

PREPARING SPECIAL EDUCATORS FOR COLLABORATION IN THE CLASSROOM: PRE-SERVICE TEACHERS' BELIEFS AND PERSPECTIVES

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Inclusion of students with disabilities in general education classrooms and programs continues to be a focus in the international field of special education. In the USA where the history of inclusion is over three decades old, current special educator's professional standards clearly expect that certified special educators will enter the field with adept collaboration and co-teaching skills in order to optimize services for students with disabilities in inclusive settings. Coursework in collaboration for pre-service special educators is a common mechanism for providing this training within the United States (McKenzie, 2009). This qualitative case study (n=12) conducted over a semester of coursework on collaboration in a distance education format utilized grounded theory, through document analysis and interviewing (n=5), to build a better understanding of pre-service special educators' perceptions and beliefs about collaborating with general educator partners in school settings. Five themes emerged from over 300 participant quotations: 1) definitions of collaboration, 2) outcomes of collaboration, 3) collaborative behaviors between teachers, 4) challenges to collaboration, and 5) preparedness to collaborate. These pre-service special educators most often commented on the challenges they experienced in school settings. Implications for teacher education programs worldwide and future research are discussed.

A global movement towards inclusion of students with disabilities in typical classrooms and schools has intensified focus on skills teachers need to meet the unique demands of this challenging equal educational opportunity. Diverse countries such as Canada (Jordan, Schwartz, & McGhie-Richmond, 2009; Philpott, Furey, & Penney, 2010), Trinidad (Johnstone, 2010), and Turkey (Gurgur & Uzuner, 2011) are identifying the strengths and weaknesses of their respective teaching forces and the necessary supports, including teacher training, for effective collaboration between special educators and general educators. Collaboration, the interaction style between school professionals, is defined as two or more equally certified or licensed professionals implementing shared teaching, decision-making, goal setting, and accountability for a diverse student body (Friend & Cook, 2009). Collaboration, though often represented as synonymous with co-teaching, rather includes co-teaching as one subset of skills needed to effectively and jointly educate students with disabilities in twenty-first century schools. Collaboration between special and general educators has been a key topic in education in the United States since the early 1970's when seminal legislation for students with disabilities mandated considering least restrictive environment in which students with disabilities would receive their education in an environment as close to their non-disabled peers as possible while still experiencing academic success, and not in separate classrooms or schools as was traditionally considered the appropriate setting for all students with disabilities. Since that time, discourse on collaboration between general and special educators including the workings of this professional partnership, the impact on professional roles and responsibilities, and the affect on student achievement has permeated special education literature (e.g., Cook & Friend, 1995; Keefe & Moore, 2004; Mastropieri, Scruggs, Graetz, Norland, Gardizi, & McDuffie, 2005; Murawski & Swanson, 2001; Nevin, Cramer, Voigt, & Salazar, 2008; Rea & Connell, 2005; Rea, McLaughlin, & Walther-Thomas, 2002; Scruggs, Mastropieri, & McDuffie, 2007).

Recent national policy in the USA, specifically, the re-authorization of The Individuals with Disabilities Education Improvement Act (IDEA, 2004) regulations (which serve as the blueprint for the delivery of special education services in USA public and private schools) continued to delineate what should be considered when determining each students' appropriate *least restrictive environment*. Currently, considering *least restrictive environment* for students with disabilities in the United States requires considering students' full participation in the general education curriculum delivered in the general education classroom and then considering more segregated settings only after it is determined that the student is not successful in the general education curriculum and classroom without more restrictive supports or specialized instruction (Office of Special Education Programs, 2006, sec. 614). In addition, high stakes testing and increased teacher accountability, requirements embedded in the No Child Left Behind Act (NCLB; U.S. Department of Education, [USDOE], 2002), resulted in more students with disabilities receiving their instruction in the general education class (Turner, 2003). According to the 29th annual report to congress on IDEA implementation during the 2007 school year, 54% of students with disabilities (ages 6-21) received instruction in general education settings for 80% of the day (United States Department of Education, 2010). Thus, twenty-first century classrooms have become epicenters for collaboration between special educators, general educators, related service professionals, and other school support personnel.

