An Analysis of Professionals' Readiness to Supervise and Participate in Co-teaching
Arrangements in Virginia Public Schools

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ABSTRACT

The purpose of this study was to examine the survey responses of participants of collaborative models of instruction in order to determine the existence of constructs determined through the literature to be effective aspects of collaborative models. Further, the purpose of this study was to examine the participants' perceptions of their own readiness to participate in their roles as collaborative educators and supervisors as prepared by their professional preparation programs.

This mixed methods study used both quantitative methods to evaluate graduation data and qualitative methods to analyze open ended survey questions to describe experiences of teachers and administrators in three high schools in public schools in Virginia. Participating districts were chosen based on graduation data for school year 2009, in which participating schools were in the three districts with the highest graduation rates for students with at least a standard diploma. Teachers participating were a collaborative teaching pair from one school within each district chosen by the participating school's principal.

Data were collected from open ended surveys from participants and graduation data from the Virginia Department of Education Website. Results are presented in descriptive form from participants and graduation data.

DEDICATION

This is dedicated to the two people whom I owe the most to, my parents, who have always believed in me and encouraged me to do what I wanted to do. They instilled in me an almost insane work ethic and an ability to believe in myself. Throughout the duration of my program my mother encouraged, sometimes more prodded me when I hit the wall and found it difficult to keep working. It kept me going to know I would make them proud. I love you both. I wish you were here to see it, dad.

ACKNOWLEDGEMENTS

There are always a great many people supporting a person when he or she accomplishes something great, so in the attempt to name those that have supported me the last four years, I will inevitably leave someone out, but here is my attempt to thank those that have helped me, supported me, guided me, and at times, pushed me when I needed it during the last four years.

My sister, Helen, who has been more and more of a friend as we have gotten older. In more ways than one, you have been a support to me the last four years and beyond. Love you….now get back in there yourself.

My friends Anita and Chris, who've moved me all over the state, and were always checking on my progress. To Anita, who has always provided room and board during campus visits and reality checks when I needed them. I couldn't ask for better friends.

My fellow administrators at Peasley Middle School, who held the fort, covered my meetings at the last minute, and stayed for events when I was visiting campus to meet with my committee, at a defense, feverishly trying to meet a deadline, or needed a mental break. You guys are the best. Thanks for the locator. Toni and I won't end up in Florida or take two hours to get from Williamsburg to Richmond. Toni, you're next. Bryan-your turn.

My committee, Dr. Theodore Creighton, Dr. Carol Cash, Dr. N. Wayne Tripp, and Dr. Travis W. Twiford, thank you for your wisdom and your advice. I have learned a great deal from the process and I am thankful for the time you have spent assisting me and helping me grow academically and professionally. Thank you Dr. Creighton, for your flexibility and your patience with me as I learned a whole new way of thinking.

Finally, thank you to Gloucester County Public Schools for their continued support of my endeavor through periodic leave and tuition reimbursements as part of their commitment to professional development of their employees. This type of support allows many of us to truly continue to be lifelong learners.

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CHAPTER I

INTRODUCTION

Background of the Study

Segregation of students with disabilities from those without is becoming the exception rather than the rule as greater numbers of students with disabilities are being placed into classrooms to be educated with nondisabled students (Weiss & Lloyd, 2003). Numbers of students with disabilities educated in the general education classroom have grown as much as 60% between the years of 1993 and 1995 (Weiss & Lloyd, 2003). With the exception of only the most severely disabled students (those labeled Intellectually Disabled with IQs below 70), special education students are expected to meet the same strenuous standards measured in state assessments as their nondisabled peers (Kloo & Zigmond, 2008).

In order to provide students with the appropriate instruction to meet these goals, students are increasingly educated in co-taught or collaborative classrooms in order to meet their special needs and to expose them to the general curriculum (Cook, 2004). For students with disabilities to achieve commensurate with their peers, instruction must address both the content and their unique learning styles (Ralabate, 2006). There are differing ideas of how co-teaching should work effectively in the classroom, with the model of both teachers' presence in the classroom full time relatively rare. Generally, the roles of the teachers are the same in different models: the general education teacher serves as the content expert, and the special education teacher serves as the learning specialist (Lawton, 1999). The focus of a co-taught classroom has to move beyond simply the placement of students in a classroom with two teachers, to the quality and process of the instruction in the classroom. The relationship between these two teachers is of high importance to the success of this program (Voltz, Brazil, & Ford, 2001).

School administrators who may not have experience working with special education students, and even less experience in supervising the programs that serve these students, are still responsible for maintaining an effective special education program (Sheehy, 2007). In schools today, the administrators are required to demonstrate leadership in a multitude of areas, including curriculum and instruction, planning and assessment, discipline, facilities management, community relations, safety and security, finance, personnel issues, and special education. Building level administrators, who lack a proper background in special education, knowledge of

school law (including special education law), effective programming, fostering collaboration, as well as educational leadership skills, are not prepared to foster the kind of environment required for co-teaching to flourish (Burdette, 1999; Zaretsky, Moreau, & Faircloth, 2008). Special education leadership duties alone include compliance and monitoring of referral processes, evaluations, eligibilities, individualized education plans, instructional placements, and procedural safeguards for special education (Sheehy, 2007).

Statement of Problem

The problem to be addressed in this study is the existing gap between what teachers and administrators are provided in their professional preparation programs and what is expected of them in practice in regards to the collaborative teaching arrangement. For the purposes of this study, the term "collaborative teaching arrangement" refers to the teaching situation involving a general and a special education teacher working in a shared setting with both special and general education students. Through the literature review, six themes emerged as aspects of an effective collaborative teaching arrangement:

1. Forming the Co-teacher team
2. Scheduling practices
3. Assigning instructional roles
4. Allocating resources
5. Providing ongoing professional development
6. Developing the co-teacher relationship

All of these six themes are considered necessary aspects of the building administrator's role in the collaborative teaching arrangement (Boudah, Schumacher, and Deschler, 1997; Bovalino, 2007; Burdette, 1999; Elmore, 2002; Hargreaves, 1992; Sheehy, 2007; and Weiss & Lloyd, 2003).

In order to address these needs effectively, building administrators need training in not only legal aspects of special education, but also assessment of individual disabilities' impact on student performance, monitoring of the special education process from referral to placement, and provision of different service delivery models, including collaborative teaching models (Garrison-Wade, 2005). As Zaretsky, Moreau, and Faircloth (2008) found, understanding legal responsibilities and ramifications for noncompliance does not necessarily ensure an appropriate education is provided for special education students. Collaborative models of instruction

especially need the guidance and support of the building administrator to facilitate collaborative problem solving by modeling, nurturing, and fostering (Garrison-Wade, Sobel, & Fulmer, 2007). The lack of preparation of school principals in the area of special education negatively affects their ability to support their general and special education staff in these areas, thereby negatively affecting their ability to improve education for all students (Garrison-Wade, 2005). Sheehy (2007), underscores the importance of the building administrator's role: "when co-teaching is implemented correctly by teachers and supported truly by administrators, it can be a legitimate option for service delivery on the continuum of services for students with special needs" (p. 13). Cooner, Tochterman, and Garrison-Wade (2005) state that "educational leadership is ranked as the number one key variable associated with effective schools" (p. 1). Administrative involvement also ensures important issues are handled more appropriately and timely (Friend, 2007).

Purpose of Study

School administrators should have the knowledge and ability to critique educational programs used within their buildings. While school administrators cannot always be an authority on specific disabilities, it is critical that they recognize and support effective instructional programs for these students. The purpose of this study is to examine a collaborative teaching arrangement in each of three high schools within the three Virginia Public School districts demonstrating the highest standard and advanced diplomas received by special education students graduating in 2009. Graduation rates for these districts for special education students for this year range from 69.7% to 76%. After examination, the results were used to provide recommendations for professional preparation programs of school administrators, general education teachers, special education teachers, and professional development for each of these groups.

Significance of the Study

Building administrators are no longer simply managers, spending most of their time with facilities upkeep, budgets, and personnel. The role of the principal has changed to become the instructional leader of a building, a collaborator, as well as a key individual to changing culture and supporting change in a building (Bovalino, 2007). Principals are the critical decision-makers who create the atmosphere for collaboration to take place. It is through their leadership and

involvement that programs such as co-teaching grow and are nurtured. As Burdette (1999) notes, both general and special educators need the support of administrators to ensure the collaborative model is not only an option for instruction, but is also a viable teaching arrangement.

When graduates of principal preparation programs begin new positions, there is not time to learn every aspect of supervising special education programs in addition to their other duties. Many new administrators find themselves relying on central office special education administration or special education teachers under their supervision for direction and support in matters of special education (Garrison-Wade, 2005; Garrison-Wade, Sobel, & Fulmer, 2007). A concern with this scenario is the quality of a collaborative program when the supervisor is relying on someone else for guidance in a situation where the special education teacher may not have the appropriate training to participate in collaborative programs. Many students receiving special education services do not have special education teachers with the necessary skills to meet their needs due to shortages of fully licensed special education teachers (Boe & Cook, 2006).

<div align="center">Definition of Terms</div>

Throughout this study, several terms are used based on specific definitions. The following terms are defined as they are to be applied to this study.

Co-teaching/collaborative teaching involves two certified teachers; a general education teacher and a special education teacher. These two individuals share responsibility for all aspects of planning, delivering, and evaluating instruction for a group of students, both general and special education, in a single classroom setting (Friend & Cook, 1996; Kloo & Zigmond, 2008).

Free and Appropriate Public Education (FAPE) is "ensured through special education and related services that are provided at no cost to the parent, meet state standards, provided at an appropriate school, and that are provided in accordance with the student's IEP" (Sheehy, 2007, p. 11).

Highly Qualified refers to additional certification requirements for special education teachers. On December 3, 2004, the reauthorization of IDEA included additional requirements beyond licensure of special education teachers teaching core subjects (Department of Education, 2006). The Elementary and Secondary Education Act defines highly qualified for all teachers as "the teacher has obtained full State certification as a teacher (including certification obtained through alternative routes to certification) or passed the State teacher licensing examination, and

holds a license to teach in such state…" (Department of Education, 2001). In Virginia, these requirements for special education teachers are met through a series of demonstrations of basic content area knowledge, approved by the Board of Education of the Commonwealth of Virginia (Virginia Board of Education Superintendent's Memo No. 118, 2005).

Individual Education Plan (IEP) is a legal document which outlines a specific educational plan for each student found eligible to be served as a student with a disability. The plan includes goals, a statement of the student's present level of performance, and any accommodations or modifications necessary for the student to have access to the general curriculum (Department of Education, 2006).

Least Restrictive Environment (LRE) is the placement documented in the IEP in which the student will be educated with the necessary support needed, without providing additional handicapping support (Department of Education, 2006).

School administrators, building administrators, and building level administrators are all terms used interchangeably in this study to denote the principal of a school building.

Students with disabilities are those students "evaluated in accordance with §§300.304 through 300.311 as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as "emotional disturbance"), an orthopedic impairment, autism, traumatic brain injury, another health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services" (NICHCY, 2008).

The Instructional Leader is also a term referring to the principal of a building that is more descriptive of the current role this individual fulfills on a daily basis. The Instructional Leader is the person ultimately responsible for the instructional programs and the progress or lack of progress of students within his/her building. Principals are now considered collaborator[s], as well as a key individual[s] to changing culture and supporting change in a building (Bovalino, 2007).

Theoretical Framework

Figure 1.1 is a conceptual framework for the current study. Professional preparation and certification programs are designed to train the professionals that supervise and participate in

collaborative teaching programs, which for the purposes of this study are principals, general education teachers, and special education teachers. The literature says that the skill a school administrator needs in order to supervise and support these programs requires principals to take on several roles, including Manager of Resources, Facilitator of Roles and Relationships, and Manager of Change. These roles are used to work in conjunction with special education teachers and general education teachers and the skills which they possess, thus affecting the quality of the collaborative teaching program that is the result of these joint efforts.
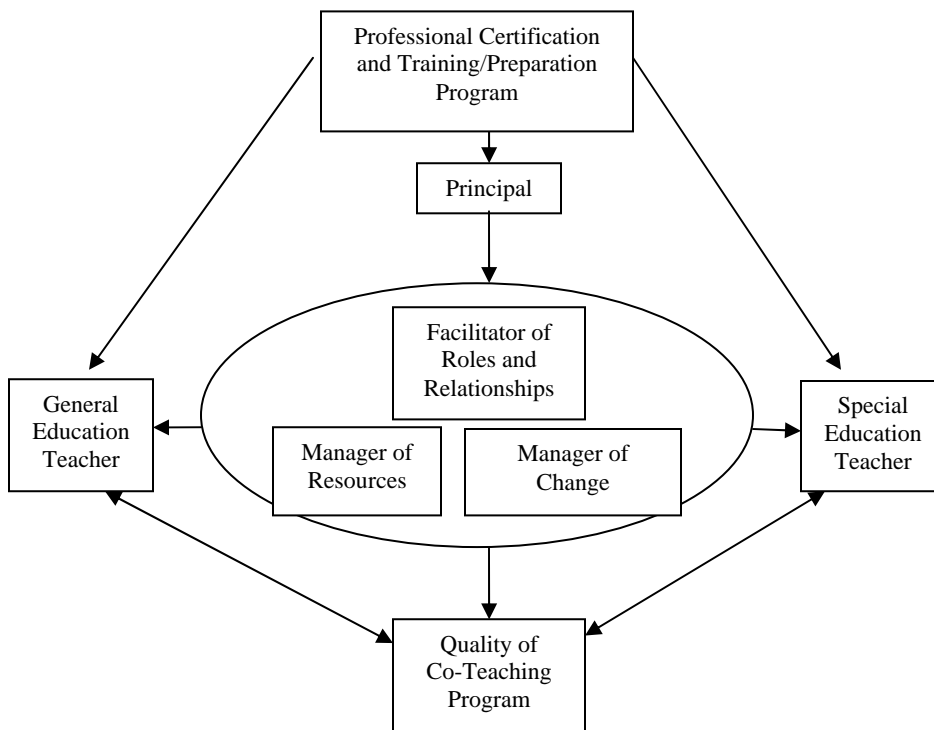
Figure 1.1. Framework for creation and maintenance of co-teaching programs.
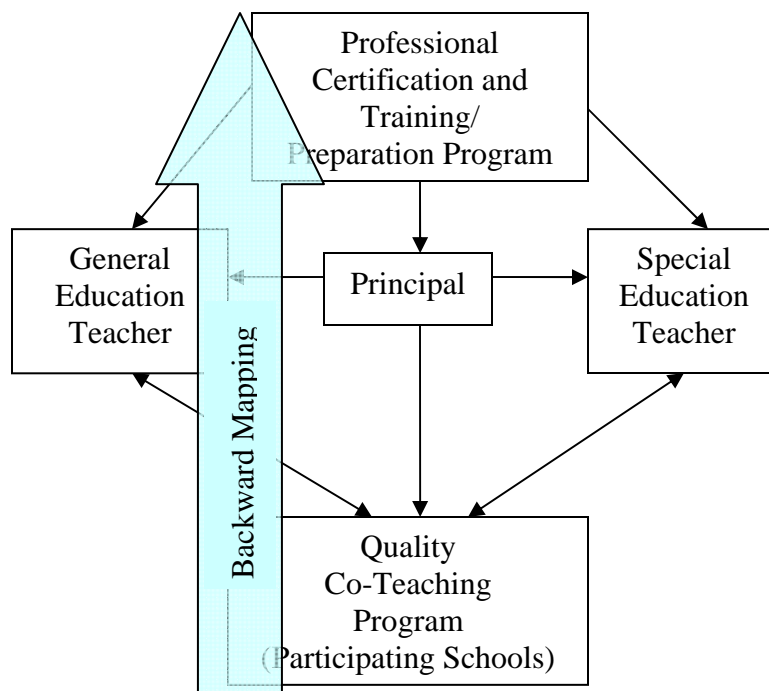
Figure 1.2. Theoretical framework for current study.

