his colleagues during an interview by commenting,

> I have to admit, three years ago when we first started the co-teaching initiative, I was angry at you (administration) for forcing us to do this. I felt like I was being forced to give up the way I always "did" teaching. I was not happy that I was expected to share "my" classroom with someone else. More so, I was upset that you expected me to let another teacher share my instruction. Sitting here three years later I have to say, I was wrong. I truly see the benefits of co-teaching. Although it has been a long road and learning process, co-teaching has not only benefited students with disabilities, but other students who were struggling academically. It has also made me a better teacher. I am more cognizant of the need to differentiate instruction and know now that some kids learn at different levels and through different methods. Having another professional to share planning and instruction with who has a background in special education is a bonus. Over everything else, I see the relationship piece to co-teaching being the most important factor in whether or not it is successful. I cannot say that if I was co-teaching with a different special education teacher I would be saying the same thing I am now.

5.5.2 Clerical and Day-to-Day Responsibilities

An interesting finding emerged after reviewing data surrounding the task subsystem. The regular education teachers reported a decrease in the clerical duties and day-to-day duties as a result of co-teaching. They indicated that their co-teaching partner shared the grading of tests and homework, along with creating adaptations and modifications for students with disabilities. Data to support this finding can be heard in the comments of a regular education teacher who summarized the thoughts of other regular education co-teachers,

> Co-teaching has lessoned my load somewhat because the special education teacher helps with grading tests and homework. There are also separate adaptations and modifications that must be made for students with IEPs and the special education teacher now shares that responsibility. We also share in student discipline, grading and evaluation and parent communication, which takes a lot of extra clerical duties away from me. It is nice having another set of eyes in the classroom to monitor student behavior. This way, when I have to call a parent to report their child's misbehavior, I have another adult to confirm what happened.

In contrast to the regular education teachers report that clerical duties decreased, the special education teachers all reported an increase in their clerical and day-to-day responsibilities as a result of co-teaching. A special education teacher provided the following insight during an interview,

> My clerical duties have increased. I help grade homework, tests and quizzes. In some classes I enter grades into the electronic grade book and make copies when needed. Discipline is shared equally, and when a call home needs to be made, we discuss what we want to convey and decide which one of us would be most effective. I assist with grading in some classes more than others, but all of my co-teachers rely heavily on me to make adaptations and modifications.

Data supports that in relation to clerical and day-to-day responsibilities, the regular education teachers saw the relative advantage of co-teaching in the task subsystem. However, the special education teachers did not believe there was an advantage to co-teaching specifically in the task subsystem as a result of the increase in clerical and day-to-day responsibilities.

Nevertheless, the special education teachers did see the advantage of co-teaching within the classroom setting. Students were able to seek the assistance from two teachers, which eliminated their wait time. Students with disabilities were being included in the regular education classroom more and were making progress. Instruction within the classroom was shared equally and both teachers were responsible for teaching students.

5.6   RECOMMENDATIONS

5.6.1   Theory

As this case study unfolded, it became clear that socio-technical variables related to the four subsystems had some type of effect on the relationship between the regular and special education co-teachers. Although variables from all four socio-technical subsystems affected the implementation of co-teaching, the human subsystem had the most significant effect on the success of the co-teaching relationships over the other three. Findings from data analysis prove that variables from the technical, structural and task subsystems were also connected to the human subsystem as well.

I believe that Owens and Steinhoff's (1976) framework for planning and interpreting change in a socio-technical environment is an efficient framework for school administrators to consider when implementing a co-teaching model. A claim can be made that school districts are socio-technical organizations with four distinct subsystems. The subsystems incur a significant amount of interaction between them and a change in one subsystem will most definitely change the others, as suggested in this case study. It is critical that leaders implementing an initiative

such as co-teaching understand the factors connected to each subsystem and how they affect the relationship between the co-teachers.