In addition to public policy, professional teaching standards have emphasized effective collaboration as a vital skill and knowledge domain in teaching. *What Every Special Educator Must Know: Ethics, Standards, and Guidelines for Special Educators* (2009), the Council for Exceptional Children's guidelines for preparing professional special educators worldwide included collaboration as a stand alone domain area in which special educators should show competence prior to entering the teaching field. These standards provide guidance in *developing and revising policy and procedures for program accreditation, entry-level certification, professional practice, and continuing professional growth* (p.11). According to the Council for Exceptional Children, collaboration as a professional practice includes multiple partners such as parents, teachers, related service providers, and outside community agencies. By working in tandem with these partners in a culturally responsive manner, *special educators are viewed as specialists by a myriad of people who actively seek their collaboration to effectively include and teach individuals with exceptional learning needs* (p.48). Furthermore, indicators of a special educator with strong collaboration skills include: a) modeling strategies for consultation and collaboration, b) building respectful and positive relationships with professionals, c) coordinating the inclusion of students with disabilities into a variety of school settings, and d) using co-teaching methods to increase student achievement in the classroom. Additionally, the National Board for Professional Teaching Standards *What Teachers Should Know and Be Able to Do* (2007) specifically addresses the necessity of collaboration between special educators and general educators due to increased inclusion in schools. Finally, the National Council for Accreditation of Teacher Education (NCATE, 2007), the professional accrediting body for teacher preparation programs throughout the USA, includes standards on teacher preparation programs evidence of providing the pedagogical and professional knowledge and skills required by teacher candidates in all professional settings: *They have a thorough understanding of the school, family, and community contexts in which they work, and they collaborate with the professional community to create meaningful learning experiences for all students* (NCATE, Standard 1c).

However, teacher preparation programs which are beholden to the aforementioned standards are often faulted for insufficient training in collaboration skills for special educators (Austin, 2001; Billingsley, 2004; Cook & Friend, 1995; Deiker, 2001; Friend, 2000; Greene & Isaacs, 1999; Keefe & Moore, 2004; Keefe, Moore, & Duff, 2004; Laframboise, Epanchin, Colucci, & Hocutt, 2004; Lovingfoss, Eddy, Molloy, Harris, & Graham, 2001; McKenzie, 2009; Otis-Wilborn, Winn, Griffin & Kilgore, 2005; Turner, 2003). Researchers have proposed that teacher education programs fail to equip special educators with the unique skills necessary for co-teaching (e.g. Alvarez & Daniel, 2008; Austin, 2001; Keefe & Moore, 2004). Colleges have been accused of a *do as we say, not as we do* attitude toward teaching instructional and behavioral techniques for the inclusive classroom (Greene & Isaacs; Kluth & Straut, 2003). In addition, programs often perpetuate the phenomena of segregated disciplinary roles and isolated practice (Bullock, Park, & Snow, 2002; Cook & Friend, 1995; Greene & Isaacs; Quinlan, 1998; McKenzie, 2009). According to Otis-Wilborn et al., 2005, teacher education failed to deliver *strategies for clarifying roles and building collaborations in formal and informal ways with general education teachers* (p.149). These programs produce teachers bound for professional placements feeling unprepared and inexperienced (Keefe & Moore, 2004; Thompson, 2001). Conversely, possessing developed collaboration skills may support the induction and retention of special educators in the field

(Billingsley, 2004). Special educators who feel prepared for the complexities of collaboration in their daily career may avoid being overwhelmed by these demands.

Suggestions for teacher education program reforms include the common thread of building better collaboration skills not just for special educators, but for general educators as well. Repeatedly, researchers called for higher education to initiate changes resulting in successful collaboration skills (e.g., French & Chopra, 2006; Griffin & Pugach, 2007; Thousand, Villa, & Nevin, 2006; Villa, Thousand, & Chapple, 1996). Specifically, the proposed solutions for this dilemma included: (a) integrated programs with other disciplines such as elementary education, school psychology, or a specific content area (Griffin & Pugach, 2007; Miller & Stayton, 2006; Otis-Wilborn et al., 2005; Turner, 2003); (b) classes designed to teach collaboration skills (Arthaud et al., 2007; Austin, 2001; Lovingfoss et al., 2001; McKenzie, 2009); (c) co-teaching during practica or student teaching (Alvarez & Daniel, 2008; Van Laarhoven et al., 2007; Wilson Kamens, 2007); and (d) modeling co-teaching in the higher education classroom (Bakken et al., 1998; Cook & Friend, 1995; Duchardt, Marlow, Inman, Christensen, & Reeves, 1999; Greene & Isaacs, 1999; Kluth & Straut, 2003; Miller & Stayton, 2006; Waters & Burcoff, 2007).