For this study, which is illustrated by *Figure 1.2*, the end product of Quality Teaching Program is exemplified by the three schools chosen for participation in this study, explained further in the Methodology section in Chapter III. From the Quality Teaching Program, the roles of the principal, special education teacher, and general education teacher in the collaborative teaching arrangement will be examined both through the six themes from the literature and through perceptions of each of these individuals as to the level of preparation provided by their professional programs for the roles they assumed in collaborative teaching.

Research Questions

To frame the data collection for this study, four research questions with the following sub-questions have been posed:

1. In what way(s) do principal preparation programs provide principals with the training necessary to supervise and support collaborative teaching arrangements?

1a. What are the perceptions of principals regarding their level of preparation to supervise collaborative teaching arrangements as provided by their preparation programs?

2. In what way(s) do general education teacher preparation programs in Virginia provide general education teachers with the training necessary to participate in and support collaborative teaching arrangements?

2a. What are the perceptions general education teachers as to the readiness of general education teachers to participate in and support collaborative teaching arrangements?

3. In what way(s) do special education preparation programs in Virginia provide special education teachers with the training necessary to participate in and support collaborative teaching arrangements?

3a. What are the perceptions of special education teachers as to their readiness to participate in and support collaborative teaching arrangements?

4. Are the six themes (forming the co-teacher team, scheduling practices, assigning instructional roles, allocating resources, providing ongoing professional development, developing the co-teacher relationship) found in the review literature manifested in the creation and maintenance of the chosen quality collaborative programs?

Delimitations

Delimitations are those conditions placed on the study by the researcher. Three public school systems in Virginia were chosen for participation in this study. These districts were selected based on their graduation rate for special education students at the end of the 2009 school year. The three districts in Virginia with the highest percentage of special education graduates (69.7, 74.4, 76) receiving at least a standard diploma were assumed for the purposes of this study to have quality collaborative programs. Schools within these districts were chosen by district personnel for participation and contact information was provided by them for the researcher to use in this study. Interview participants within each school were chosen based on the currently held positions of principal, general education teacher, and special education teacher at the time of the data collection for this study. The principal participants were chosen by virtue of holding the position in the schools which were chosen for participation in the study. General education and special education teacher participants were chosen by their principal's recommendation and by their involvement in a co-teaching arrangement within their respective schools. Teacher participants were further refined based on their holding full licensure status and their willingness to participate.

Limitations

Limitations are those conditions of the study in which the researcher has no control. Generalizability of the study is limited in scope to Virginia education programs as well as limited by the small sample size. Due to the nature of survey questions in making program and readiness judgments of themselves and employees, limitations may occur in respondents' willingness to divulge candid answers. Because data collection in part relies on analysis left to the discretion of the researcher, some limitation may be in researcher bias. Teacher selection for participation was determined by the principal in each building, so the range of experiences for each teacher may be narrow.

Organization of the Study

This study is organized into five chapters. Chapter one consists of a background for the study, and statements of the problem, research questions, significance, and purpose of the study. A definition of all terms and a theoretical framework for the study is included. Chapter two is a review of the research including documentation of necessary principal roles for an effective collaborative teaching program and the discontinuity of these roles from professional preparation programs for school administrators. Chapter three is an explanation of the methodology to be used in this study including selection of participants and school sites, data collection, data analysis, and data synthesis. Chapter four is a presentation of the results of the study. Chapter five includes a report of conclusions and recommendations for further study.

CHAPTER 2

LITERATURE REVIEW

Introduction

The predominant literature on the subject of collaborative or co-teaching focuses on how the teaching arrangement is structured (i.e. definitions of different approaches or the effectiveness of one structure over another). A significant amount of research (Boudah et al, 1997; Dieker, 2001; Friend & Cook, 1996; Lawton, 1999; Luckner, 1999; Murawski, 2006; Weiss & Lloyd, 2003) has been dedicated to the argument of whether inclusion or segregated programs are best for students with special needs; however, for the purpose of this study, the focus of the literature review is on one structure of the teaching arrangement: co-taught classrooms with one special education teacher and one general education teacher. The literature includes support for the collaborative or co-teaching model as the model of choice for students with mild to moderate disabilities. Literature is also reviewed that examines the building administrator's role in how to create, support, and maintain co-teaching programs. Because co-teaching in some schools may be a divergence from the traditional structure, the administrator's role in bringing about effective change was also discussed in this literature review. Finally, literature was reviewed which discusses the current status of teacher and principal preparation programs in relation to their readiness to create and maintain effective collaborative teaching models.

Historical Background

Compulsory attendance laws have existed in the United States since 1918, although students with disabilities were excluded from many public education programs and benefits until the 1970s (Bovalino, 2007). Special education advocates have lobbied for the inclusion of special education students to be educated in the same settings as their peers for over 30 years (Kloo & Zigmond, 2008). As a result of the drive for students with disabilities to have the same educational opportunities as their nondisabled peers, three laws have impacted the provision of special education services for students with disabilities the most; The Education for All Handicapped Children Act (IDEA), Section 504 of the Rehabilitation Act of 1973, and the Elementary and Secondary Education Act of 2001. Because this study is limited to students with

academically impacting disabilities who have qualified for special education services under IDEA, Section 504 was not explored in the literature review or historical background.

Co-teaching was initially not designed for special education students, but rather rose from the popularity of team teaching among general educators in the 1950s (Friend, 1993). In the 1960s, the model evolved to include two components in the classroom; a lecture portion followed by additional instruction in class groups. In one of the other models, teachers were planning jointly, but providing instruction individually. By the 1970s, collaborative teaching was more popular and was used in both the elementary and secondary schools. In the early 1980s, this form of team teaching was beginning to be used in special education as a means of mainstreaming (Friend, 1993).

The Individuals with Disabilities Education Act (IDEA) was first implemented into law under the name of the Education for All Handicapped Children Act, also known as Public Law 94-142. This law requires of public schools two important conditions: that students with disabilities are entitled to a "free and appropriate public education" or FAPE, and that this education has to be provided in the "least restrictive environment" or LRE (Department of Education, 2006, p.3). In 1990, PL 94-142 was reauthorized and renamed IDEA, and has since been reauthorized as the Individuals with Disabilities Education Improvement Act (IDEIA). As its predecessor, this act mandates services for students eligible for special education from the age of three through twenty-one.

Although IDEA does not mandate that students be placed in the general education classroom, it does require that students with disabilities be educated "to the maximum extent appropriate" in the least restrictive environment (Department of Education, 2006, p.3). The LRE that must be considered first by the student's Individualized Education Plan (IEP) Team is the general classroom setting. The LRE is based on a continuum of services for students with disabilities which ranges from placement in the general classroom with accommodations with no direct services from a special education teacher, to placement in a hospital or other facility (Department of Education, 2006). Increasingly, for special education students, the LRE is placement in some type of collaborative class (Cook, 2004; Dieker & Murawski, 2003; Weiss & Lloyd, 2003). Any placement away from nondisabled peers has to be explained and justified by the team in the plan. The only legal justifications are based on the nature and severity of the student's disability and his/her inability to benefit from instruction provided in the general

classroom (Luseno, 2001). The spirit of IDEA overall, is to educate students in their general classroom within their home schools as much as possible (Bovalino, 2007) and to provide exposure to the curriculum on which state tests are based upon (Kloo & Zigmond, 2008).

The Elementary and Secondary Education Act of 2001 (ESEA), officially PL 107-110, is a federal mandate which legislates expectations for all students, with and without disabilities (Department of Education, 2006). Special education students are included in a designation called a subgroup, (other groups are ethnicity, economically disadvantaged, and English proficiency) that is required to meet adequate yearly progress (AYP) benchmarks, which increase each year. All schools under ESEA mandates are expected to have 100% proficiency in math and reading by the year 2014 (Ralabate, 2006). Because of the high performance expectations on state assessments needed to meet this goal, school systems are moving towards the inclusion of students with disabilities in the general classrooms (Weiss & Lloyd, 2003). With the advent of No Child Left Behind, students with special education services are expected to achieve the same high academic standards as their nondisabled peers, regardless of disability category (Thousand, Villa, & Nevin, 1996).

Current Status of Collaborative Teaching Arrangements

Current research on the subject of co-teaching generally focuses on how the teaching arrangement is structured. Although research exists both in defense of and in criticism of the model, both groups of research point to the need for students with and without disabilities to receive an education which will make them productive members of society (Friend, 2007). Friend (1993) describes co-teaching as "having great promise as one approach for supporting students with disabilities in general education settings" (Friend, p. 14). This observation comes partially due to the increasing attention and emphasis on collaboration in schools and the opinions of students and teachers on the model.

Administrators often rely on teachers who are willing to volunteer for participation in co-teaching classes for a few reasons. First, teachers who are not familiar or do not have experience in the co-teaching classroom are hesitant to teach with another adult out of concern that the other teacher is judging or critiquing them. Second, and more important for this study, teachers are reluctant to volunteer for co-teaching situations because there is little guidance from administration as to how to participate in the approach (Friend, 2007).

Sindelar (p. 39) expresses the challenge that teachers have in working together in the teaching environment, a profession that initially was solitary; one teacher, one classroom. As the move to collaboration began, teachers were put into classrooms with other teachers but were not given tools or training to work within this model. Many new innovations and programs die in the beginning stages because of a lack of leadership and guidance to foster these ideas. Building administrators have control over issues that directly affect the co-teaching arrangement, such as staff development, planning times, resources, classroom sizes, and balanced classroom rosters (Sindelar, 1995).

Luckner (1999) also found in his study comparing two co-taught classrooms, that administrator involvement is key to the success of a collaborative program (p. 30). For the program to work effectively, Luckner determined that building level administrators have to provide feedback to teachers as to issues which arise in the process, as well as feedback related to observations in the classroom during program implementation. In Luckner's words, "Feedback is the lifeblood of every system" (p. 30). For feedback to be of any practical use to educators, this feedback has to be given with knowledge of what is happening in the classroom, in other words, the administrator has to spend time in the classroom observing, making suggestions, and having a first-hand view of what is taking place in the collaborative setting. Friend echoes this sentiment by stating that administrative visits to a collaborative classroom communicate commitment and interest in the program's success (Friend, 2007).

Feedback is not the only important role building administration must play. Because the building administration sets the tone for acceptance and change, the administration's role in how the co-teaching model is received and perceived is pivotal. The building level administration must demonstrate a need and a value to the co-teaching model not only in words, but in everyday actions (DiPaola & Walther-Thomas, 2003).

Defining Collaborative Models

In the reviewed literature, different terms for collaborative models are used interchangeably; consultation, co-teaching, collaborative teaching, and team teaching are all terms which professionals may use to describe the instructional delivery method known as co-teaching (Walther-Thomas, Bryant, & Land, 1996). Schools' efforts to adopt the concept of co-teaching have led to differences in practice, and variations in what professionals call co-teaching

(Sheehy, 2007). In the studies and articles reviewed for the purposes of this study, it is apparent that researchers also have many different definitions for what is considered co-teaching.

Friend and Cook (1996), use a definition of co-teaching that focuses on a general education teacher and a special education teacher working together to share all of the duties that would normally be assigned to one teacher. These duties include planning, teaching, and assessment. Specifically, Friend and Cook use the definition, "two or more professionals delivering substantive instruction to a diverse or blended group of students in a single space" (p. 156). The non-negotiables in Friend's and Cook's definition are the presence of two educators, the delivery of meaningful instruction, the audience of a diverse group of students, and presentation in a common setting (Burdette, 1999). Friend and Cook also further explain their definition by providing descriptions of five variations of their main definition; one teach/one assist, station teaching, parallel teaching, alternative teaching, and team teaching (Friend & Cook, 1996). Each variation has differences in which the teacher takes the lead in classroom teaching and in how groups are broken up briefly for instructional purposes, but the variations all include their non-negotiables.

Thousand, Villa, and Nevin (1996) present their own four approaches to co-teaching using the terms supportive teaching, parallel teaching, complementary teaching, and team teaching. Overall, these two groups of researchers' definitions may have different names, but the definitions carry the same meaning (Friend & Cook, 1996; Thousand, Villa, & Nevin, 1996). Supportive teaching and one teach/one assist both have one teacher taking the lead in teaching while one teacher moves about the room and assists with student behavior or questions. Parallel teaching takes on the same definition from both groups of researchers, however, Thousand, Villa, and Nevin report eight variations of the term (Thousand et al. 1996), although the basic premise that the two teachers break students up into smaller, heterogeneous groups remains unaltered. Complementary teaching is when one teacher in the teaching duo does something instructionally to enhance the instruction of the other teacher, such as paraphrasing a lecture or modeling note taking as the other teacher lectures (Thousand et al. 1996). This form of co-teaching still utilizes both teachers as teachers, not relegating one to an aide. Friend's and Cook's term, alternative teaching, is when one teacher provides enrichment or instruction while the larger group works with the other teacher (Friend & Cook, 1996). Team teaching for both groups of researchers is defined the same: both teachers sharing responsibilities which were traditionally

held by one teacher, such as grading, instruction, and discipline (Friend & Cook, 1996 and Thousand et al. 1996). For the purposes of this study, the term co-teaching will be inclusive of these definitions, and research included in this literature review will be from those articles and studies using these definitions.

Building Administrator as Instructional Leader

In the past, building administrators were considered managers and were able to focus more on the day to day operations of the school than they can today (Bovalino, 2007). Now, not merely managers, principals are considered visionaries, collaborators, colleagues, and lifelong learners (Bovalino, 2007). As visionary leaders, they must establish their own personal beliefs and share them with their staff and larger community, keeping true to these beliefs in order to keep the vision viable. As collaborators, principals realize they are not the only ones responsible for or able to enact change. As a colleague, building administrators have to build trust among their teachers and not only share ideas, but listen to others' as well. As lifelong learners, principals understand and appreciate the need for professional development, and the importance of their participation alongside their staff. Although the role of the principal is changing, the responsibility of being a manager has not faded. At times when faculty members are refusing to implement changes or participate in team meetings or teaching, the administrator will have to address the situation directly (Bovalino, 2007).