School administrators should also rely on Gately and Gately's (2001) three stages of co-teaching when transitioning to a co-teaching model. In addition, there should be a clear understanding of the connection between these three stages and Friend, Reising and Cook's (1993) five models of co-teaching. This case study confirmed that as the co-teachers moved from the Beginning Stage to the Collaborative Stage, their use of the five co-teaching models became more frequent and strategic. The co-teaching pairs who never moved beyond the Beginning Stage only used the Lead and Support model. The co-teaching pairs who moved into the Compromising Stage began to utilize the Station Teaching and Alternative Teaching models more often. Finally, those co-teachers who reached the Collaborative Stage were utilizing the Parallel Teaching and Team Teaching models more frequently than the other three. Rarely did the co-teachers utilize the Lead and Support model during instruction when they worked at the Collaborative Stage.

Another significant point of reflection regarding this case study is that administrators would benefit from understanding that implementation of co-teaching can be a complex series of stages and proper planning and preparation must occur for implementation to be successful. Particularly, school district administrators should consider specific factors related to each of the four subsystems from the socio-technical system prior to implementation. The findings of several researchers identified these same factors as factors that contributed to an effective co-teaching model. A summary for linking factors from the socio-technical subsystems, and those discovered by various researchers, to a positive co-teaching model has been provided (see figure 6).

Socio-Technical Subsystem	Researchers	Factors
Human Subsystem	Hord (1992) LeCompte and Preissle (1993) Scruggs and Mastropieri (1995) Vaughn and Schumn (1995)	Common philosophy Consistent pairing of co-teachers Additional Staff
Technical Subsystem	Hord (1992) Friend, Reising and Cook (1993) LeCompte and Preissle (1993) Scruggs and Mastropieri (1995) Vaughn and Schumn (1995) McLesky and Waldron (1996) Stump (2000) Gately and Gately (2001) Mageira and Simmons (2005)	Special education teacher's knowledge of the content Use of five co-teaching models Use of differentiated instruction Ongoing professional development
Structural Subsystem	LeCompte and Preissle (1993) Scruggs and Mastropieri (1995) McLesky and Waldron (1996) Stump (2000) Gately and Gately (2001) Mageira and Simmons (2005)	Common planning time Shared instruction Consistent pairing of co-teachers
Task Subsystem	Vaughn and Schumn (1995) McLesky and Waldron (1996) Lipsky and Gartner (1998) Gately and Gately (2001)	Teacher perception Shared responsibility of clerical duties

Figure 6: A summary of factors from the socio-technical subsystems and those discovered by various researchers that result in a successful co-teaching model

5.6.2 Practice

*S*chool districts are implementing the co-teaching model in order to meet special education mandates placed upon them by Federal and State laws. Specifically, school districts in Pennsylvania are utilizing co-teaching in order to fulfill the Least Restrictive Environment requirement as a result of the Gaskins Settlement and the Highly Qualified Status requirement that the No Child Left Behind Act mandates. Although the reasons for implementation vary depending on each school district, this instructional practice has the potential to influence the way in which teachers and administrators engage students with disabilities in teaching and learning, specifically in the regular education classroom.

The level of accountability that the IDEA, NCLB, Gaskins Settlement and Chapter 14 of Pennsylvania School Code demands almost forces school districts to implement a co-teaching model in order to maintain compliance and meet the needs of students with disabilities in the least restrictive environment. Utilizing co-teaching in a productive, meaningful way requires an understanding of the complexities of implementation and factors that relate to a successful program. The following is a list of guidelines that school administrators should follow before adopting and implementing co-teaching. This amounts to substantial change in terms of the four subsystems:

- Innovation champions significantly influence members of the organization and they must be armed with researched information for implementation, remain confident and maintain leadership during difficult times of implementation

- Start with a select number of individuals when adopting the initiative and identify key players to move the initiative forward in a positive way

- Administrators should focus on providing professional development on differentiated instruction, curriculum content and lesson planning with teachers prior to offering professional development on co-teaching

- Central Office Administrators and building principals should be provided intense professional development on co-teaching prior to introducing it to the staff

- Be prepared to redefine and restructure both the school's socio-technical subsystems and co-teaching in order to create a fit between the two