Although coursework in collaboration is recommended, there is scant research on how pre-service special educators view their collaboration skills while completing coursework and prior to entering the teaching field (Bradley & Monda-Amaya, 2005; Gallagher, Vail, & Monda-Amaya, 2008). Without building this knowledge, it continues to be difficult to assess how coursework, as a mechanism for preparing special educators in collaborative skills and knowledge, influences pre-service teachers' beliefs and practices. A better understanding of preservice teachers' experiences with collaboration may provide valuable information on relevant content, activities, and assignments that focus on collaboration between school professionals.

Method

The purpose of this study was to gain further understanding of pre-service teachers' beliefs and perceptions about collaboration between special educators and general educators while completing coursework on collaboration and in their future professional practice. Due to the descriptive nature of the research questions asked, a qualitative case study design was used. The research questions were:

1. What are pre-service special educators' beliefs and perceptions about collaboration as a professional practice?
2. What challenges do pre-service special educators report as obstructing collaboration in their school environments?
3. After completing coursework in collaboration, how prepared to collaborate do these educators feel?

Context of the Study

Pre-service special educators were beginning their second and final year of a distance education undergraduate degree program in special education at a large southeastern university in the United States. The course on collaboration was designed to cover the wide array of collaboration that occurs in schools. Requirements for the distance education course matched the face-to-face version. Participants were concurrently spending approximately 20 or more hours a week as part of their practicum requirement. The 13 objectives in the course syllabus are aligned with professional preparation standards outlined in *What Every Special Educator should Know and Do* (Council for Exceptional Children, 2009). Course objectives cover: (a) the history and theory behind collaboration, (b) communication skills for working with families and professionals, (c) relationship building with families, (d) ethical practices, (e) team roles and responsibilities in planning an individualized education plan, and (f) collaborative teaching techniques including instructional delivery, planning, and assessment. Assignments for the course included attending a school team meeting, periodic reflective journal entries, and interviewing a parent of a child with a disability.

Participants

Purposeful sampling was used. Twelve participants volunteered: 11 females and one male. All participants agreed to submit their assignments for analysis, and five agreed to conduct a post-course interview. The gender breakdown reflects the overall breakdown of men (12%) to women (88%) in this distance education undergraduate special education program. Participants' ages ranged from 24 to 55 years. All of the participants could be considered nontraditional undergraduates (National Center for

Educational Statistics, 2003). The majority of participants currently worked as paraprofessionals; the target population of this federally funded grant program for teacher certification through distance education in special education. The remaining participants completed their field placement through a practicum arrangement. Three participants worked in elementary settings, four worked in middle schools, and five worked in high schools. Fifty-eight percent worked in urban school districts while 42% worked in rural districts.

Participants reported working in a variety of special education program models. Four participants taught in a co-taught/collaborative classroom, four taught in a resource setting, three worked in an inclusion class, and one participant taught in a self-contained class. Therefore this sample offered a diverse range of educational experiences (e.g. elementary, middle, and high school) in a variety of program settings (e.g. co-taught, resource, self-contained) within diverse school districts.

Data Collection

Multiple data collection methods were used during the semester. Documents collected for the study included: reflective journals (5 per participants), a team meeting observation assignment, and a parent interview assignment. The semi-structured post-course interview protocol consisted of questions about participants' perceptions of collaboration, their beliefs of their self-efficacy in collaboration; and attitudes about experiences with collaboration now and in the future. Interview transcripts from five interviews lasting 21-46 minutes were analyzed. Prior to data-analysis, transcripts were given to participants for member checking (Brantlinger et al., 2005; Marshall and Rossman, 2006).