As building administrators realize their new role in the education of the students within their buildings, it is essential that they convey the behaviors necessary to create and maintain programs that when implemented, foster student achievement (DiPaola & Walther-Thomas, 2003). Included in these behaviors is the acceptance and promotion of quality educational programs for students with disabilities. When the building administrator endorses or pays particular attention to certain initiatives, there is a greater degree of implementation in the classroom (Burdette, 1999). With this change in role expectation, administrators need to be able to at least assist in the design, implementation, and assessment of educational programs, including those for special needs students (DiPaola & Walther-Thomas, 2003). A belief system has to be instilled in the school as a whole that achievement of all students, including those with disabilities is what is important. As the school leader, it is the building administrator's job to work towards this goal, which means a change in how classrooms are run on a daily basis. For

the purposes of this study, the change in question is that of a move towards the collaborative environment needed for effective co-teaching to occur.

Boudah, Schumacher, and Deschler (1997) conducted a study to examine the effects of an instructional model they termed Collaborative Instruction, which provides specific instruction to teachers on how to work together in a co-teaching setting. This model is defined as "an instructional environment that includes two teachers, one general education teacher and one special education teacher, who work in the environment simultaneously to enable students to be more successful learners" (Boudah, Schumacher, & Deschler, 1997, p. 297). This definition of collaboration aligns well with the definitions of co-teaching established earlier in this literature review.

The model was founded on the ideal that students receiving special education are no longer served in pullout programs where they can receive intensive instruction in learning strategies, then these strategies must be integrated into the general classroom content where the students are being educated (Boudah et al. 1997). Outcomes from this instructional model should be that students learn how to learn more effectively and more independently. As students realized these outcomes, greater success in school may result. The model's purpose is to provide a framework as to how the teachers are supposed to interact with students and the other teacher in the room. The model assigns roles for the two teachers, as a mediator or as a presenter, one teaches, one enhances the instruction. Again, this definition aligns well with previously discussed definitions of co-teaching.

Boudah, Schumacher, and Deschler used four secondary schools with four teams of special and general education teachers. Teachers were organized by four experimental and four comparison classes. Two classes of each grade of 6, 7, 8, and 10 were divided into one experimental and one comparison group. Teachers in the experimental group were observed prior to training in Collaborative Instruction to attain a baseline measure. Teachers were provided two training sessions in order to provide feedback for teachers on their baseline results, to provide an overview of the Collaborative Instruction model, to train them to teach and prompt the use of strategic skills, and to provide planning time with each other and feedback opportunities with the researcher.

A total of 32 students participated in the four experimental classes and a total of 32 students participated in the four comparison classes. Students included in both classes were

labeled as low achieving or mildly disabled according to the servicing labels on their Individual Educational Plans. Researchers observed the classes during instruction using a time sample method. Observers would listen for a tone sounding at ten second intervals using tape recorders and headphones during the observations which would signal them to record individual teacher behaviors observed at that time. Observers marked the behavior observed in predetermined categories and made anecdotal comments aside from the category response. Inter-observer reliability was achieved by having a second observer recording teacher actions during the same interval for at least 20% of all observations.

Behaviors were categorized in five categories, four of which come from the roles delegated in the Collaborative Instruction model, including presenting content, mediating, circulating, and engaging in non-instructional behaviors. For the fifth category, the researchers added the measure of role exchanges, in which the observers noted whenever one of the teachers switched between presenter and mediator during an interval period. Presenting content and mediating describe one teacher providing instruction as the other actively supports that instruction, respectively. Circulating involves moving about the room to answer questions and address discipline issues. Non-instructional behaviors refer to those activities which do not enhance or involve instruction, such as grading papers, handing back homework, or leaving the room to run errands. A satisfaction questionnaire was completed by the experimental teachers consisting of fourteen items related to the training, ease of application, and perceived changes in student performance supplied social validity measures.

Baseline results indicated that teachers spent the majority of their time (61%) in non-instructional activities. An improvement in this area was noted after training, in which it was observed 54% of the time was spent in these types of activities. Baseline results of engagement in mediated instruction were low (8.37%), but improved after training (22.43%). Prior to training, the mean number of role exchanges were 5.4, but rose to 17.74 after training. According to anecdotal records taken during observations, before training, one teacher, usually the special education teacher was standing off to the side while the other teacher presented material. The researchers reported after training, both teachers were typically standing together delivering instruction at the front of the room. According to the results of this study, teachers engaged in non-instructional activities less, mediated instruction more often, and switched roles more often

during instruction after training in the Collaborative Instruction model (Boudah, Schumacher, & Deschler, 1997).

Weiss and Lloyd (2003) conducted a case study with the purpose of identifying what roles special educators took in the collaborative classroom, to determine the factors that influenced these roles, and to determine why special education teachers participated in co-teaching. This qualitative study used a grounded theory methodology. Participants were three special education teachers at a middle school and three at a high school. These teachers were chosen to participate based on three factors: 1) all taught in one district, so administrative supports were similar, 2) this district had not adopted a specific model of collaboration, so the study would not evaluate a certain model, and 3) all teachers co-teaching in this district at the high school and middle school levels could participate, giving a broader view of the co-teaching experience.

Data collection consisted of observations, interviews, and analysis of documents, including the district's integration policy and job responsibilities in the teacher handbook. Interviews were semi-structured and were conducted with the teachers on three different occasions. The first interview consisted of demographic questions, the second asked clarifying questions as to special education teacher behaviors which the teachers had observed. The third interview was a review with the teachers of the text of the previous two interviews for correctness, any clarification questions the researcher felt were necessary, and a presentation of what had emerged from the study. Teachers were observed 31 times in co-taught classrooms in different content areas. Observations lasted for 30 minutes while the teachers were participating in instruction. During the observations, the researchers took field notes of the classroom and special education teachers' actions in the format of a running record. After observations, teachers completed a journal entry for researcher analysis. An administrator was interviewed in order to put the teachers' experiences in context.

Data analysis occurred as it was collected, with three stages of coding. Open coding consisted of reading through observations, interviews, and journals, line by line, highlighting information which became preliminary categories. Some of these categories then were collapsed into larger groups. During axial coding, causal connections were examined. Finally, selective coding was used to integrate all data by choosing a core category and linking each category to the core. To address validity, the researchers collected data from different sources, had teachers

review the transcribed interviews for accuracy, then an objective researcher not directly involved in the study reviewed the data weekly to provide suggestions and feedback for groupings. In each case of teacher review, the teachers agreed the transcripts and the collected data were accurate representations of his or her situation.

As a result of data analysis, it was determined that special education teachers in this study took on one of four roles; providing support, teaching the same content in a different classroom, teaching a separate part of the content in the same classroom, or teaching as a team. The definitions Weiss and Lloyd give the teacher roles of providing support, teaching in a separate part of the classroom, and teaching as a team correspond to Friend's and Cook's (1996) models of one teach/one assist, station teaching, and team teaching. The format of the special education teacher removing students from the class and teaching content separately from the rest of the class is loosely similar to their model of parallel teaching, but still has few aspects of co-teaching, since it is a different location, with different students, teaching the same content. It is noted by the researchers that the teacher still termed this co-teaching, as both of them were responsible for the students' progress regardless of what room or by which teacher they were instructed.

Teachers reported in interviews that conditions in organization influenced the roles they took in the classroom. These organizational conditions included scheduling, the amount of acceptance by the general education teacher, the content which they were being asked to teach, and the needs of the special education students in their classes (Weiss & Lloyd, 2003). As discussed further later in the review, these are aspects of the school operation which school administrators have at least some degree of control over.

Building Administrator as Agent of Change

Elmore (2002) suggests that the building administrator will accomplish the task of changing how schools respond to special needs learners by sharing leadership duties with other members of the school community, including teachers and even possibly parents and students. Elmore terms this sharing of responsibility "distributed leadership" (Elmore, 2002, p. 12). A basic definition of distributed leadership is that by sharing the leadership responsibility, the amount of leadership available to enact change or improvement grows with each individual involved. This strategic sharing of responsibility in turn builds the capacity of leadership any

building can have by dividing, distributing, and allowing other individuals to distribute responsibility (Sheehy, 2007).

Bovalino (2007) found that in school systems where administrators practiced distributed leadership, or at least some degree of it, the environment becomes favorable for change in relation to collaborative practice. Bovalino used both qualitative and quantitative data from a case study to examine the school administrator's role in the shift from a self-contained environment (in which students receive their education with other special education students with a special education teacher in a classroom apart from the general education population) for special education students to a more collaborative arrangement. In an effort to learn about the role of a building level administrator in the change process, Bovalino (2007) used a case study and semi-structured interviews along with qualitative data gleaned from surveys using a five-point Likert scale.

Three middle schools were chosen for participation based on their districts' commitments to promoting inclusionary practices in their middle schools and the amount of time they had been practicing these forms of inclusion. Participants in each school, including the principal, two regular education teachers, two special education teachers, and the Director of Special Education, were each given surveys for the purpose of creating general questions in reference to the schools' transition to more inclusive practices and to create specific questions related to the participants' responses. Surveys consisted of: a) five closed response demographic statements, b) three open-ended questions regarding the school's mission statement, how the participant defined the collaborative practices in his/her building, and the school's greatest strength, and c) 34 five-point Likert scale statements in which participants indicated their feelings towards the move towards more inclusionary practices and their administrator's role in the process. Then, in order to get a deeper, truer picture of the schools, Bovalino conducted case studies at each school.

Bovalino's findings suggest that in order for the move to more collaborative educational experiences for special education students, both principals and teachers need to value differences of both students and teachers. Of the three schools included in the study, it was apparent that in the schools where leadership was shared among the faculty and the building administrator, change was more accepted and smoother. In instances where teachers felt that decisions were made about special education programs regardless of their opinions, whether they felt these opinions were welcomed or not, transition was less smooth and more resisted. A similar reaction

to change was demonstrated when teachers felt changes are directed by district level administration.

Not only did teacher roles change in these studies, but also the roles of the building principal. In those most effective instances of change, the building administrator considered himself a collaborator with his staff, not leader dictating orders. The principals whose buildings found change easier and more beneficial felt their roles were to provide support for regular and special educators working collaboratively and that it was their responsibility to provide "everything that they needed" to make the transition successful (Bovalino, 2007, p. 120). What was needed, in the administrators' view was training sessions, common planning time, and flexible scheduling. Although many teachers in this study perceived the move towards collaboration to be a directive from higher authorities, in one school where a group of teachers and the school administrator introduced the initiative, the shared vision of collaboration and student achievement not only grew consistently in a positive direction, but also survived five changes in building principals (Bovalino, 2007). All of the administrators in this study agreed that ongoing communication is essential, even after it is felt that the transition phase of change is over.

Sheehy (2007) conducted a qualitative study in order to determine how school leaders support co-teaching in a response to what she called a lacking in research "regarding leadership practices as they relate to the co-teaching service delivery model (Sheehy, 2007, p. 3). Sheehy's study was conducted at the elementary level, and although she suggests a replicated study at the middle school level for comparison, much of her findings are applicable to administration of co-teaching programs at any level, as her findings were found to be recurring themes in the literature reviewed for this study.

One elementary school with four co-teaching teams was the focus of this case study. Sheehy used a cross-case analysis considering each co-teaching team one case. Two teaching teams were assigned to the lower grades, kindergarten through fourth grade, and two teams were assigned to the upper grades fourth through sixth. The case study was conducted by face to face interviews with district and building level administrators and the co-teaching teams from the school, observations and field notes from on-site meetings and visits, and a review of documents. Administrators directly supervising co-teaching models and co-teachers, both special and general, were interviewed. Interviews were completed individually using open ended questions.

Semi-structured interviews were conducted with three administrators and eight teachers, four special and four general educators.

Observations were conducted in the school setting, taking the form of a preliminary tour of the building and the attendance of planning and scheduling meetings. A review of the documents (specifically, the county's policies and regulations related to service delivery, principal policies, staff development materials, school and county memos, teacher and parent handbooks, the school website, data collected from the school profile, and meeting agenda minutes), aided the creation of the interview questions. An administrator and teacher demographic survey was also submitted by participants and field notes maintained during each site visit. Sheehy reports that data collection and analysis were conducted simultaneously, using the constant comparison method. Themes were determined in the data by analyzing both within and cross case, in that respective order.

As in Bovalino's (2007) study, the perspective of viewing leadership observed was of a distributed leadership model, in order to stress that school leadership is not appropriately studied in the context of an individual, such as the principal, but in the greater environment where tasks are carried out and decisions are made. The distributed leadership perspective assumes there is a dynamic between leaders and followers, both learning from the other (Sheehy, 2007). A difference in Sheehy's study was that the co-teaching model had already been established in the school, unlike the transitioning schools in Bovalino's (2007).

Sheehy identified five roles and responsibilities necessary for the school administrator to create an effective and instructionally productive co-teaching arrangement: forming the team, scheduling, assigning instructional roles, allocating resources, and developing the co-teaching relationship. These five roles and responsibilities are discussed in more detail later in the literature review. As a result of her study, Sheehy did express that the school in this study in her view operated as a "professional learning community" which was supportive of the co-teaching model (Sheehy, 2007, p. 130).

The goal of Burdette's study (1999) was to examine how principals viewed their ability to support the collaborative process between general and special education teachers. This study was a result of her finding that there was a lacking in the research as to how to overcome hindrances to collaborative models, such as little administrative support. Burdette found this lack of research was especially scarce from the administrative perspective. The majority of the

research focuses on different approaches and whether they influence teachers' attitudes and/or instructional methods. Burdette also makes the point that for school leaders, supporting an initiative, does not solely rest with knowing whether a method of instruction is effective or not, but also how to provide support given constraints from organizational factors, such as funding, mandates, and time. In the case of Burdette's study, the initiative to be supported was collaborative methods. Burdette's rationale for needing such a study lies in the fact that unless administrative support or lack thereof is studied and understood, then there is no basis to exact change in the support for collaborative models.

Burdette chose a qualitative research method, specifically a multiple site grounded theory case study, across six elementary schools serving kindergarten through fifth or sixth grade, in order to allow "theoretical considerations to permeate the study while not being based on one theory" (Burdette, 1999, p. 50). Participating principals were chosen based on physical location to the researcher and the fact that as teachers, they participated in collaborative teaching arrangements (with both positive and negative experiences) prior to their positions as school administrators. Data collection took the form of interviews with principals and one or two of their teacher teams, observations and field notes from on-site meetings and visits, and analysis of documents, specifically policy manuals, meeting agendas, teacher handbooks, and administrative memos. Interviews began with a short demographic section and also included open ended questions which asked about participants' experiences. Planned prompting was utilized when respondents did not fully answer a question or when the researcher felt the subject had more to offer than the initial answer. Documents were used to represent activities for which the researcher could not be present, such as faculty meetings, and for the purpose of cross referencing with interview results.