- Realize that implementing co-teaching will result in changes in the four socio-technical subsystems. These changes may be planned or may be residual consequences of implementation

- Provide frequent training opportunities throughout the year for faculty that involves both the consultants and administrators at the onset of implementation

- In addition to providing common plan time, administrators should hold teachers accountable for the actual co-planning of the lessons and require them to produce lesson plans that reflect solid co-planning between the regular and special education teacher so that they can become more skilled

- Provide resources for teachers that are practical and useable

- Be prepared to commit additional resources such as: additional desks; supplemental teaching materials; technology; and staff to the co-teaching initiative in order to maximize utilization and sustain its existence within the organization

APPENDIX A

LETTER TO REGULAR EDUCATION AND SPECIAL EDUCATION TEACHERS

REGARDING STUDY

December 4, 2009

Dear Teacher,

I am currently a doctoral candidate in the Administrative and Policy Studies program at the University of Pittsburgh and the Director of Pupil Services of a suburban school district located in Western Pennsylvania. I am interested in your participation in my research study. It would require you to participate in a 15-question semi-structured interview with me and allow me to observe one of your co-taught classrooms. If you are willing to participate, the interview questions will focus on your role as a co-teacher. The classroom observation will focus on the interaction between the co-teachers as they relate to the socio-technical subsystems that are described in the next paragraph. As an experience educator, I believe my research topic will provide benefits to you as an educator as you reflect and identify key aspects of your responsibilities as a co-teacher.

The purpose of the study is to examine the implementation of a regular education and special education co-teaching model from a socio-technical perspective. Particularly, the focus of the study will be on identifying the changes that occur in the ***human*** (teacher relationship, staff, training, etc.), ***task*** (co-planning, evaluation of student work, classroom management, etc.), ***technical*** (delivery of instruction, knowledge of the curriculum, addressing the needs of the students, etc.) and ***structural*** (master schedule, co-planning time, classroom set-up, etc.) subsystems of a school as a result of the implementation of co-teaching. Co-teaching is becoming a common trend in school

164

districts as a result of Federal and State mandates. Particularly, IDEA requires students to be provided a Free Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE). In public school systems, FAPE and LRE is the regular education classroom. In addition, the No Child Left Behind Act (NCLB) requires all teachers, including special educators, to become highly qualified. Many districts are implementing co-teaching in order to maintain compliance with this Federal requirement.

While much attention has been given to the philosophy of co-teaching, little has been completed on the specific socio-technical subsystem variables that affect the successful implementation of co-teaching. Your participation will prove valuable as I seek to uncover the depths of these subsystem variables within the middle school co-teaching model.

Participation in this study is strictly voluntary, and you may withdraw at anytime. There is no financial compensation for participation and confidentiality will be addressed throughout the study. To maintain confidentiality neither your name, email address, nor other identifying information will be submitted with completed results. All documents and data collected will be kept under lock and key. The interview guide and classroom observation is designed to identify common themes or categories that relate to the socio-technical subsystems and not identify respondents. If you have any additional questions, please contact me at (412) 492-6306 or at mawhinney@ht-sd.org. You may also contact my dissertation chair, Dr. Sean Hughes at (412) 648-7165 or at shughes@pitt.edu.

Thank you for your time and participation in this study.

Warm Regards,

Monique Mawhinney
University of Pittsburgh's School of Education

APPENDIX B

SEMI-STRUCTURED INTERVIEW GUIDE

Opening Question

1. In your opinion, how is the co-teaching initiative being accepted by the teaching staff in the building?

Human Subsystem-HS

2. How have you attempted to establish a relationship with your co-teaching partner?

3. How have you and your co-teaching partner established a common philosophy regarding:
   Inclusion:
   > *Co-teaching:*