Data Analysis

Data were analyzed using a seven-phased inductive approach (Marshall & Rossman, 2006). For each piece of data, initial coding consisted of creating *in vivo* codes, or codes containing verbatim utterances from participants. These were then reviewed and compared across multiple pieces of data and multiple sources resulting in the identification of themes on collaboration for these pre-service teachers. Coding was checked for substantive significance (Patton, 2002) and triangulation across participants and documents before final themes were determined.

Findings

Data analysis of 84 assignments and interviews revealed five themes related to collaboration among teachers: (a) defining collaboration, (b) outcomes of collaboration, (c) collaborative behaviors among teachers, (d) challenges to collaboration, and (e) preparedness to collaborate. Contained within themes were data categories as shown in Table 1 that more precisely describe commonalities from the data. The most salient categories will be discussed.

Defining Collaboration

How someone defines collaboration suggests their beliefs about collaboration as a professional skill and their expectations of how collaboration should work. Participants primarily defined collaboration in one of two ways a) as people coming together to resolve differences or b) as people working together towards a common goal. The participants who described collaboration as *blending differences* expected that collaboration would include different ideas and opinions. For example, Angela wrote, *Often times, you will have to bring your different opinions together in order to make a decision about something. Sharing these ideas and coming up with something that works for everyone is a great example of collaboration at work.* Lillian commented, *Each teacher who sees a particular student may see different facets of his/her personality, different strengths and weaknesses and different ways to reach him or her.*

Secondly, some gave *working together* as the definition of collaboration. Anne stated, *To me, collaboration is when two or more people work together towards a common goal, by sharing ideas with each other that could be used to assist them in reaching their particular goal.* Rhonda provided a school example to illustrate her definition of collaboration: *I work with several teachers at school to help our students understand concepts being taught and helping student reach their goals. We work as a team to accomplish this.* In contrast with the category *blending differences*, these participants' definitions described collaboration as people who are in agreement or are on the proverbially *same page* with each other about a decision. These definitions did not suggest differences of opinions sorted out by collaboration.

Table 1 Themes and Categories about Collaboration

Code Theme	Categories Included	Frequency
Definitions of collaboration	Working together	21
	Blending differences	11
	Collaboration is common	9
Outcomes of collaboration	Positive outcomes	21
	Student success	19
	Extra attention	6
Collaborative behavior between teachers	Shared professional responsibility	29
	Co-teaching models	20
	Teacher behaviors	13
	Shared planning	10
	Shared resources	9
Challenges to collaboration	Power	44
	One teach one assist	25
	School-wide recognition of collaboration	17
	Time/schedule	12
	Failure to share responsibility	9
Preparedness	Belief in performance	30
	Critical look at collaboration	29
	Coursework	14

Outcomes of Collaboration

When individuals combine their knowledge and expertise, a positive and pleasant learning environment will be created for all to learn and be successful in the school setting. (Tanya)

Participants believed that *student success* was achieved through collaboration. Anne wrote, *The better the collaboration is among its members, the more successful the school district. Furthermore, the students will be more successful.* Tanya declared, *Collaboration should be a process of giving and taking for a child to learn and succeed academically.*

Besides student success, participants believed that collaboration meant *greater academic assistance* for students in the classroom. Two teachers could deliver more individualized support to an individual student in their classroom. Roger commented, *More students are reached and given the free appropriate education they deserve. Students that are not reading at grade level or students having a difficult time with the school life are helped.* Isabelle wrote, *In a collaboration classroom the students have not one teacher but two teachers to ask for assistance.*

Collaborative Behavior between Teachers

Participants described teachers' behaviors in school settings that to them exemplified positive effective collaboration. Participants voiced that teachers and other school professionals who were collaborating did so by *sharing professional responsibility*. This category included descriptions of teachers making commitments: to jointly educate students, to jointly prepare and present information on students in meetings, and to jointly uphold each teacher's unique responsibilities for a student. Participant quotes suggested that with shared professional responsibility students with disabilities belong to both teachers. For example, Angela, when discussing her own performance in the classroom stated, *I work in three different inclusion classes during the day, and in all three classes there is rarely a time when I can sit down. Both teachers are constantly helping students.* Tanya's journal entry included a classroom exemplar of sharing professional responsibility:

One teacher was going over the vocabulary words that were on the board. The other teacher made sure the students were writing the terms and knew how to pronounce and define each term. The special education teacher could break the terms down so that the special needs students could understand the work. The teachers also distributed graphic organizers to the students that had problems with writing. Both teachers cared about all of the students.