Data were analyzed using the constant comparative method due to its flexibility. As data were collected, Burdette analyzed the data, returned to the schools to retrieve more data, and analyzed the data again. As themes began to emerge in the results, two objective peer reviewers were employed to review the coding process and offer assistance in regrouping, if necessary. At the end of the study, ten themes emerged: supporting partnerships, hiring selectively, modeling cooperative behavior, establishing special education as integral to the school's mission, utilizing validated practices, making common time a common practice, being knowledgeable about special education issues, utilizing referral and pre-referral processes, developing in-house special

education training, and assigning teachers and students. These themes are very similar to those found in other studies in this literature review and are discussed again further in the review.

Recurring Themes in the Literature

The researchers of the studies included in this literature review have examined the aspect of the involvement of the administrator from different perspectives. Some have used the perspective of either the special education or general education teacher, some the teacher teams, and some have viewed the initiative of co-teaching and collaboration from the viewpoint of the school administrator. From these studies and research on the subject of collaborative teaching, several recurring themes have emerged from the literature as having an impact on the ability of a school administrator to supervise co-taught instructional delivery systems and areas where change will need to be focused and addressed. Table 1 organizes the recurring themes in the literature and research findings including the importance of forming the co-teacher team, scheduling practices, assigning and clarifying roles, allocating resources, the need for ongoing professional development, and building the co-teacher relationship.

Table 2.1

Recurring Themes and Authors from Literature Review

Recurring Themes in Literature Which Effect the Building Administrator's Ability to Create and Maintain Effective Collaborative Programs	Author(s)
Forming the Co-teacher Team	Sheehy (2007)
Scheduling Practices	Burdette (1999), Sheehy (2007)
Assigning Instructional Roles	Burdette (1999), Bovalino (2007), Hargreaves (1992), Sheehy (2007), Weiss & Lloyd (2003)
Allocating Resources	Boudah et al (1997); Burdette (1999), Sheehy (2007), Weiss & Lloyd (2003)
Providing Ongoing Professional Development	Boudah, Schumacher, and Deschler (1997), Bovalino (2007), Elmore (2002), Sheehy (2007)
Developing the Co-teacher Relationship	Bovalino (2007), Hargreaves (1992), Sheehy (2007), Weiss and Lloyd (2003)

Forming the Co-teacher Team

Sheehy (2007) found that forming the team which would carry out the responsibilities of the co-taught classroom was one of the most important administrator roles in supporting a collaborative program. While the principal might delegate or share this responsibility with teachers who shared his/her vision, it was the building administrator who facilitated the process and ultimately made the decision for who would be assigned to co-teach.

Scheduling Practices

Burdette (1999) noted the need for scheduling to address the need for teachers to consult more often with parents, teachers, students, administrators, and each other. Teachers felt that they did not have time to implement a collaborative program. Paperwork is an aspect of time that is often overlooked in scheduling of special education teachers. Also related to scheduling is the aspect of assigning an appropriate caseload for teachers who are participating in the co-taught classroom (Burdette, 1999). The amount of collaboration and paperwork is directly related to the number of students and the severity of the disabilities of those students which are placed on the special education teacher's caseload.

Sheehy (2007) echoes this need for closely examining scheduling practices in light of allowing sufficient planning time and balancing caseloads. In her study, scheduling was shared between the administration and teacher leaders. This collaborative effort in planning was used to address scheduling conflicts and put into place changes for the following school year to avoid the same difficulties. The researcher also notes that despite scheduling issues from the administration, the results of her study confirm the belief that "when co-teaching teams valued common planning and were committed to the model, they made time and built it into their schedules" (Sheehy, 2007, p. 128). This time came before and after school and during lunch and planning periods.

All but one of the teachers in Weiss' and Lloyd's study had no planning time with their supposed collaborative partners and co-taught in as many as nine different classrooms during the day. The one teacher whose definition of what occurred in her co-teaching classroom which fit the definition of co-teaching used in this study had common planning time daily.

Assigning Instructional Roles

Teachers want to know what their roles are and what is expected of them (Burdette, 1999). As teachers and administrators begin to change their previously comfortable roles in the implementation process of collaboration, there is a great deal of confusion as to what these roles have become, and how to relate and work with other colleagues whose roles have also changed. In Sheehy's study (2007), the administration shared this leadership task with teacher leaders, until the need for a management or supervisory role was needed. As the collaborative process was implemented in her study, one teacher refused to allow the special education teacher to teach in her classroom, despite training and urging from fellow teachers. These teachers, who believed in the collaborative process, brought this situation to the principal's attention, where it was handled directly and resolved.

Weiss and Lloyd (2003) determined that in order to meet objectives set for co-teaching models and the students which they serve, those who teach them and their administrators must "have a better understanding of which components or factors influence the roles that special educators take within the co-taught classroom" (Weiss & Lloyd, 2003, p. 29). In other words, the collaborators in the model need to understand what influences how or what they understand the special education teacher's role to be in the general classroom. Role confusion hinders the collaborative teaching process.

During this same study, special education teachers reported that organizational conditions influenced the roles they assumed in the general education classes as much as the relationship with the general education teacher. As mentioned in previous sections, scheduling and caseload assignment affect the role a special education teacher is able to take on in a collaborative classroom. In one of the high school classes in the study, the special education teacher did not participate often in direct instruction of students because teachers believed "general educators did not accept their participation in instruction and that the general educator was responsible for the state-mandated curriculum so classes could not be adapted" (Weiss & Lloyd, 2003, p. 35).

Role confusion can also come from different operational definitions of what is considered a co-teaching model. Teacher interviews in this same study included belief statements that said collaborative teaching will not work unless the teachers have the same teaching philosophy. At all levels of classes observed in this study, teachers who used the one teach/one assist model defined co-teaching as simply a facilitation of the general education teacher's instruction. Only

one teacher in Weiss' and Lloyd's study (2003) reported participation in a teaching arrangement which resembled the actual accepted definition of co-teaching in which both teachers delivered instruction interchangeably. In this teaching situation, she felt as an equal partner to the general education teachers whom she collaborated with on a daily basis.

In the process of moving from the traditional method of pullout programs and isolated teaching, it is not only the teachers who find themselves in role changes. Sheehy's study (2007) highlights the need for principals to be active participants in creating and maintaining collaborative programs, not simply the overseer. As the principal moves from the role of manager, it is important that he/she be able to facilitate the collaboration taking place among teachers, which requires participation as a colleague. Bovalino (2007) also notes the changes in the role of the principal from simply a manager to visionary, collaborator, colleague, and life-long learner.

From interviews and observations analyzed in her study, Burdette (1999) found another obstacle to overcome when learning new roles required for collaboration; territoriality. Both special education and general education teachers exhibited aspects of territoriality when it came to specific groups of students. Special education teachers tended to hover over or focus time with special education students and limit time these students spent with general education teachers. General education teachers tended to resent the presence of the special educator in his/her classroom.

Hargreaves (1992) noted that another obstacle to role changes and collaboration is the aspect of isolation in teaching. In the past, teaching had been a solitary activity, one teacher in one classroom. Change to opening up to the classroom to suggestion and possible criticism is difficult. On the other end of the spectrum, discounting ideas and differing opinions is a different type of barrier to a collaborative environment. When sharing ideas, all suggestions should be taken into account.

Allocating Resources

Although it came up in the literature less than some other themes, the allocation of resources, which could be considered financial, human, or materials, is an issue as it relates to the ability of an administrator to support collaborative programs. In the case of Sheehy's study (2007), instructional assistants were vital to the implementation of the co-teaching structure which the teachers put into place with the support of the administration. Without these assistants,

the structures put into place could not have been realized, according to the teachers. Each of the teaching arrangements in this study had limited space resources, but what was available was assigned by administrators with the input from co-teachers. In instances where special education teachers were basically relegated to the position of a classroom assistant (Boudah et al. 1997; Burdette, 1999; Weiss & Lloyd, 2003) there were instances where the administration wasted a vast amount of resources, both financially and in human resources.

Providing Ongoing Professional Development

Of the reviewed literature, the most commonly stated need to improve collaborative teaching models was ongoing professional development. In the case of the principal, a competent leader knows when he/she has a lack of information in which to guide a program effectively on his/her own. A responsible leader also knows when to search for new research based strategies and programs to assist his/her faculty and staff in supporting student achievement, as well as being aware of the laws and regulations as they change and communicate these to faculty and staff (Sheehy, 2007).

Boudah, Schumacher, and Deschler (1997) make the case for professional development in their study of Collaborative Instruction. After receiving instruction in the model of Collaborative Instruction, the researchers found that teachers spent more instructional time using the mediation model of co-teaching rather than having the special education teacher function basically as a classroom assistant. Instructional roles were exchanged more frequently after the intervention so that both special education and general education teachers spent more time providing direct instruction and supporting the other teacher's instruction rather than each assuming a constant role. Less time was also spent in non-instructional activities after instruction in the collaborative model, as well. The results from this study indicate that teachers can learn to employ new instructional models and perform different roles successfully in the classroom with the assistance of professional development in how to use new models of instruction (Boudah et al., 1997).

Teachers voiced the belief that in order to facilitate the shared vision and beliefs needed to realize the collaborative model, continuous discussions and professional development in regards to special education laws and regulations and training in accommodations and adaptations were essential (Bovalino, 2007). Teacher opinions of collaboration and change were also more favorable in instances where the building administration provided training sessions. In

Bovalino's study, this professional development took the form of training on inclusionary practices. Elmore (2002) found that professional development was not only important in the initial change to collaboration, but also in sustaining a change in the school culture. The school administrator's role as instructional leader is even more important with respect to planning professional development.

Developing the Co-teacher Relationship

Sheehy (2007) felt that this recurring theme was one of the strongest found in her study's data. Trust and confidence were keys to building a productive relationship between the collaborators. Teachers felt so strongly about this relationship, they likened it to a marriage. A strong belief in the need for a common philosophy of teaching was also found. Inability to plan together affects the ability to build relationships. In this study, one of the teacher pairs was not able to plan or meet together due to the special education teacher's schedule. Not having the ability to build the professional relationship affected their ability to work together in the classroom. After consulting with the principal, adjustments were made to improve the situation for the following school year.

Bovalino (2007) also found the existence of strong relationships important to make the collaborative environment work and the building of these relationships not an easy task. Teachers have to feel comfortable sharing ideas and offering suggestions before the environment can be truly collaborative. She also found that relationships were more likely to result in productive collaboration when the principal acted as collaborators with his/her staff. These principals indicated that it was their responsibility to provide teachers with tools they needed to be successful, and it was their job to facilitate the move to collaborative teaching. Weiss and Lloyd (2003) also see the communication of expectations within the collaborative relationship as the responsibility of the principal, as it is he/she who will be evaluating the program's effectiveness.

Hargreaves (1992) cautions about how the school administrator approaches facilitating change. As other studies have provided suggestions as to what administrators have done to create a positive atmosphere for change, Hargreaves warns that forcing collaboration or forcing relationships will not provide the results administrators are hoping to reach. He uses a term called contrived collegiality to describe how some administrators facilitate change by putting mandates and formal measures in place to ensure planning and consultation. The pitfall here is

that when building administrators use mandates to force collaboration and then attempt to move from a contrived collegial situation to a legitimate one, the transition often fails (Hargreaves, 1992).

Weiss (2004) found that teachers felt co-teaching was useful, but put it into practice in ways that were against supporters' recommendations. What is suggested here is that teachers would be willing to participate in collaborative teaching environments but lack the guidance to do so effectively. Administrative resources have to be available to support teachers working together. If these resources are not provided, teachers are left to make things work as best they can (Weiss & Lloyd, 2003).

Current Practices of Administrator Preparation Programs

Before teachers and administrators work together or with students, much of the knowledge and experience each bring to their positions comes from the training programs in which they participate. Special education in leadership programs is given what Zaretsky, Moreau, and Faircloth term "inadequate treatment" (2008, p. 162). In their review of administrator programs in both the United States and Canada, they found that special education was included within course material, such as legal issues, curriculum, and human resources, but was not given its own course. Standards for Educational Administration, adopted by The National Council of Accreditation of Teacher Education (NCATE) are aligned with the Interstate School Leaders Licensure Consortium (ISLLC) Standards, which include the following:

Standard 1: A shared vision of learning

Standard 2: Culture and programs conducive to student and personnel learning

Standard 3: Safe, efficient, and effective learning environments

Standard 4: Collaboration and working with the community

Standard 5: Ethical Behavior

Standard 6: Understanding and influencing political, social, economic, legal, and cultural contexts

Standard 7: Internships that are standards-based and cooperatively delivered by university and school district personnel (Council of Chief State School Officers, 2008).

As was found in the Zaretsky, Moreau, and Faircloth (2008) study, Lashley and Boscardin (2003) point out the lack of individual treatment of special education in the ISLLC

Standards. A lack of inclusion within the ISSLC Standards as well as a failure to explicitly address special education in required coursework, according to the authors, leads to a continued dual system of preparation for special education and for general education. Zaretsky, Moreau, and Faircloth (2008) also mention that the isolation of special education from general education programs is not limited to administration programs, but is also prevalent in teacher education. Administrator preparation programs were found by Praisner (2003) to provide a minimal amount of knowledge which was useful to building administrators in facilitating students with special needs ability to work in the general education classroom.

Despite the growth of diverse learners in public schools and the role principals play in the acquisition of appropriate programs for these students, Cooner, Tochterman, and Garrison-Wade (2005) found that states have moved away from mandating administration preparation programs to include special education coursework. They reviewed each of the ISLLC standards in the context of special needs learners. Standard 1 states in its completion: "A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community" (Council of Chief State School Officers, 2008). Cooner et al. (2005) state that as over six million of public school students are receiving special education services, the role of the principal has changed and the need for knowledge of special programs, diverse learners, and special education law has drastically changed. The researchers also mention that while the need for knowledge and levels of responsibility has changed, the requirements for licensing programs in the area of special education have not increased. Similarly to Zaretsky et al. (2008), Cooner et al. (2005) notes the separation of general and special education programs in which administrators and teachers are prepared to work in one of the two systems, rather than working within a system which educates both general and special education students.

ISLLC Standard 2 states: "A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth" (Council of Chief State School Officers, 2008). As the building leader, the principal is the key to implementing and monitoring inclusionary practices, including co-teaching. Without training specifically in special education, a principal is at a disadvantage to advocate, nurture, or evaluate the quality of programs for special needs students.

ISLLC Standard 3 states: "A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment" (Council of Chief State School Officers, 2008). Just as Sheehy (2007), Boudah et al. (1997), Burdette (1999), and Weiss & Lloyd (2003) all state in the theme of allocating resources, resource management, whether it be human or material, is important to maintaining an effective collaborative program.

ISLLC Standard 4 states: "A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources" (Council of Chief State School Officers, 2008). Principals must be able to participate in and facilitate collaborative planning as well as problem solving among general and special educators, specialists, family members, and the student. Professional development at the district level has made attempts to assist principals with their changing roles, but it does not replace "connecting effective leadership to special education in general education settings" (Lashley & Boscardin, 2003, p. 21).

ISLLC Standard 5 states: "A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner" (Council of Chief State School Officers, 2008). Gaps in training related to special education law can cause liability issues for districts, as ignorance or misunderstanding of the law is not a defense when regulations are not followed. Building administrators are required to be a part of IEP meetings, which is many times delegated to subordinates, such as assistant principals. Regardless of who is in attendance to the actual meetings, the building administrator is responsible for ensuring that a LRE is provided for students, transition planning is completed, and compliance guidelines are met.