   > *Assessment:*

   > *Instruction:*

4. Has it been necessary to hire additional staff as a result of the co-teaching initiative?

Technical Subsystem-TS

5. How has your job as a classroom teacher changed as a result of the co-teaching initiative?

6. Have you utilized any of the co-teaching models and if so, which ones?

7. Do you feel you have been provided sufficient training on co-teaching?

Structural Subsystem-SS

8. Do you have common planning time built into your schedule with your co-teaching partner?

9. Have there been changes in grading and evaluation procedures in the school as a result of the co-teaching initiative?

10. How has the master schedule changed as a result of the co-teaching initiative?

Task Subsystem-TaskS

11. How have your clerical duties changed as a result of the co-teaching initiative?

12. How have you and your co-teaching partner worked out roles and responsibilities within your classroom?

13. How are the day-to-day duties shared between you and your co-teaching partner? (Examples include: student discipline, grading and evaluation, parent communication and attendance)

Closing Questions

14. What is the greatest challenge you face in implementing co-teaching in your classroom? How might you overcome this obstacle?

15. What recommendations do you have for improving the co-teaching initiative for next school year?

CO-TEACHING OBSERVATION GUIDE

HUMAN SUBSYSTEM OBSERVABLE BEHAVIOR	YES	NO	ANECTODAL NOTES:
1. Nonverbal communication is observed			
2. Humor is often used in the classroom			
3. Materials are shared in the classroom			
4. The "chalk" passes freely			
5. Communication is open and honest			
6. Students appear to accept and seek out both teachers' help in the learning process			
TECHNICAL SUBSYSTEM OBSERVABLE BEHAVIOR	YES	NO	ANECTODAL NOTES:
7. Teachers appear competent with the curriculum and standards			
8. Teachers agree on the goals of the co-taught classroom			
9. Many measures are used for grading students			
10. Both teachers appear familiar with the methods and materials with respect to the content area			
11. Modifications of goals for students with special needs are incorporated into the class			

	YES	NO	
12. A variety of classroom management techniques is used to enhance learning			
13. Test modifications are commonplace			
14. Both teachers appear to feel confident in the content			
15. Student-centered objectives are incorporated into the classroom curriculum			
16. Goals and objectives in the IEPs are considered as part of the grading for students with special needs			
STRUCTURAL SUBSYSTEM **OBSERVABLE BEHAVIOR**	**YES**	**NO**	**ANECTODAL NOTES:**
17. Planning for classes appears to be the shared responsibility of both teachers			
18. Time is allocated for common planning			
TASK SUBSYSTEM **OBSERVABLE BEHAVIOR**	**YES**	**NO**	**ANECTODAL NOTES:**
19. Both teachers move freely throughout the space			
20. Spontaneous planning occurs throughout the lesson			
21. Both teachers take stage and present during the lesson			
22. Classroom rules and routines have been jointly developed			
23. There is fluid positioning of teachers in the classroom			
24. Behavior management is the shared responsibility of both teachers			

Gately, S. (2005). Two are better than one. *Principal Leadership, 9*(5), 36-41.

APPENDIX D

HAMPTON MIDDLE SCHOOL CO-TEACHING
ON SITE VISIT DATES
KEYSTONE CONSULTING, INC.
2006-2007

Date	Consultant	Consultant
September 8, 2006	Joe	Bob
October 10, 2006	Rob	Richael
November 17, 2006	Richael	Rob
December 8, 2006	Richael	Joe
January 12, 2006	Bob	Joe
February 9, 2006	Bob	Joe
March 9, 2006	Bob	Richael
April 13, 2006	Richael	Joe
May 11, 2006	Rob	Bob

BIBLIOGRAPHY

American Federation of Teachers. (1994, July). *AFT news release: Teachers urge caution of full inclusion, poll finds.* Washington, DC: Author. Retrieved September 25, 2007, from AFT Web site: http://www.aft.org/advsearch/index.htm

Americans With Disabilities Act of 1990, 42 U.S.C. § 12112 et seq. (1990).

Baker, E.T., Wang, M.C., & Walberg, H.J. (1994/1995). The effects of inclusion on learning. *Educational Leadership, 52*(4), 33-35.