Participants also noted that shared professional responsibility was at work when teachers met informally to problem solve about a student or when they met in a more formal context such as an IEP meeting. Shared professional responsibility for students was considered a positive representation of collaborative

behavior between teachers.

The majority of the participants reported that *co-teaching models* were in use as the primary instructional delivery model in their settings. Comments described observing and utilizing four co-teaching models with general educators in classrooms settings. The most common co-teaching model reported, one teach-one assist, was associated with challenges in the collaborative partnership between teachers and therefore will be discussed under that theme. Participants reported seeing: a) parallel teaching, where the group of students are split and taught the same content; b) one teach and one remediate, where one teacher provides main instruction and one provides individualized help; and c) team teaching, where both teachers are actively teaching and supporting throughout the lesson. Participant comments on these models focused on classroom examples. Roger wrote, *The special education and regular education teacher are actively involved in the co-teaching model. They decide what strategies to use and who will teach each part of a lesson. Some days involve flip flopping each period on who's teaching.* Tanya reported seeing, *One such good partnership was in a biology classroom; a regular education and special education teacher were working together. The two teachers taught like wrestlers. They worked like a tag team.*

An additional positive tenet of collaboration was identified as teachers who *shared planning time and resources* in order to educate students. Participants wrote of teachers swapping instructional activities, and mapping curriculum as a collaborative effort. One participant noted that she provided her general education partner materials for a student behavior plan. Angela commented on the outcome of shared planning and resources: *Since the general education and special education teachers plan together on a weekly basis, it eliminates the possibility of the special education teacher feeling like an outsider or intruder in the general ed [sic] teacher's classroom.*

Challenges to Collaboration between Teachers

This theme contained the highest number of quotes from participants. Increased reference to challenges may have been influenced by course assignment guidelines in which participants were ask to think critically about collaboration in their schools. The participants witnessed some challenging situations while other situations directly involved the participant as a collaborator. The most salient categories under this theme were: power, one teach-one assist, and school-wide recognition of collaboration.

With increased collaboration in schools and higher percentages of teachers co-teaching, teachers now experience different *power* dynamics in the classroom. This category of codes describes participants' reactions to unequal power between teachers. Frequently, participants described co-teaching arrangements where power was a problem. Gail reported on a co-teaching pair she witnessed:

From what I have observed, the general education teacher is the primary teacher, and the co-teacher tries to step in and help explain to the students different ways to measure angles, and chimes in to help answer questions, etc. The general education teacher is obviously bothered and somewhat *put out* by the co-teacher. As a matter of fact, four or five weeks ago, she pulled him aside and told him that he was being much too loud in her classroom. Furthermore, she mentioned to him that he needed to be quiet during her lecture. He was highly offended by her remarks, and went and sat in the back row of the classroom.

Teachers who were not willing to relinquish power and control were seen as very difficult to collaborate with. Diana reported, *She (the general education teacher) definitely demonstrated it was a big power thing. She didn't like the fact that I wanted to go in there and teach the class.* Lastly, Mary Ann offered her opinion on this challenge: *It (co-teaching) is more about a power play and showing who has more control than the other one. Power and control is not why I want to be a teacher.*

Next, participants' descriptions highlighted challenges of the co-teaching model, *one teach- one assist*. Typically in this model, the general educator provided the majority of instruction while the special educator assisted students. For example, Angela wrote, *Co-teaching means that two teachers work together as two teachers in one classroom, not a teacher and a secretary.* Overall participants expressed dislike for the one teach- one assist model of co-teaching that they witnessed and participated in at their schools. Some reported that this was the most prominent model in their school such as Lillian who said, *What they call co-teaching is basically either using the special education teacher as a paraprofessional or using the special education teacher to run from one class to another.*

Finally, participants reported that when *school recognition of collaboration* was lacking, the ability to collaborate was challenged. This challenge included the administration having a narrow view of collaboration, such as accepting the one teach one assist model of co-teaching as the primary model of instructional delivery in co-taught classrooms. Mary Ann commented on this challenge: *At the school I work at I often here [sic] the term inclusion/collaboration but I do not feel that is being done the way I have been taught... and read about in different textbooks and articles.*

Preparedness to Collaborate

According to Bandura (1997) self-efficacy is a social cognitive theory that posits that a person's belief in their performance influences their actual performance and their ability to attain certain outcomes. These beliefs influence a person's course of action and their perseverance when faced with challenges. It is a relationship between belief of performance and attainment of desired outcome. Those who believe they will be successful are successful; as are they more determined, more resourceful, and less discouraged (Bandura). For collaboration in particular, participants' *belief in their collaborative skills* helps to situate the learning they did in their coursework and their school settings.