ISLLC Standard 6 states: "A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context" (Council of Chief State School Officers, 2008). The reauthorization of IDEA in 1997 specified that school administrators must have knowledge of IDEA requirements, including eligibility, placement, performance goals, and assessment. Results of recent studies have noted that school principals found that special education was the most consistent demand on their time, while at the same time was the area where principals felt

most unprepared. Cooner, Tochterman, and Garrison-Wade (2005) determined from their review of the ISLLC Standards that the only way for preparation programs to change is to have collaboration between special educators and administration preparation program leaders.

In 2008, the ISLLC Standards were updated and adopted by the National Policy Board for Educational Administration (Council of Chief State School Officers, 2008). The authors acknowledged the need to update the standards to reflect increasing demands on school leaders which require the "rewriting of administrators' job descriptions every year" (p. 3). Even with this strong statement describing the current nature of administrators' responsibilities, there is still no explicit mention of special education in the 24 page document. The only wording in the document that might be construed to refer to special needs populations and the requirements that envelop them are references to "all population subgroups" (p. 3) and "diverse" (p.15). Each standard contains a list of the functions contained in each standard. Mention of special education still remains absent even in these more detailed functions. This absence of explicit reference in standards whose purpose is to "provide high-level guidance and insight about the traits, functions of work, and responsibilities expected of school and district leaders" (p. 5) continues to perpetuate the lack of importance placed on special education training in administration preparation programs.

A report prepared by the Presidential Commission on the Conditions of Special Education (Council for Exceptional Children, 2001) stated two of the most pressing issues facing the condition of special education in public schools was inadequate administrative support and poorly prepared general and special educators. Nicholson and Leary (2001) state in their review of Appalachian principals that a critical issue in principal preparation programs is their characterization of "being largely irrelevant and out of touch with practical concerns" (p. 199). They further mention that there is a discrepancy between what skills a preparation program offers students and what skills will be demanded of them in their roles when in practice (Nicholson & Leary, 2001).

Current Practices of Teacher Preparation Programs

The separation of skill sets and of special education from general education in preparation programs does not exist only in administration programs, but also in teacher education programs (Lashley & Boscardin, 2003). Regardless of which degree a teacher earns, both general and special educators must have the knowledge and skill to collaborate and work

together, including the skills needed to modify educational programs to meet the needs of diverse students (Dingle, Falvey, Givner, & Haager, 2004).

Conclusions

After a review of the literature, what is still lacking in research is an analysis of the necessary roles of the building administrator in the creation and maintenance of collaborative teaching programs in comparison to the preparation these individuals receive to participate in these roles. An understanding of roles for both administrator and teacher in working with special needs students is needed in order to guide the restructuring and development of these programs to assure the needs of all learners are met (Zaretsky, Moreau, & Faircloth, 2008). The researchers included in this literature review agree that the role of the principal is as important in maintaining the changes made in collaborative programs as it is in implementing them. The included studies also document the shortage in applicable research in this area. Research into co-teaching is based on elementary settings and what the model should look like to teachers is easier to locate (Friend, 2007; Friend & Cook, 1996; Luckner, 1999; Weiss 2004) than research relative to the role of the building administrator in this collaborative process (Boudah et al., 1997; Dieker, 2001; Sheehy, 2007). Weiss (2004) further explains this lack of research in the area as possibly due to co-teaching's historical designation as a place rather than as instruction. In part of the research the school administrator is left out as a participant, only included as an observer or supervisor. Weiss goes on to take the position that administrators have to be in classrooms understanding what is going on in both successful and unsuccessful classrooms.

The recurring themes in the literature point out the need for the administrator to be an active participant in the collaborative process. For many schools, this process is a change from what teachers have been comfortable with, which requires principals to be skilled in both how to facilitate change and collaborative relationships. This process also requires teachers, both general and special education to be prepared to actively participate in these collaborative relationships. As teachers are forced to change and adapt to roles, a resistance to change can occur. School administrators are expected to carry out these daunting tasks while their role is changing at the same time as the teachers with which they work.

CHAPTER 3

METHODOLOGY

This chapter begins with an explanation as to the selection of the participants and the securing of their participation. The chapter continues by defining the instrument and its creation through how the data was collected through the instrument and was analyzed through both qualitative and quantitative methods.

Selection of Participants

The three public schools chosen for inclusion in this study were chosen based on Class of 2009 Division Level Cohort graduation rates for students with disabilities (Virginia Department of Education, 2009). Districts with no special education graduates or a group of graduates below the state definition for personally identifiable results were removed from the database. Secondly, school districts with no special education graduates receiving a standard or advanced diploma or a group of special education students receiving these types of diplomas specified as below the state definition for personally identifiable results were removed. For the individual remaining districts, the number of standard diplomas and advanced diplomas were combined and used to find the overall percentage of special education students for a given district graduating with a standard or advanced diploma for that district's graduating class. From these districts, the three with the highest percentage of special education graduates with at least a standard diploma were chosen for participation in this study.

From the district level, once approval was given for research to take place, high schools were designated for participation in the study to the researcher, and contact information was provided to initiate the surveys. Because these three divisions did not provide permission to include their names or the names of individual schools in the findings of this study, pseudonyms were used.

Individual participants in this study from the public school sector were selected by their status as practicing building administrators, special education teachers, and general education teachers in three public high schools with collaborative classroom settings within the three previously selected districts. Participants consisted of fully licensed individuals, who meet the "Highly Qualified" status as defined by the Elementary and Secondary Education Act and reauthorization of IDEA. On December 3, 2004, the reauthorization of IDEA included additional

requirements beyond licensure of special education teachers teaching core subjects, which include math, language arts, science, social studies, geography, foreign language, civics, and economics (U. S. Department of Education, 2006).

Three principals, three special education teachers, and three general education teachers were chosen at the public school level to participate in the surveys. One principal and a collaborative teaching pair, consisting of one special education teacher and one general education teacher were chosen for participation from each site. This makeup of the collaborative team was based on the previous definition of co-teaching included in the *Terms* section of Chapter I (Friend & Cook, 1996; Kloo & Zigmond, 2008).

<div align="center">Informed Consent and Permission Procedures</div>

Prior to beginning the current study, a proposal was submitted to the Virginia Polytechnic Institute and State University Institutional Review Board. Permission to begin the study was given based on an exempt status. The IRB approval letter can be found in Appendix A.

For access to individual schools participating in this study, permissions to conduct research were completed and submitted to each division's designated office. Prior to participation in this study, individual participants within schools were provided and asked to sign a letter documenting the purpose of the study, their rights as a participant, researcher contact information, and confidentiality assurance. As part of this document, the participant was provided an informed consent form, which is contained in Appendix B. During the completion of the study and the dissertation, data, including paper and electronic forms will be stored in the researcher's locked office. After acceptance of the dissertation by the researcher's committee, all forms of data not used for the dissertation will be destroyed.

<div align="center">Instrumentation</div>

Information from principals, general education teachers, and special education teachers was collected in the form of open ended surveys, both in written form and by phone, which was determined by proximity to subjects and availability. Surveys included open ended questions which asked about participants' experiences both in reference to the collaborative classroom setting and how their prior training may have prepared them for their current position of building administrator or teacher.

Content validity was increased because the survey questions were created directly from the six themes or constructs which the researcher pulled from current research. The survey questions were piloted by nine principals and central office staff members which were part of the researcher's class in the Administration and Supervision Ed. D. cohort at Virginia Tech. Feedback was provided as to the clarity of the surveys and the relatedness of the questions to the content. For each theme previously identified through the literature review, questions were created by the current researcher that relates the participants' experiences in practice with the necessary aspects of collaborative teaching arrangements in the literature review. Surveys were completed by electronic submission for the initial set of questions. The researcher asked clarifying questions by phone and by electronic mail when necessary after completion of the initial electronic submission of the open ended surveys by participants. Table 3.1 is a listing of the six themes and the corresponding survey questions. The surveys also contain an additional four questions pertaining to participants' opinions of readiness and preparation programs. Survey questions for co-teachers and principals are included in Appendix C and Appendix D, respectively.

Table 3.1

Recurring Themes and Corresponding Survey Questions

Recurring Theme	Corresponding Survey Question
Forming the Co-teacher Team	How is the collaborative teaching team selected in your school?
	Is this responsibility handled by the principal or a designee?
	Are teachers chosen by volunteering, or are collaborative teachers chosen from all teachers?
Scheduling Practices	How is the master schedule created?
	How often do collaborative teachers have the opportunity to plan together based on the schedule?
	What is the duty load for special education teachers versus general education teachers?
Assigning Instructional Roles	How are roles in the collaborative classroom delineated?
	What is the principal's role in the collaborative process?
	How do collaborative participants handle conflicts which arise?
Allocating Resources	How are special education aides assigned?
	How are special education aides used in the collaborative classroom?
	When resources are requested, are they received for the collaborative classroom?
Providing Ongoing Professional Development	Did you participate in any professional development related to co-teaching prior to participating in the field?
	After implementation, how often does the collaborative team participate in professional development directly related to the co-teaching model?
	Was the professional development you participated in helpful in your participation in the co-teaching model?
Developing the Co-teacher Relationship	Do you feel you can raise questions or make suggestions in the collaborative situation in which you are working?
	What is your principal's role in the collaborative relationship both in and out of the classroom?
	What steps have been taken to build the teacher relationship?

Data Collection

Data were collected on three points from three public schools in Virginia, from three individuals at each site, including the principal, a general education teacher and a special education teacher:

1. At the public school level, principals' perceptions as to the level of preparation to supervise collaborative teaching arrangements as provided by their preparation programs

2. At the public school level, general education teachers' and their principals' perceptions as to the general education teachers' level of preparation to participate in collaborative teaching arrangements as provided by their preparation programs

3. At the public school level, special education teachers' and their principals' perceptions as to the special education teachers' level of preparation to participate in collaborative teaching arrangements as provided by their preparation programs

Data Analysis

Data were analyzed using a mixed method approach. Qualitative data were analyzed as it was collected, using a constant-comparative analysis method of coding (Creswell, 2007). Surveys with practicing professionals were conducted to compare preparation programs to practice in the field. Coding was used to create categories. Surveys and anecdotal data were initially coded separately to create groups within the types of data. Axial coding was used to link codes among the groups by placing them in conceptual categories. Surveys were transcripted, and then reviewed line by line to create preliminary categories during open coding. The final step for the qualitative process, selective coding, was used to integrate all data by choosing a core category and linking each category to the core.

Quantitatively, descriptive statistics were used to describe trends in the data. Excel was used to perform a Chi-square test of goodness of fit test. A Chi-square goodness of fit "uses frequency counts from a sample and compares those counts to the expected frequency count from the population" (Creighton, p. 139). For this study, the Chi-square test was used to compare the graduation rates for special education students, which were used to choose divisions for participation, and the graduation rates for nondisabled students in these same divisions. This comparison was to determine whether or not the graduation rates for special education students

were statistically significant in their difference to the expected rates in each division. To calculate the Chi-square, the expected graduation rate for special education students in each division was determined using the percentage of general education students graduating in each division. For each percentage of general education students graduating within the cohort, that same percentage of special education students was determined from the graduating group. This figure was used as the expected graduation rate for special education students in the Chi-square calculation.

This same procedure was performed on the data for special education and general education graduation data for 2009 for each individual school to determine if graduation rates for special education students in each school were statistically significant in their difference to the expected rates in each school. These data were then compared between the school and district level.

<div align="center">Summary</div>

In order to address the problem of the disconnect between professional preparation programs and professional practice, three collaborative programs in three different schools in Virginia public school districts were examined. For the purposes of this study, these three schools were considered to have quality collaborative programs based on 2009 graduation data for which their districts had the highest percentage of standard and advanced diplomas for special education students. Data were compared to the recurring themes in the literature which state what aspects are important to the implementation and maintenance of co-teaching programs. Findings were analyzed both quantitatively and qualitatively.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

Introduction

The research conducted in this study provides a description of collaborative settings for three high schools in Virginia. These descriptions are based upon the principals, general education teachers, and special education teachers who work within these models on a daily basis. This chapter summarizes the responses from these individuals on the open ended surveys.

Responses from the surveys were examined by grouping responses in summary and in a series of tables comparing responses by school, by position, by similarities, and by differences in respect to whether or not responses followed what research presented as the six constructs for an effective collaborative teaching program; forming the co-teacher team, scheduling practices, assigning instructional roles, allocating resources, providing ongoing professional development, developing the co-teacher relationship. The tables contain quotes directly from participants' survey responses which are indicative of the overall responses for each question category.

Responses to survey questions were then analyzed as to their answers to these initial research questions:

1. In what way(s) do principal preparation programs provide principals with the training necessary to supervise and support collaborative teaching arrangements?

1a. What are the perceptions of principals regarding their level of preparation to supervise collaborative teaching arrangements as provided by their preparation programs?

2. In what way(s) do general education teacher preparation programs in Virginia provide general education teachers with the training necessary to participate in and support collaborative teaching arrangements?

2a. What are the perceptions general education teachers as to the readiness of general education teachers to participate in and support collaborative teaching arrangements?

3. In what way(s) do special education preparation programs in Virginia provide special education teachers with the training necessary to participate in and support collaborative teaching arrangements?

3a. What are the perceptions of special education teachers as to their readiness to participate in and support collaborative teaching arrangements?

4. Are the six themes (forming the co-teacher team, scheduling practices, assigning instructional roles, allocating resources, providing ongoing professional development, developing the co-teacher relationship) found in the review literature manifested in the creation and maintenance of the chosen quality collaborative programs?

The three schools that participated in this study, as outlined in the Methodology section of Chapter 3, were members of the three districts in the state of Virginia with the highest standard and/or advanced diploma attainment for 2009 for students with disabilities. In the tables that follow, the graduation rate for each district's and each school's special education population was compared statistically to that district's and that school's general education graduation rate and to the other two schools who participated in the study.

Table 4.1

Graduation Rates for Special Education and General Education Students for Participating Districts

School District Participant	General Education Graduation Rate	Special Education Student Graduation Rate
School District F	88	69.7
School District C	84.8	74.4
School District L	92.6	76

Table 4.2

Graduation Rates for Special Education and General Education Students for Participating Schools

High School Participant	General Education Graduation Rate	Special Education Student Graduation Rate
School F	94	82
School C	86	77
School L	90	64

Chi-square Analysis

A Chi-square analysis for goodness of fit was performed in order to determine if the graduation rates for special education students first in each district, then in each school were statistically significantly different. Comparisons were made within each district and school, not between districts and schools. The hypothesis for each Chi-square analysis was that the special education graduation rate for each district and school was at a comparable rate to general education students in that school. With a probability value of .05 and 1 degree of freedom, the critical value of x is 3.84. 3.84 is the point of value where the significance begins.