Banks, J.A., & McGee-Banks, C.A. (2004). *Multicultural educations: Issues and Perspectives* (5th ed.). New York: John Wiley

Bauwens, J., Hourcade, J., & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. *Remedial and Special Education, 10,* 17-22. Retrieved November 20, 2007, from JSTOR database.

Brown v. Board of Educ., 347 U.S. 483 (1954).

Bradley, D.F. & Fisher, J.F. (1995). The inclusion process: Role changes at the middle level. *Middle School Journal, 26*(3), 13-19.

Bradley, D.F., King-Sears, M.E., & Tessier-Switlick, D.M. (1997). *Teaching Students in inclusive settings: From theory to practice.* Boston: Allyn and Bacon.

Borthwick-Duffy, S.A., Palmer, D.S., & Lane, K.L. (1996). One size doesn't fit all: Full inclusion and individual differences. *Journal of Behavioral Education, 6,* 311-329.

Champagne, J. (1993). Decisions in sequence: How to make placements in the least restrictive environment. *EDLAW, 2*(10), 1-2.

Coates, R.D. (1989). The regular education initiative and opinions of regular classroom teachers. *Journal of Learning Disabilities, 22,* 532-536.

Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective Practices. *Focus on Exceptional Children, 28*(3), 1-16.

Cooper, J., Gencturk, N., & Lindley, R. (1996). A sociotechnical approach to smart card Systems design: An Australian case study. *Behaviour and Information Technology, 15*(1), 3-13.

Daniel R.R. v. State Board of Education, 874 F.2d 1036 (5th Cir. 1989).

Datnow, A., & Castellano, M.E. (2001). Managing and guiding school reform:

Leadership in success for all schools. *Educational Administration Quarterly, 37*(2), 219-249.

Dieker, L. (2001, Fall). What are the characteristics of "effective" middle and high school co-taught teams for students with disabilities? *Preventing School Failure, 46*(1), 14.

Education for All Handicapped Children Act of 1975, 20 U.S.C. § 1400 *et seq.* (1975).

Elliot, J. (2003). IDEA 2003: Reauthorization or retrofit? *American Association of School Administrators, 60*(1), 28-35.

Fetter-Harrott, A., Steketee, A., & Dare, M. (2008). Boosting inclusion for students with disabilities. *District Administration, 44*(10), 63-65.

Forest, M. & Pearpoint, J. (1997). *Inclusion! The bigger picture*. Retrieved December 11, 2007, from Inclusion Web site: http://www.inclusion.com.tools.html

Friend, M., & Cook, L. (1992). The new mainstreaming: How it really works. *Instructor, 101*(7), 30-32, 34, 36.

Friend, M., & Reising, M., & Cook, L. (1993, Summer). Co-teaching: An overview of the past, a glimpse at the present, and considerations for the future. *Preventing School Failure, 37*(4), 6.

Fullan, M. (1998). *Change forces: Probing the depths of educational reform.* London: The Falmer Press.

Fullan, M. (2001). *The new meaning of educational change.* New York: Teachers College Press.

Furguson, D.L. (1995). The real challenge of inclusion: Confessions of a "rabid inclusionist." *Phi Delta Kappan, 77*(4), 281-287. Retrieved December 11, 2007 from JSTOR database.

Gaskin v. Pennsylvania, 389 F. Supp. 2d 628 (E.D. Pa. 2005).

Gately, S. (2005). Two are better than one. *Principal Leadership, 9*(5), 36-41.

Gately, S., & Gately Jr., F. (2001). Understanding co-teaching components. *Teaching Exceptional Children, 33*(4), 40-47.

Gerber, P.J., & Popp, P.A. (2000, Summer). Making collaborative teaching more effective for academically able students: Recommendations for implementation and training. *Learning Disability Quarterly, 23*(3), 229-236.

Giangreco, M.F. (1996, February). What do I do now? *Educational Leadership, 53*(5), 56-59.

Glasser, B.G. (1978). *The art of case study research.* Thousand Oaks, CA: Sage Publications.