In this category quotations from participants described their personal evaluation of their performance during a collaborative event in their school setting. The evaluation was most often positive in nature and connected to an experience where the participant was satisfied with the outcome of the collaboration. Ten out of 12 participants noted their beliefs in their performance at least one time throughout their coursework, and several included their beliefs in their ability to collaborate across multiple assignments. Several participants commented on their performance within a formal meeting. For example, Rhonda wrote, *It was good that I attended this meeting because I played an active role in the decision making process.* In addition, Barbara said, *I was able to be an active participant of this meeting when she (the mother) brought her concern about the lunch line.*

Participants remarked on instances where their experiences led to better collaboration. When describing a co-teaching situation in which the participant and the general education teacher were struggling to work together, Roger noted his course of action: *After a couple of days with no improvement, I decided to use the valuable information I learned in my college textbook and put consultation service to work. Later in his writing, Roger commented that, having this experience gave me a great deal of confidence in the collaboration process.*

Not all participants' personal evaluations were positive. After an intensive meeting with parents where the parents and school expectations did not match, Rhonda felt defeated by the collaboration process: *Looking back at the meeting, I felt as though all of us failed the child. We gave into the parents' demands.* Anne described a situation in which while acting as a paraprofessional in the special education teacher's classroom, she was subjected to aggressive arguments from the lead teacher in the room. She chronicled a pattern of behavior in which when frustrated the teacher would yell at her and at students. In thinking back on her behavior, Anne is clearly disappointed in her collaborative performance, *I was wrong for not taking the proper steps to confront the conflict occurring in the classroom. I should have demanded respect for myself and the students; instead I engaged in avoidance.*

Discussion

Findings suggested differences in how these pre-service special educators defined collaboration. The distinction becomes interesting when considering the number of challenges between collaborative members that participants identified. If conflict within collaboration is seen as negating collaborative efforts, then participants are at risk of taking an unrealistic definition of collaboration into the school environment. Friend and Cook (2009) warn, *both conflict and resistance are natural occurrences in collaboration, but depending on your response to them, they can either enhance collaboration or impede it* (p.290).

According to these pre-service educators, collaboration between teachers led to increased student success. In addition, when a general education teacher and a special education teacher worked together, more individualized instruction and increased academic support were provided. Although participants' expressed the belief in collaboration to produce this outcome, they made few references to specific instances in which a collaborative teaching team made instructional modifications or provided additional assistance to students. More importantly, the evaluation of student success was never mentioned in their writings. In other words, these pre-service teachers believe that collaboration produces increased student success but are not reporting evidence that this outcome occurs, or that it is being measured at their

schools. Murawski and Swanson's (2001) meta-analysis of co-teaching yielded little evidence of co-teaching increasing student success. With special education demanding evidence-based practices to be used in classrooms, it remains unknown as to whether collaboration between teachers, often demonstrated through co-teaching, affects student achievement.

Perspectives of collaborative behavior between teachers partially coincided with Friend and Cook's (2009) defining characteristics of collaboration: a) collaboration is based on mutual goals, b) collaboration depends on shared responsibility, c) collaborative partners share resources, and d) collaboration includes shared accountability for students (pp. 9-11). Participants felt that collaboration occurred when teachers performed behaviors such as sharing resources and professional responsibility in order to teach all students. However, Friend and Cook's first tenet of collaboration, that it is voluntary, was not identified as part of the collaborative paradigm by participants. This may be due to the role these pre-service educators played at their school, either acting as paraprofessionals or as student interns, which may not have allowed them access to how collaborative partnerships emerged. The research has emphasized that voluntary collaboration, particularly with co-teaching, is fundamental to the success of the partnership (Mastropieri et al., 2005; Scruggs et al., 2007).