Table 4.3

Chi-square analysis of graduation rates for School District F

Graduate Group	Cohort	Graduation Rate Diplomas	Percentage	x^2
1. General Education	13289	11696	88	67.2*
2. Special Education	1778	1240	69.7	

*p<.05

The relation between these variables was significant, x^2 (df=1) = 67.1, p<.05. The null hypothesis that there is no statistical significance between special education graduation rate and general education student graduation rate is rejected. The Chi-square figure exceeds the needed value of 3.84 for the .05 probability level. For the purposes of computing the Chi-square, the expected number of special education diplomas used was 1564, based on the 88% graduation rate for general education students.

Table 4.4

Chi-square analysis of graduation rates for School District C

_____
| | | Graduation Rate | | |
Graduate Group	Cohort	Diplomas	Percentage	x^2
1. General Education	4872	4072	84.8	9.61*
2. Special Education	848	631	74.4	
_____

*p<.05

The relation between these variables was significant, x^2 (df=1) = 9.61 p<.05. The null hypothesis that there is no statistical significance between special education graduation rate and general education student graduation rate is rejected. The Chi-square figure exceeds the needed value of 3.84 for the .05 probability level. For the purposes of computing the Chi-square, the expected number of special education diplomas used was 720, based on the rounded 85% graduation rate for general education students.

Table 4.5

Chi-square analysis of graduation rates for School District L

_____
| | | Graduation Rate | | |
Graduate Group	Cohort	Diplomas	Percentage	x^2
1. General Education	3661	3665	92.6	19.48*
2. Special Education	346	263	76	
_____

*p<.05

The relation between these variables was significant, x^2 (df=1) = 19.48, p<.05. The null hypothesis that there is no statistical significance between special education graduation rate and general education student graduation rate is rejected. The Chi-square figure exceeds the needed value of 3.84 for the .05 probability level. For the purposes of computing the Chi-square, the expected number of special education diplomas used was 322, based on the rounded 93% graduation rate for general education students.

Table 4.6

Chi-square analysis of graduation rates for School F

_____

		Graduation Rate		
Graduate Group	Cohort	Diplomas	Percentage	x^2
1. General Education	358	337	94	52
2. Special Education	33	27	82	

_____

*p<.05

The relation between these variables was not significant, x^2 (df=1) = .52 p<.05. The null hypothesis that there is no statistical significance between special education graduation rate and general education student graduation rate is accepted. The Chi-square figure does not exceed the needed value of 3.84 for the .05 probability level. For the purposes of computing the Chi-square, the expected number of special education diplomas used was 31.02, based on the rounded 94% graduation rate for general education students.

Table 4.7

Chi-square analysis of graduation rates for School C

_____

		Graduation Rate		
Graduate Group	Cohort	Diplomas	Percentage	x^2
1. General Education	555	477	86	86
2. Special Education	86	66	77	

_____

*p<.05

The relation between these variables was not significant, x^2 (df=1) = .86 p<.05. The null hypothesis that there is no statistical significance between special education graduation rate and general education student graduation rate is accepted. The Chi-square figure does not exceed the needed value of 3.84 for the .05 probability level. For the purposes of computing the Chi-square, the expected number of special education diplomas used was 73.96, based on the rounded 86% graduation rate for general education students.

Table 4.8

Chi-square analysis of graduation rates for School L

_____

Graduate Group	Cohort	Graduation Rate Diplomas	Percentage	x^2
1. General Education	565	508	90	6.13*
2. Special Education	80	51	64	

*p<.05

The relation between these variables was significant, x^2 (df=1) = 6.13 p<.05. The null hypothesis that there is no statistical significance between special education graduation rate and general education student graduation rate is rejected. The Chi-square figure exceeds the needed value of 3.84 for the .05 probability level. For the purposes of computing the Chi-square, the expected number of special education diplomas used was 72, based on the rounded 90% graduation rate for general education students.

Survey Analysis

Analysis of the surveys began with the responses from participants as to how their program compared with the themes from the literature. The first theme, or construct was *forming the co-teacher team.* In response to the surveys, none of the participating administrators replied that they were participants in choosing collaborative teaching teams. One principal replied "both" when asked if the principal or delegate assigned teams, and another responded that the supervising administrator made the decision, however neither responded that they were participants in these decisions. In one division, this decision was made by a Coordinator of Special Education, not a building administrator. When asked if teachers were appointed or if they volunteered, administrators responded primarily that they volunteered, and that special education teachers were placed according to highly qualified status.

Both special education and general education teacher responses were similar to each other. Responses were similar to administrators for the question *Was the team created by the principal or a delegate*, but differed on responses to *Did you volunteer or were collaborative teachers chosen from all teachers?* All responded that teams were created originally by a principal or their designee. When asked if they were chosen for the collaborative setting or if

they volunteered, only three responded that they volunteered, despite two of three principals replying teachers were volunteers. Two general education teachers answered this question by stating they originally were appointed to this position, but after the experience, have volunteered. Special education teachers agreed this duty was part of their job.

Table 4.9

Forming the Co-Teacher Team

Principals:
• "Teams are selected by the supervising administrator and the coordinator of Special Education. The sped teacher is paired with the content in which he/she is highly qualified."
• "We have teachers who like to work with other teachers and they volunteer and some are chosen to work with other teachers."
• "General content teachers are usually volunteers. In other cases, the responsibility is rotated through the department."
General Education Teachers:
• "Initially [team was] assigned by administrators but after five years, team selected by choice".
• "Regular education teacher volunteered. Special education teachers are assigned by their highly qualified status".
• "I was told by the administration when I arrived at [School C] that I would have a collaborative teacher-I was not given a choice. It was created by the administrator who oversees special education and English".
Special Education Teachers:
• "My coordinator informed me that I would be involved in the collaborative teaching for that particular year."
• "As a special ed teacher, this is usually part of the job"
• "Initially, we were assigned by administrators to co-teach. After the first year we requested that we continue to co-teach together".

In response to the survey question about how the master schedule was created for their building, two of the three principals replied that the schedule starts with the special education schedule then the other schedules are built around that schedule. One principal replied that the schedule is created by a computer program, but special cases are hand scheduled. All but one of the teacher teams responded that the schedule was created prior to their involvement. One team did respond that they recommended when their collaborative class would best be scheduled, and administration followed through with their recommendation.

Answers as to how often teacher teams plan together varied not only from administrator to teacher, but from school to school. School C's administrator answered that the teachers only

met every other day due to the block scheduling, even though the teachers said they met on a daily basis. School F's administrator initially answered the question "varies", but answered another question later in the survey that each teacher had two 'off' or planning periods. The special education teacher responded she had planning time with one of her collaborative teachers, but not with another, since it was another subject, and had a different scheduled planning time. The general education teacher responded she planned with her special education collaborative teacher daily. School L's administrator stated that time was provided during a remediation period and after school time. Both the general education and special education teacher from this school answered that they planned together 'at best' every other day for one block of time.

The answer to how the duty load compares between general and special education teachers also varied depending upon respondent position and school. School L's administrator simply mentioned that the duty load "should be equal". The teachers' reply addressed classroom duties only, but did describe a fairly equal distribution of work. The administrator of School F stated that teachers do not have any outside of the classroom duties. The special education teacher in School F described her duty division between her and one of her general education collaborative teachers as "50-50", but described her other co-teaching setting as the general education teacher doing most of the work, and her as being regulated to more clerical duties as such grading, data entry, and copying notes. The general education teacher stated that duties are shared equally. The administrator of School C went into a great deal of detail to describe how the special education teacher's teaching load was usually less than the non-collaborative teaching general education teacher. The general and special education teachers for School C agree that duties within the classroom were split evenly and decided upon together. The general education teacher stated that not only does she not have reduced duties, but she has additional duties due to paperwork, planning, and meetings, stating, "Not only do we not have decreased duties while we do more work for these classes, no one (most teachers and principals) respects the extra effort we do to ensure our class prospers."

Table 4.10

Scheduling Practices

Principals:
- "The teaching load for the sped teacher is generally less…"

- "Because we are on an alternating block schedule, this means they meet two to three times a week."

- "It [master schedule] is created by a computerized program but there are overrides that we create also in special cases."

General Education Teachers:
- "I have no decreased duties as a result of collaborative teaching. As a matter of fact, I have additional duties"

- "The master schedule is created by the administrative team."

- "The regular education teacher does most of the content instruction while the special education teacher assures that all accommodations and goals area addressed. Both teachers share in instruction, test-making/modification and even discipline, when necessary.

Special Education Teachers:
- "We plan together at best every other day for one block of time."

- "This [division of duty] varies by team. For me, in the math class it's very 50-50, but in the Chemistry class the gen ed teacher delivers all the instruction and we share the grading, helping students, copying and data entry."

- "We suggested to the administration that it would be best to have our class during first period so that we would be able to see these students every day."

In response to how roles are delineated in the collaborative relationship in the classroom, all three administrators responded that this is a situation that is handled in the classroom between the general education and the special education teachers. The general and special education teachers all agreed that it is their decisions that create these roles. Two of the principals replied that their role in the collaborative process was to evaluate the effectiveness of the collaborative team, one replied that his role was to pair the teams and to work to see that the teams had the same block off to plan together. It is worth noting that this respondent is one that also used a delegate to create co-teaching teams at least a portion of the time according to his reply to survey question number one.

When asked what the principal's role is in the collaborative process, the teacher responses were similar to each other regardless of position or school. Teachers' responses were either that administrators have no role in the collaborative process or their role is purely supervisory or evaluative, which is in agreement with the administrators' responses. One teacher stated when asked what the principal's role was in the collaborative relationship, "none". Another stated what was indicative of most other replies, "The principal has a supervisory relationship with us..". When asked how co-teaching participants handled conflicts which may arise during the collaborative process, administrators' responses were generally quotes of the process teachers would follow to address issues between each other. The administrator from School C did differentiate between student conflict and teacher conflict. When answering this question, general and special education teachers' answers were split between discussing student conflict and teacher conflict. When discussing student conflict, both general and special education teachers provided answers that discussed the process they used for handling the situation in and out of class. When discussing conflict between the co-teachers, both general and special education teachers replied in a similar fashion as to how they addressed the situation amongst themselves. The theme in both situations was that teachers went to administrators as a last resort, and worked to address situations themselves. Only one reply discussed a conflict between teachers going to an administrator, and that conflict was with a past co-teacher, not with someone the general education teacher was currently working with.

Table 4.11

Assigning Instructional Roles

Principals:
- "Principal evaluates the effectiveness of the teams-student academic progress, classroom management, meeting IEP accommodations."

- "Conflicts with student behavior are handled by individual administrators. Conflicts between teachers are generally handled by the administrator who supervises the Sped/core content departments."

- "First go to Dept. Chair, then AP, then me. Don't know any that have gone past AP."

General Education Teachers:
- "[Principal] intervenes only if a problem arises."

- "Co-teachers work together to diffuse the problem, only considering principal involvement as a last resort. We have never had to involve the principal in five years of working together."

- "[Principal's role is] None, other than to stay informed on what is going on when it is necessary."

Special Education Teachers:
- "We work together to resolve outside differences and have never had to resort to outside intervention."

- "The principal would only get involved if there were major issues. Most issues will be resolved within the team."

- "Conflicts have been very minimal. When they do arise, I try to reach a compromise that is acceptable to the two of us. This way both of our inputs are taken into consideration with a positive outcome."

In response to questions about resources and special education assistants, administrator, general and special education teacher responses are all consistent with each other. All participants were in agreement as to how assistants were assigned in schools. None of the collaborative classrooms participating in this study are utilizing paraprofessionals; however, none of the teachers in the study expressed that their classrooms have a need for this assistance. In response to whether or not resources were provided when requested, all teachers replied that when they requested resources they were received, except for one reply from a general education teacher, who replied that she had not requested any resources.

Table 4.12

Allocating Resources

Principals:
• "[Special education assistants are] assigned by skill set or relationship with special needs child"
• "They are assigned by the department chair and the assistant principal who supervises the special education department"
• "Generally any reasonable request [for resources] is funded."
General Education Teachers:
• "We have an entire department of special ed. teachers and specialists. I don't think we have any special ed "aides" in our team taught class. They are assigned by their department chair.
• "The only assistants assigned in our school work with the severely handicapped students one on one."
• "[Special education assistants] are assigned by special education department chair and special education dean."
Special Education Teachers:
• "I have never requested aide-type support for a teamed class"
• "We do not have special education aides in our collaborative classroom. All resources that are requested are received for the collaborative classroom."
• "Aides are normally only in teamed classes if there were students in the classes who needed extra support. Most aides are in self contained classes."

Administrator responses to the question of whether or not teachers participated in professional development related to co-teaching prior to participating in the model were completely different. One response was that no professional development was held related to collaborative teaching, due to a county focus on another area for the year, one response was vague, and positive to the fact that teachers participated in professional development, but not specific as to what the content of the course was, and one response was definite that new collaborative teams participated in professional development before working together. This administrator gave more detail in her answer that not only did the division provide professional development for new collaborative teams, but the school level did, as well. Two of the three principals, with the exclusion of the one who admitted that there was no professional

development for collaborative teaching said that the professional development was helpful for the teachers in their participation in the co-teaching model.

Teacher responses to the same survey question were generally similar to each other, but in the case of one school, completely different from the administrator responses. The administrator from School C stated new collaborative teams were expected to participate in professional development prior to the beginning of the school year. The special education teacher from School C stated she had not had any professional development before her placement in her collaborative class six years ago. She did say that she had had some professional development sessions since then, and had picked up some useful websites for use with her students, but had learned no skills directly related to the collaborative classroom and working with the co-teacher that she and the other teacher weren't already doing in the classroom. The general education teacher from School C did say she had participated in a professional development in prior years, but not before she began co-teaching. The special education teacher from School L did state that she had participated in professional development prior to participating in the collaborative teaching model and that it was helpful to her. Further comment possibly clarified the administrator's response, in that the special education teacher stated that part of the annual staff development includes a co-teaching component. The administrator commented that there was staff development, but did not specify that it was specific to co-teaching. The response on this question from the general education teacher from School L was in agreement. The special education teacher responded to the professional development question by providing her years of experience as her professional development, and then going on to say when she "has time for professional development, it is helpful and informative".

Table 4.13

Providing Ongoing Professional Development

Principals:

 "Both the division and the school provide training for new collaborative teams. All pairs are expected to participate in training prior to the beginning of the school year."

- "Yes [professional development was helpful] and as a result, we have some very successful collaborative teams that enjoy working with each other and create a nurturing atmosphere where students achieve academic success."

- "It is my opinion that the activities were beneficial."

General Education Teachers:

- "At the beginning of every school year (staff development)."

- "I participated in a two day workshop during the summer and that was followed by several role playing activities in the fall."

- "When we have a chance to do the professional development, it is always helpful and informative."

Special Education Teachers:

- "I was first placed in a collaborative setting six years ago without prior experience."

- "I have had a few professional developments since then. I did pick up some website information for games, etc. that were very useful in the classroom, but not too much insight was given to collaborative teaching that we weren't doing already in our room."

- "I have had success with my team and professional development has not been necessary."