Gorman, T., & Rose, M. (1994). Inclusion: Taking a stand AFT challenges special education policies. *American Teacher, 10*(5), 9-12.

Grider, J. (1995). Full inclusion: A practioner's perspective. *Focus on Autistic Behavior, 10*(4), 1-12.

Hardman, M., Drew, C., Egan, M., & Wolf, B. (1993). *Human exceptionality.* Boston, MA: Allyn and Bacon.

Hines, R.A., & Johnston, J.H. (1996). Inclusive classrooms: The principal's role in role in promoting achievement. *Schools in the Middle, 5*(3), 6-10.

Hord, S. (1992). *Facilitative leadership: The imperative for change.* Austin: Southwest Educational Development Laboratory.

Individuals with Disabilities Education Act Amendments of 1997, Pub. L. No. 105-17, 20 U.S.C. § 1412 *et seq.* (1997).

Individuals with Disabilities Education Improvement Act of 2004, Pub. L. No. 108-466, 20 U.S.C. § 1401 *et seq.* (2004).

Kauffman, J.M., & Hallahan, D.P. (1995). *The illusion of full inclusion: A comprehensive critique of a current special education bandwagon.* Austin, Texas: PRO-ED.

Keefe-Martin, M. (2001). Legislation, case law and current issues in inclusion: An analysis of trends in the United States and Australia. *Australia and New Zealand Journal of Law and Education,* 6, 1and 2. pp. 25-46. Retrieved December 11, 2007 from EBSCO Publishing database.

King, S. (2000). Principals influence culture of inclusion. *High School Magazine, 7*(7), 45-46.

Klinger, J.K., Vaughn, S., Hughes, M.T., Schumm, J.S., & Elbaum, B. (1998). Outcomes for students with and without learning disabilities in inclusive classrooms.

Learning Disabilities Research and Practice, 13, 153-161. Retrieved December 11, 2007, from Academic Search Premier database.

Knight, D., & Wadsworth, D. (1993). Physically challenged students. *Childhood Education, 60*, 211-215. Retrieved December 11, 2007, from Academic Search Premier database.

Larrivee, B., & Cook, L. (1979). Mainstreaming: A study of variables affecting teacher attitude. *Journal of Special Education, 13,* 315-524. Retrieved December 11, 2007, from Academic Search Premier database.

Learning Disabilities Association. (1993). Position paper on full inclusion of all students with learning disabilities in the regular education classroom. *LDA Newsbrief, 28*(2), 1.

LeCompte, M.D., & Preissle, J. (1993). *Ethnography and qualitative design in educational research.* (2nd ed.) Orlando, Fla: Academic Press.

Lipsky, D.K., & Gartner, A. (1998). Taking inclusion into the future. *Educational Leadership, 58,* 78-81.

Little, S.G., & Witek, J.M. (1996). Inclusion: Considerations from social validity and functional outcome analysis. *Journal of Behavioral Education, 6,* 283-91. Retrieved December 11, 2007, from Academic Search Premier database.

Lowenbraun, S., Madge, D., & Affleck, J.Q. (1990). Parental satisfaction with integrated class replacement of special education and general education students. *Remedial and Special Education, 11,* 37-40. Retrieved November 20, 2007, from JSTOR database.

MacDonald, A.P., & Hardman, M.L. (1989). The desecration of America's special schools: Strategies for change. *Journal of the Association for Persons with Severe Handicaps, 14*(1), 68-74. Retrieved December 11, 2007, from Academic Search Premier database.

Magiera, K., & Simmons, R.J. (2005). *The Mageira-Simmons quality indicator model of co-teaching.* Fredonia, NY: Excelsior Educational Services.

McLaughlin, M. (1998). Listening and learning from the field: Tales of policy implementation and situated practice. In A. Hargreaves (Ed.), *International Handbook of Educational Change* pp. (70-84). Boston, MA: Kluwer.

McLesky, J. & Waldron, N.L. (2002). Inclusion and school change: Teacher perceptions regarding curricular and instructional adaptations. *Teacher Education and Special Education, 25*(1), 41-54. Retrieved November 20, 2007, from Professional Development Collection database.

McLesky, J. & Waldron, N.L. (1996). Responses to questions teachers and administrators frequently ask about inclusive school programs. *Phi Delta Kappan, 78*(2), 150-155.

Merriam, S.B. (1998). *Qualitative research and case study applications in education.* San Francisco, CA: Jossey-Bass Publishers.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis.* Thousand Oaks, CA: Sage Publications.

No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 6301, Stat. 1425 (2002).

Oberti v. Board of Education of the Borough of Clementon School District, 995 F.2d 1204 (3rd Cir. 1993).

Osborne, A., & Russo, C. (2003). *Special education and the law: a guide for practitioners.* Thousand Oaks, CA: Corwin Press.

Owens, R., & Steinhoff, C. (1976). *Administering Changes in Schools.* Princeton, NJ: Prentice Hall.

Parish, T.S., Nunn, G.D., & Hattrup, D. (1982). An attempt to reduce negative attitudes of future teachers toward exceptional children. *College Student Journal, 16*(3), 254-257. Retrieved November 20, 2007, from JSTOR database.

Park, H.S., & Lian, M-G. J. (2001). Introduction to special series on culturally and linguistically diverse learners with severe disabilities. *The Journal of the Association for Persons with Severe Handicaps, 26*(3), 135-137.

Parrot, P., Driver, B., & Eaves, D. (1992). *Collaborative teaching must be a collaborative Venture.* Chesterfield, VA: Chesterfield Public Schools.

Pearman, E.L., Barnhart, M.W., Huang, A.M., & Mellblom, C. (1992). Educating students in school: Attitudes and beliefs about inclusion. *Education and Training in Mental Retardation, 27,* 177-182.

Pennsylvania Association for Retarded Citizens v. Pennsylvania, 334 F. Supp. 1257 (E.D. Pa. 1972).

Pennsylvania School Board Association (2005). *Recent testimony: Gaskin Settlement.* Retrieved September 25, 2007, from PSBA Web site: http://www.psba.org/ advocacy-leg/testimony-gaskinsettlement.asp

Piantanida, M. & Garman, N. (2009). *The qualitative dissertation: a guide for students and faculty,* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Ringer, L., & Kerr, S. (1988). Integration: The legal imperative. *Impact, 1*(2), 8-9. Retrieved November 20, 2007, from JSTOR database.

Roberts, C., & Zubrick, S. (1993). Factors influencing the social status of children with mild academic disabilities in regular classrooms. *Exceptional Children, 59,* 192-   202.

Rogers, E.M. (2003). *Diffusion of Innovations* (5th ed.). New York, NY: Free Press.

Roncker v. Walter, 700 F.2d 1058 (6th Cir. 1983).

Sacramento City Unified School District v. Holland, 14 F.3d 1398 (9th Cir. 1994).

Sands, D.J., Kozleski, E.B., & French, N.K. (2000). *Inclusive education for the 21st Century.* Belmont, CA: Wadsworth.

Sapon-Shevin, M. (2003). A matter of social justice. *Educational Leadership, 61*(2), 25-28.

Schattman, R., & Benay, J. (1992). Inclusive practices transform special education in the 1990s. *The School Administrator, 49*(2), 8-12. Retrieved December 11, 2007, from Academic Search Premier database.

Schleien, S., & Heyne, L. (1996). Can I play too? Choosing a community recreation program. *Disability Solutions, 1*(1), 1-3.

Schumaker, J.B., & Deshler, D. (1988). Implementing the regular education initiative In secondary schools: A different ball game. *Journal of Learning Disabilities, 21*, 36-42.

Scruggs, T.E., & Mastropieri, M. A. (1995). Case studies in co-teaching in the content areas: Successes, failures, and challenges. *Intervention in School and Clinic, 40*(5), 260-270.