All of the administrators believed that the collaborative teachers who were working together as co-teachers in their buildings were able to raise questions and make suggestions in their collaborative relationships. Answers to what the principal's role in building the relationship between the two teachers were similar to the administrators' answers to question three, in which administrators were asked what their role was in the collaborative process. Answers did not stray from supervision or provision of resources. When asked what steps had been taken to build the co-teacher relationship, the administrator from School F stated that steps taken were keeping teams together and providing planning time when possible. It is worth noting that on question two, he replied that teachers have two free planning periods daily. The administrator from School L stated that teachers have input into the assignment of co-teachers. He did not specify if both

general and special education teachers had input. Again, it is worth noting that on question one when asked how teachers were chosen for collaborative teams, he did say that there were teachers that did like to work together, so there was an effort to allow those teachers to co-teach. The administrator of School L discussed the teachers meeting at the end of the year to map out the next year's curriculum and instruction.

In agreement with the administrators of their buildings, the special education teachers and the general education teachers all felt as if they were able to raise questions and make suggestions in the collaborative relationship in which they are working. Just as teacher responses in question three for principal involvement, there was very little expectation or demonstration of principal involvement for an administrative role in the collaborative relationship. Of the six teachers surveyed, three stated there was no involvement and three stated the principal's role was one of supervision and/or to provide resources.

When asked about the steps taken to build the co-teaching relationship, the teachers' answers lean more towards personal responses. Five of the six teachers discuss in their responses the building of personal relationships outside of the classroom which helped their professional relationship inside the classroom. One teacher compared her co-teaching relationship to a marriage. One teacher replied that "the relationship was already established, so steps did not need to be taken to build the relationship".

Table 4.14

Developing the Co-teacher Relationship

Principals:
"Formal and informal walk-thru observations are done throughout the year."
• "Teachers have input into the assignment of co-teachers. Activities area available to assist the development of a cohesive team."
• "To make sure effective teams are established and that training and resources are available to support the co-teaching situation."
General Education Teachers:
• "[The principal's role is] to support us in whatever way we need, especially following through with parents if we are unable to make that contact."
• "We have developed a friendship outside of the classroom and communicate regularly."
• "Collaborative teaching is very much like a marriage. Sometimes it just doesn't work, but given hard work most of the time it's a good experience. And if you have a knowledgeable, patient, hardworking collaborative teacher working with you, it's a happy marriage."
Special Education Teachers:
• "No specific steps, but we have gotten to know each other on a personal level which helps our professional relationship."
• "At this point, we are friends in and out of the classroom. This process has taken time."
• "In our situation, we have not required outside involvement [from the principal]."

When asked specifically about their professional preparation program and if it prepared them for supervision and support of collaborative teaching arrangements, none of the three principals participating in this study felt that their programs addressed the supervision of co-teaching programs. One administrator did not go into detail, but only answered that co-teaching programs were not really discussed. The administrator from School L mentioned the generic nature of his program and stated that he was trained to supervise overall programs for students, but not specific courses or disciplines. The administrator of School C echoed his sentiment. All three principals stated that none of the questions contained in the survey instrument used for this study were addressed in their licensure program.

General education teachers, unlike school administrators, did not agree among themselves as to whether or not their programs prepared them for their co-teaching duties. Two of the three general education teachers surveyed said that they did believe that their professional preparation programs prepared them to participate in collaborative teaching arrangements. The general education teacher from School L did mention that her program provided her tools that were addressed in the questions of the survey during this study, such as common planning, and teacher relationships. The other teacher who responded positively to this question stated that she could not remember anything specific.

Special education teacher responses were identical to general education teacher responses in that two of the three participants replied that their preparation programs did prepare them for their participation in co-teaching situations. It is worth noting that the one special education teacher that did not respond affirmatively to this question is the special education co-teaching counterpart to the general education teacher who did not respond affirmatively to same question. When asked for specifics as to why their programs may have prepared them for co-teaching, the special education teacher from School F quoted her credentials and stated she was provided experience with teaming and how to be successful in teamed classes. The special education teacher from School L also stated her licensures and that these areas of licensure stress the importance of collaboration as well as consultation. The one special education teacher that said she was not trained in the collaborative teaming situation did mention that she felt that a lot of times, teachers do not understand what all is expected in the collaborative teaching classroom. As a note, none of the teachers that disagreed on their answers attended the same programs as undergraduates or graduates for their professional programs.

Perceptions of administrators as to whether or not teachers are prepared to co-teach did not match with the teachers' perceptions of themselves. The administrator from School C, where both teachers stated they were not prepared for co-teaching, did not comment directly on her teachers, but on the fact that newer teachers seem to be more prepared than veteran teachers through their programs. The administrator of School L, where both the general and the special educators stated their professional programs prepared them for their co-teaching positions, stated that he disagreed. He thought special education teachers were prepared to co-teach, but general education teachers were not prepared for the situation. The administrator of School F, who also disagreed with the level of preparedness of his teachers, mentioned in his answer that preparation

for co-teaching may not be something that can be given in school, but rather only through experience.

Table 4.15

Principals and Teachers Perceptions of Preparedness for Co-Teaching

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Principals:
On Themselves:
- "I took a class in Sped regulations and law. However, there was no official training in relationship to team/co-teaching. I learned this on the job."

- "Most programs and classes were generic. They addressed overall supervision of teachers but not teachers of specific courses or disciplines."

- It prepared me for evaluating and developing programs to assist students but not to specifically supervise co-teaching programs."

On Their Teachers:
- "Teaching is an experience, not a theory or idea in a text. Need the experience and then the guidance of theory."

- "I feel special education teachers are prepared to co-teach but little preparation is given to the general education teacher to prepare him/her to co-teach special education classes."

- "The newer teachers have participated in the collaborative model through student teaching and teacher training programs. The veteran teachers have had the hardest time adjusting because they were used to the self-contained model of the pre-SOL and NCLB age."

General Education Teachers:
- "Collaborative teachers need professional preparation before they begin teaching together-every year. Then they need refresher informal classes to air concerns."

- "It's been 17 years, so I can't recollect anything specific we did to prepare us for teaming. I suppose it's mostly come from experiential learning and whatever I've gleaned from my special ed teammates."

- "I was given unique tools for collaborating successfully, i.e. common respect, 50/50 teacher participation (teacher-teacher not teacher-assistant relationship), using a common planning, etc."

Special Education Teachers:
- "A lot of times, teachers do not understand what collaborative teaching entails. Possibly incorporating this into the student teaching program may be beneficial."

- "I have a master's in SPED, we discussed teaming and how to be successful in teamed classes."

- "I am currently licensed as a school counselor and Special Educator. Both areas address the importance of collaboration, as well as consultation."

Summary

Through analysis of survey responses, it is clear that there is some difference among responses of administrators, general education teachers, and special education teachers especially in the areas of the role of the principal and the perception of teachers' preparation for collaborative roles. Teachers were more likely in their responses to view the principal as a supervisor and a provider of resources rather than part of the collaborative relationship. Some responses even hinted that the principal was an unwanted participant in the relationship. Principals were likely to agree with this perception that their role was supervisory and to assist with resources when needed. Principals did not see that they had a role in relationships.

In responses as to perceptions about readiness to supervise or participate in the collaborative teaching environment, principals' responses were short and blatant as to the fact that they were not trained to supervise the co-teaching environment. More than half of teachers, both general and special education felt that they were prepared to work in the collaborative setting, as compared to principals, who did not believe that the majority of their teachers were prepared to work as co-teachers by their professional preparation programs.

CHAPTER FIVE

SUMMARY DISCUSSIONS AND IMPLICATIONS

Introduction

The purpose of this study was to examine a collaborative teaching arrangement in each of three high schools within the three Virginia Public School districts demonstrating the highest standard and advanced diplomas received by special education students graduating in 2009. Using a mixed methods design to analyze data, I collected survey data from three principals and three collaborative teaching teams working in their buildings in order to determine the perception of preparedness for participation in the collaborative model and the level presence of the six constructs the literature states should be present in an effective collaborative model.

In this chapter, I revisit my research questions, present a brief summary of my findings, and end the chapter with implications for practice, recommendations of the study, and implications for further research.

Graduation Data

In performing the Chi-square for goodness of fit for each of the districts that participated in this study, it was found that none of the districts have graduation rates for their special education populations that are consistent with the graduation rates for general education students in their district. District C had the closest Chi-square statistic of 9.61 to the cutoff of 3.84, which places them closest of the three districts in general education graduation rates being consistent with special education graduation rates within their own school cohort for the 2009 school year. District L ranked second in the Chi-square comparison with 19.48, and District F ranked a distant third at 67.1.

When performing the same procedure on individual schools, ranking order compared differently. School F and C both had Chi-square statistics which were not significant, which indicated that there was not a statistically significant difference between graduation rates of special education students and general education students in these schools. School L was the only school with a Chi-square of 6.13 which had a statistically significant difference between the two groups.

Research Questions

The research questions providing the framework for this study were:

1. In what way(s) do principal preparation programs provide principals with the training necessary to supervise and support collaborative teaching arrangements?

1a. What are the perceptions of principals regarding their level of preparation to supervise collaborative teaching arrangements as provided by their preparation programs?

2. In what way(s) do general education teacher preparation programs in Virginia provide general education teachers with the training necessary to participate in and support collaborative teaching arrangements?

2a. What are the perceptions general education teachers as to the readiness of general education teachers to participate in and support collaborative teaching arrangements?

3. In what way(s) do special education preparation programs in Virginia provide special education teachers with the training necessary to participate in and support collaborative teaching arrangements?

3a. What are the perceptions of special education teachers as to their readiness to participate in and support collaborative teaching arrangements?

4. Are the six themes (forming the co-teacher team, scheduling practices, assigning instructional roles, allocating resources, providing ongoing professional development, developing the co-teacher relationship) found in the review literature manifested in the creation and maintenance of the chosen quality collaborative programs?

Findings

The findings from the surveys for this study will be presented specifically in reference to answering the research questions posed which guided this study.

Research Question 1: In what way(s) do principal preparation programs provide principals with the training necessary to supervise and support collaborative teaching arrangements?

1a. What are the perceptions of principals regarding their level of preparation to supervise collaborative teaching arrangements as provided by their preparation programs?

Finding 1: Principals did not at all feel they were prepared to participate in collaborative teaching situations. Principals felt as if they were given tools to supervise overall programs, teachers and students, but not specific programs. Instruction was provided in special education law, but not in programming. One of the principals did not offer specifics, but stated that co-teaching was not discussed. The other two principals were similar in their answers that their programs were generic in relation to special education and did not specifically address any co-teaching or special education program needs. All three principals agreed that the questions addressed in the survey instrument used for this study were not addressed in their licensure programs.

This lack of preparation to supervise special education programs is what Zaretsky, Moreau, and Faircloth (2008) and Lashley and Boscardin (2003) also found in their studies, which in their opinions, creates a dual system of special education and general education, almost a competing system, rather than a comprehensive one designed to serve the student. Research Question 2: In what way(s) do general education teacher preparation programs in Virginia provide general education teachers with the training necessary to participate in and support collaborative teaching arrangements?

2a. What are the perceptions of general education teachers as to the readiness of general education teachers to participate in and support collaborative teaching arrangements?

Finding 2: General education teachers were more likely than principals to reply favorably that they were provided some instruction that prepared them for co-teaching situations. General education teachers reported their preparation programs prepared them for collaborative teaching arrangements by providing training on common planning and teacher relationships. Out of the three general education teacher participants, two replied they were provided some positive training which prepared them for collaborative teaching arrangements. All three participating principals stated they had not had any preparation for co-teaching situations.

This finding was in some disagreement to the research included in this study. Although Zaretskey, Moreau, and Faircloth (2008) discuss the isolation of special education from general education preparation programs, the teachers included in this study seemed to feel they were prepared to participate in collaborative environments.

Research Question 3: In what way(s) do special education teacher preparation programs in Virginia provide special education teachers with the training necessary to participate in and support collaborative teaching arrangements?

        3a. What are the perceptions of special education teachers as to the readiness of special education teachers to participate in and support collaborative teaching arrangements?

Finding 3: Special education teachers were more likely than principals to respond favorably that they were provided some instruction that prepared them for co-teaching situations, and equally as likely as generally education teachers. Two of the three special education teachers responded they were provided preparation by there professional program just as two of the three general education teachers responded. None of the three principals felt they were prepared to work in co-teaching environments. Special education teachers felt that their licensure areas stressed the importance of collaboration and consultation.

This instruction of collaboration for special education teachers is no surprise to Lashley and Boscardin (2003). In their research, they note that for special education teachers, this instruction is part of their preservice instruction, but for administrators, even those in special education administration, collaboration between general and special education is left out of preparation programs.

Additional Finding: Although it is not included in the research questions, Principals differ on their perceptions on their teachers' preparedness for co-teaching. All three principals gave a different perspective as to whether or not they felt their teachers were prepared for co-teaching, only one really answering yes, his special education teacher was prepared. The principal of School F, simply stated that preparation for co-teaching may not be something that could be given in a preparation program, but only on the job, although both of this teachers felt they were prepared for the collaborative environment. The principal from School C mentioned that veteran teachers had more difficulty with collaborative teaching than the newer teachers, although she did not specifically state whether she felt her two teachers were prepared for co-teaching. The principal from School L disagreed with his general education teacher, stating that special education teachers were prepared, but not general education teachers.

That general education teachers may have less preparation for the collaborative environment would not be unexpected, according to Zaretskey, Moreau, and Faircloth (2008). General education and special education teachers seem to be prepared in their preservice

programs in a dual system, which can at times be more of two competing systems rather than two collaborative systems working together for the benefit of students.

Although special education teachers responded that they felt prepared, they could not answer any specifics as to what their preparation programs provided them which prepared them for the collaborative teaching environment. As special education teachers, with specialized training in disabilities, strategies, and behavior management, it would have been expected that there would have been more examples of how special education teachers were prepared for co-teaching when answering that they felt prepared.

Research Question 4: Are the six themes (forming the co-teacher team, scheduling practices, assigning instructional roles, allocating resources, providing ongoing professional development, developing the co-teacher relationship) found in the review literature manifested in the creation and maintenance of the chosen quality collaborative programs?

Finding 4: There is little principal involvement in the creation of collaborative teams in these three schools. There is some evidence from survey responses however, that some aspects of volunteering are incorporated into teaming decisions, although not all of the time, and in differing amounts according to principals and teachers. Most of the creation of teams is handled by either a department head or another delegate.

Although according to Sheehy (2007), forming the team which will carry out the teaching responsibilities of the collaborative team is one of the most important responsibilities of the building administrator. While it is acceptable for the principal to share the responsibility, it should be he/she that facilitates the process and ultimately makes the decision who will be assigned to co-teach.

Finding 5: Planning time among the teachers included in this study is inconsistent. Some are provided regular planning, some every other day, some when they are able to fit it in to their schedule, which includes time outside of the school day. Teachers in this study echoed the sentiments of the participants in Burdette's study (1999) in which the amount of meetings and completion of paperwork which comes with special education students affects time able to be spent planning together. Only one of the schools in this study included the teachers in the scheduling process as Sheehy (2007) suggests. This scheduling process involved consistent meeting times and balancing caseloads.