Scruggs, T.E., & Mastropieri, M.A. (1996). Teacher perceptions of mainstreaming/ inclusion, 1958-1995: A research synthesis. *Exceptional Children, 63,* 59-74.

Skrtic, T.M. (1991). The special education paradox: Equity as the way to excellence. *Harvard Educational Review, 61,* 148-206. Retrieved December 11, 2007, from Academic Search Premier database.

Snell, M.E., & Janney, R. (2005). *Collaborative teaming.* Baltimore, MD: Paul H. Brookes Publishing.

Stainback, W., & Stainback, S. (1990). *Support Networks for inclusive schooling: Interdependent integrated education.* Baltimore, MD: Paul H. Brookes Publishing.

Stoler, R.D. (1992). Perceptions of regular education teachers toward inclusion of all handicapped students in their classrooms. *The Clearing House, 66*(1), 60-62.

Stump, C. (2000). *Plan for a successful inclusion program: Meeting the needs of students with mild/moderate disabilities.* Retrieved September 18, 2007, from NAESP Web site: http://www.naesp.org/ContentLoad.do?contentId=487andaction=Print

Swanson, H. (2006). *Gaskin settlement expected to boost inclusion.* Retrieved September 25, 2007, from Metro Kids Web site: http://www.metrokids.com/march06/specialkidspa0306.html

The Arc. (2006). *The Individuals with Disabilities Education Act (IDEA): Procedural Safeguards and Due Process.* Retrieved September 17, 2007, from The Arc Web site: http://www.thearc.org

The Rehabilitation Act of 1973, 29 U.S.C. § 794 (1973).

Titone, C. (2005). The philosophy of inclusion: Roadblocks and remedies for the teacher and the teacher educator. *Journal of Educational Thoughts, 39*(1), 7-32.

Thousand, J., & Villa, R. (1991). A futuristic view of the REI: A response to Jenkins, Pious, and Jewell. *Exceptional Children, 57,* 556-562.

Torres-Valesques, D. (2000). Sociocultural theory: Standing at the crossroads. *Remedial and Special Education, 21*(2), 66-69. Retrieved December 11, 2007, from Academic Search Premier database.

Vaughn, S. & Schumm, J.S. (1995). Responsible inclusion for students with learning disabilities. *Journal of Learning Disabilities, 28,* 264-270, 290.

Villa, R.A., Thousand, J., & Nevin, A.I. (2004). *A guide to co-teaching: Practical tips for facilitating student learning.* Thousand Oaks, California: Corwin Press.

Walsh, J., & Jones, B. (2004, May). New models of cooperative teaching. *Teaching Exceptional Children, 36*(5), 14-20.

Walther-Thomas, C. (1997). Co-teaching experiences: The benefits and problems that teachers and principals report over time. *Journal of Learning Disabilities, 30*(4), 395-407. Retrieved December 11, 2007, from Academic Search Premier database.

Weiss, M., & Lloyd, J. (2002). Congruence between roles and actions of secondary special educators in co-taught and special education settings. *Journal of Special Education, 36*(2), 58.

Williams, B.T. & Katsiyannis, A. (1998). The 1997 IDEA amendments, implications

for school principals. *NASSP Bulletin, 82*(594), 12-18.

Woelfel, K. (1994, March). Inclusion, exclusion, confusion, and infusion: Four words say a lot about the past, present, and future of special-needs students. *Principal, 84,* pp. 48, 50. Retrieved from National Association of Elementary Principals Website: http://www.naesp.org/ContentLoad.do?contentId=288

Wright, P.W.D. (2005). *The individuals with disabilities education improvement act of 2004: Overview, explanation, and comparison IDEA 2004 v. IDEA 1997.* Retrieved November 20, 2007 from http://www.wrightslaw.com

Yell, M., & Katsiyannis, A. (2004). Placing students with disabilities in inclusive settings: Legal guidelines and preferred practices. *Preventing School Failure, 49*(1), 28-35.

York, J., & Vandercook, T. (1991). Designing an integrated program for learners with severe disabilities. *Teaching Exceptional Children, 23*(2), 22-28.