Finding 6: Administrators have no participation in the assigning of instructional roles. Despite Sheehy (2007), Burdette (1999), and Weiss and Lloyd (2003) all writing of the need for administrative involvement to dispel role confusion, it is clear by survey responses that administrators have no participation in the assigning of instructional roles. All three administrators responded that the assigning of roles in the classroom is handled by the two teachers on their own. All of the teachers responding to the surveys agreed that assigning of instructional roles was a duty that was to be handled by them in the classroom. The theme in survey responses was that teachers handle what goes on in the classroom until administrative presence is requested or needed because something has gone badly. Teacher and principal responses tend to still see the principal as the building manager and not as an instructional leader. Two principals replied that their responsibilities to the instructional role assignment were to evaluate the effectiveness of the team. One replied that his role was to pair the teams and make sure they had time to plan together.

Finding 7: All teachers agreed they were provided ample resources when they were requested. Unlike some reports in the studies of Sheehy (2007), Boudah et al, (1997), Burdette (1999), and Weiss and Lloyd (2003), included in the literature review, participants' survey responses indicated that resources were not wasted and were provided when needed.

All teachers replied that they were provided resources when they requested them, both in materials and in assistance. Administrators stated that they provided any reasonable requests. One pair of co-teachers did state that they did not ask for any resources. As an interesting additional finding, two of the collaborative pairs, when asked about paraprofessionals in their classes, seemed taken aback in their responses that they would be provided that type of assistance. Especially one of the two pairs was insistent that kind of help is not needed. If the two teachers were doing as they should, the "class' needs should be taken care of with the two teachers".

Finding 8: Professional development is not offered for co-teaching on a consistent basis. One division provides professional development only for new co-teachers, one reported it had no collaborative professional development this past year, and other teachers said they did not need the staff development. Only one principal replied that the school offered professional development for co-teaching at the school level. As Elmore (2002) found, professional development is not only important for initial changes, but also in sustaining any change in a

school culture. Teacher opinions of collaboration and change were more favorable in instances where the building administration provided training sessions (Bovalino, 2007). While professional development for new teams may be helpful, it is questionable as to how well a new team will be able to sustain itself without assistance.

Finding 9: The principal is not a part of, nor expected to be a part of, developing the co-teacher relationship, according to responses from both the principals and teachers. Teacher responses were very clear that the principal is considered a supervisor, and someone to turn to if a relationship goes bad, but not someone who will help build the relationship. When asked what the principal's involvement in developing the co-teacher relationship was, three teachers stated there was no involvement, and three stated the role was to provide supervision and/or to provide resources. Principal responses also withdrew their participation in this relationship. Principals responded that their involvement in developing the collaborative relationship was to keep teams together, provide planning time, and to give some input into assignment of co-teachers. One principal also noted that he did formal and informal observations when asked what he did to build the co-teacher relationship.

This removal of the principal from the collaborative relationship is less likely to result in a productive collaboration according to Bovalino (2007). Although there was some evidence from responses of teachers that feedback was provided, especially from teachers in School C, as Friend (2007) stated was necessary for a collaborative program's success, the principal was still not seen as a collaborator, but rather a supervisor.

Finding 10: Based on findings 4, 5, 6, 8, and 9 not all of the six themes found in the literature are present in the schools participating in the study, based on the survey responses.

- Forming the Co-Teacher Team: Although there was some evidence of input from co-teachers and volunteering, most of the forming of the collaborative team was left to a delegate, not the principal.

- Scheduling Practices: Although there was some evidence of teacher input, the majority of the scheduling was left to a delegate, not the principal, and planning is not consistent.

- Assigning of Instructional Roles: Principals do not have any involvement with the assignment of instructional roles in the classroom. Teachers see principals as supervisors and providers of resources, but not as part of the collaborative process in

the classroom. Principal survey responses agree with the teachers in their assumptions.

- Developing the Co-Teacher Relationship: The principal is not a part of developing the co-teacher relationship in these schools. The principals, again, see themselves as supervisors and providers of resources, and the teachers' responses agree.

- Ongoing Professional Development: Professional development is not offered on an ongoing basis for co-teaching. One system offers it only to new collaborative teams, other districts offer it inconsistently.

Finding 11: Based on the Chi-square for goodness of fit test performed on the graduation data, none of the school districts had graduation rates for their special education populations which were consistent with the graduation rates for general education populations for their school districts. Although the three school districts chosen for this study were chosen because they had the three highest graduation rates for special education students receiving standard and/or advanced diplomas in the Commonwealth of Virginia during the 2009 graduation year, when compared with their general education peers, special education students are still performing below expectations for general education students. Considering all students regardless of disability have to meet 100% proficiency on state assessments measuring basic skills by 2014, this finding is problematic (U. S. Department of Education, 2001).

Finding 12: In contrast to the district Chi-square findings, two schools, F and C, had graduation rates for special education populations that were not statistically significantly unlike their general education peers.

According to research, there are six constructs which should be present in a collaborative teaching arrangement in order for it to be effective; forming the co-teacher team, scheduling practices, assigning instructional roles, allocating resources, providing ongoing professional development, and developing the co-teacher relationship. For the purposes of this study, three high schools were selected as effective based on the fact that they had the three highest graduation rates for students with disabilities in the Commonwealth of Virginia in 2009. Based on the survey responses from these schools, not all of these constructs are present in these schools as written in the research.

Implications of Findings

In order to provide students with the appropriate instruction to meet curriculum goals, students are increasingly educated in co-taught or collaborative classrooms in order to meet their special needs and to expose them to the general curriculum (Cook, 2004). One of the least restrictive environments for these students is the co-taught classroom. In order for the model to be effective in practice, building level administration must demonstrate a need and a value to the co-teaching model not only in attitude, but in everyday actions (DiPaola & Walther-Thomas, 2003). As the demands of educating special needs students in collaborative environments increase, the responsibility for educating them cannot rest on the two individuals in the classroom alone.

In the current study, despite a lack of a consistent presence of five of the six themes found in the literature which research says are necessary for an effective collaborative program, the three participating districts have the three highest graduation rates for special education students with standard and/or advanced diplomas. At first inspection, it would seem that these districts are doing well without principal involvement in the areas of scheduling, team creation, and professional development, given they are the three highest rated districts in the Commonwealth of Virginia for graduation rates for students with disabilities based on 2009 cohort data (Virginia Department of Education, 2009). Once the Chi-square goodness of fit test is performed the true gap between special education and general education performance is discovered. It is quite possible with more administrator involvement and training such as that discussed in this study and the research could create environments in which special education students begin to bridge the gap between them and their nondisabled peers' progress.

Administrator involvement cannot stop once the schedule is created or only be expected when problems arise. It is imperative that building level administrators take an active role in the collaborative classroom to ensure the education of special education students continues to improve. Based on the findings of this study, the practitioner may want to consider the following:

1. Encourage local universities to create at least one course in co-teaching of special education classes at the college level for teachers; at the very least include units of collaborative study within other classes to prepare teachers for working in collaborative classrooms.

2. Encourage local universities to create at least one course in supervising collaborative special education programs for administrators at the college level outside of special education law courses.

3. The building level administrator should have a direct interaction with the master schedule, and not leave that duty solely to a delegate.

4. The building administrator should take on a more active role in the collaborative relationship, not merely a supervisory role. This role may become more active by attending data meetings, team meetings, etc., not only becoming involved when problems arise or when a team member invites the administrator to a meeting.

5. Explore the idea of Professional Learning Communities in order to create planning time and collegiality among co-teachers and other general and special education teachers.

6. Provide professional development on an ongoing basis. Include team input as to the team's needs.

<center>Recommendation for Future Research</center>

Sheehy (2007) states there is a lack of research in reference to administrative involvement in the area of co-teaching. Administrators have to become more involved in collaborative classrooms and have to be given the tools to be more active in the education of their special needs populations. Based on the data generated in this study, there is a need for further study of administration involvement in co-teaching teaching arrangements. The recommendations for further research are:

1. A longitudinal study of the same three districts included in this study to determine program effectiveness more definitively based on more than one year of graduation data. The study conducted, when using the comparison of general education graduation rates and special education rates within the same district did raise questions of effectiveness even though the three districts chosen were the highest rated for special education graduation rates in the state.

2. A case study involving new building administrators or new collaborative teachers may prove helpful in providing insight into creating professional development for beginning administrators or co-teachers who do not get this training in their professional programs.

3. A longitudinal study on the students from the classes of the participants in this study. The outcome for the students in these settings could have much less to do with the administrators and their involvement than with the teachers they have the fortune to work with.

4. A replication of this study, but rather than using open ended surveys with electronic submission, use open ended interviews with face to face sessions for more clarification.

5. A review of teacher training programs for the extent of inclusion of each of the six themes and an investigation of the extent of preparation in co-teaching programs.

6. In light of the difference between the graduation statistics of School C and School L and their Districts, a case study of each school's collaborative program in comparison to other programs in the division to determine what aspects of their program has produced such different results.

Conclusions

This study provides information as to how school administrators can participate in the co-teaching arrangement in their building more effectively. This research identifies perceptions of the principal's role in the collaborative arrangement, which must be overcome in order for he/she to be an effective member or the collaborative team. The principal can no longer be just a building manager or a manager of resources. He/she has to be an active participant in the education of all students in the building.

This study focuses on the role of the administrator, but it is important, because of the population of students it seeks to support. As more students with disabilities are served in the general education classroom, this subgroup for Adequate Yearly Progress (Department of Education, 2006) becomes more and more important for school administrators to pay attention to, not only because of test score necessity, but also because of the unique needs that they will bring to the classroom.

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APPENDIX A

INTERNAL REVIEW BOARD APPROVAL TO CONDUCT RESEARCH

▓ VirginiaTech

Office of Research Compliance
Carmen T. Green, IRB Administrator
2000 Kraft Drive, Suite 2000 (0497)
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FWA00000572(expires 1/20/2010)
IRB # is IRB00000667

DATE:　　　January 6, 2010

MEMORANDUM

TO:　　　Theodore Creighton
　　　　　Sandra Hedrick

FROM:　　Carmen Green

SUBJECT:　**IRB Exempt Approval:**　"An Analysis of Professionals' Readiness to Supervise and Participate in Co-teaching Arrangements in Virginia Public Schools" , IRB # 09-1080

I have reviewed your request to the IRB for exemption for the above referenced project. The research falls within the exempt status, CFR 46.101(b) category(ies) 2.

Approval is granted effective as of January 6, 2010.

As an investigator of human subjects, your responsibilities include the following:

　　1.　　Report promptly proposed changes in the research protocol. The proposed changes must not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.

　　2.　　Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

cc: File

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APPENDIX B

INFORMED CONSENT FORM

Survey Consent

Sandra Hedrick
P.O. Box 1038
Urbanna, Va 23175

Dear _____:

I am the researcher on the project entitled: An Analysis of Professionals' Readiness to Supervise and Participate in Co-teaching Arrangements in Virginia Public Schools. This project is part of my doctoral work through the Department of Educational Leadership and Policy Studies at Virginia Tech. I may be contacted at (804) 693-1494 or shedrick@gc.k12.va.us if you should have any questions.

Thank you for your willingness to participate in this research project. Your participation is very important to my doctoral studies and is very much appreciated. Before completion of the survey, I would like to reassure you that as a participant in this project, you have several definite rights:

1) Your participation in this survey is completely voluntary.
2) You are free to refuse to answer any question on the survey.
3) You are free to withdraw from the project at any time.
4) This survey will be kept completely confidential, and will only be available to myself and dissertation chair.

Excerpts of this survey may be made part of the final research report, but under no circumstances will your name or identifying characteristics be included in this report.

I would be grateful if you would sign this form to acknowledge you have been provided your rights as a participant and that you are choosing to participate in this project. If you do agree to participate, please complete the enclosed survey and one copy of the signed consent form and return in the enclosed postpaid return envelope.

_____ Signed

_____ Printed   _____ Dated

I would be glad to provide you with a final copy of the dissertation document.
If you would like a copy, please provide your mailing address below.

APPENDIX C

CO-TEACHER SURVEY

Co-Teacher Survey

1) How was the collaborative teaching team you are participating in selected?
   - Was this team created by the principal, or a delegate?
   - Did you volunteer, or were collaborative teachers chosen from all teachers?

2) How was the schedule created?
   - How often do collaborative teachers have the opportunity to plan together based on the schedule?
   - What is the duty load for special education teachers versus general education teachers?

3) How are roles in the collaborative classroom delineated?
   - What is the principal's role in the collaborative process?
   - How do collaborative participants (including the principal) handle conflicts which arise?

4) Do you have special education assistants in your school? If yes, how are they assigned?
   - How are special education aides used in the collaborative classroom?
   - When resources are requested, are they received for the collaborative classroom?

5) Did you participate in any professional development related to co-teaching prior to participating in the model?
   - After creation of the team, how often does the collaborative team participate in professional development directly related to the co-teaching model?
   - Was the professional development you participated in (if any) helpful in your participation in the co-teaching model?

6) Do you feel that you can raise questions or make suggestions in the collaborative situation in which you are working?
   - What is the principal's role in the collaborative relationship both in and out of the classroom?
   - What steps have been taken to build the co-teacher relationship?

7) Where did you complete your professional licensure program?

8) Do you feel as your professional program prepared you for participating in co-teaching programs?

9) Did your professional licensure program address any of the questions and/or answers included in this survey? Please explain, and include any specific examples.

APPENDIX D

PRINCIPAL SURVEY

Principal Survey

1) How are the collaborative teaching teams in your school selected?
   - Were these teams created by the principal, or a delegate?
   - Did teachers volunteer, or were collaborative teachers chosen from all teachers?

2) How was the master schedule created?
   - How often do collaborative teachers have the opportunity to plan together based on the schedule?
   - What is the duty load for special education teachers versus general education teachers?

3) How are roles in the collaborative classroom delineated?
   - What is the principal's role in the collaborative process?
   - How do collaborative participants (including the principal) handle conflicts which arise?

4) Do you have special education assistants in your school? If yes, how are they assigned?
   - How are special education aides used in the collaborative classroom?
   - When resources are requested, are they provided for the collaborative classroom?

5) Did you or your teachers participate in any professional development related to co-teaching prior to participating in the collaborative model?
   - How often do members of the collaborative team participate in professional development directly related to the co-teaching model?
   - Was the professional development you and/or your teachers participated in (if any) helpful in your participation in the co-teaching model?

6) Do you feel that members of the collaborative team can raise questions or make suggestions in the co-teaching situation in which they are working?
   - What is the principal's role in the collaborative relationship both in and out of the classroom?
   - What steps have been taken to build the co-teacher relationship?

7) Where did you complete your professional licensure program?

8) Do you feel as your professional program prepared you for supervising co-teaching programs? Explain why or why not.

9) Did your professional licensure program address any of the questions and/or answers included in this survey? Please explain.

10) Do you feel your special education teachers and general education teachers were prepared for their positions as special education teachers and general education teachers when they began their position? Please explain.