Most frequently noted in assignments and interviews, were challenges to collaboration. When discussing collaboration between teachers, the unwillingness of two teachers to share space, instructional responsibilities, and students was seen as representing a power struggle among the educators. Some general education teachers were presented as demanding that special educators assume a submissive or *back seat* role in class. Difficulties in negotiating power within the co-teaching relationship are well documented (e.g. Keefe et al., 2004; Mastropieri et al., 2005; Walsh & Jones, 2004). In addition, participants saw that the overuse of the one teach-one assist model of co-teaching perpetuated the power differential between general educators and special educators. Based on their reactions, it may be prudent to remove this model from the co-teaching paradigm, instead focusing on models that by the very nature of the environmental arrangement suggest a more equal power dynamic. For example, in parallel teaching, each teacher takes a heterogeneous group of students and teaches the same content to their group. This requires active teaching and preparation for both co-teachers.

Finally, participants reported that after completing coursework they felt prepared to collaborate and confident in their ability to do so in the future. They reported positive self-efficacy beliefs around collaboration. Reflecting about collaboration resulted in their being more aware of the collaboration around them, and more apt at critically assessing collaborative work. These findings support that coursework in collaboration prepares pre-service teachers for the collaborative aspects of their profession. Yet, due to these participants providing vague and general answers about the skills they learned throughout the course and applied in their school settings, this interpretation should be cautiously adopted. Rarely mentioned by participants were any of the specific nuanced skills necessary for effective collaboration (i.e. problem solving models, conflict resolution, and meeting agendas).

Limitations

Generalizability of the findings reported here is limited by the unique small sample and focused geographical location (i.e. southeastern United States). However, this limitation was minimized by participants' varied placements along the continuum of special education service delivery models, grade levels, and classification of school district (i.e. urban). This research provides a specific building block to the greater understanding of collaboration as a professional practice of special educators. Case studies can be considered as a whole to develop consistent themes or ideas about a topic (Flyvberg, 2006) and generalizability is achieved when readers for whom the topic is of interest are offered a detailed description of the findings as those reported herein (Merriam, 2002). A second limitation was my dual role as both instructor of the course and researcher of this study. Although my students were guaranteed verbally and in writing that their responses would in no way affect their performance in the class, my holding this position of power may have caused students to be more guarded and less candid in their responses. This was minimized through the use of grading rubrics and member checking.

Implications for Practice and Research

The research questions answered here may be of particular importance to countries newly including students with disabilities in typical school settings for example, Cyprus (Bekirogullari, Soyturk, & Gulsen, 2011), and currently developing policies for training and teacher preparation. First, teacher preparation in special education should provide training in both the pedagogical knowledge around collaboration and the pedagogical skills necessary to collaborate. Second, the design of collaborative

training should be considered carefully. Recommendations from the literature include a growing research base on collaborative cohorts of general and special pre-service educators who complete coursework and field placements in matched pairs (Griffin & Pugach, 2007; Van Laarhoven et al., 2006; Ross, Stafford, Church-Pupke, & Bondy, 2006; Smith, Frey, & Tollefson, 2003; Villa, Thousand, & Chapple, 1996; Kamen, 2007). Van Laarhoven et al., (2006) used both a shared curriculum as well as shared field experiences for 84 special education and general education students, and compared their experiences to a control group of student teachers taking course work alone. Longitudinal outcomes favored the group of teachers who had completed field experience and practiced planning and presenting a co-taught lesson. These teachers reported feeling that the training they received improved their ability to collaborate with other school professionals. Using this type of model for the training of collaboration may promote the learning of the nuanced collaborative skills that these participants did not discuss after coursework alone.

Third, the content of the training should be considered. These participants' overwhelming representation of challenging experiences in collaboration highlight the need for teacher preparation to focus on conflict and its resolution as a key skill when collaborating with other school professionals (Bradley & Monda-Amaya, 2005; Gallagher et al., 2008). Power struggles in the classroom between teachers were strongly implicated as a challenge to collaboration. Disagreements were seen as detrimental to collaborative practices, and not as a naturally occurring part of collaborative events. Participants rarely reported constructive conflicts in which, *a problem is solved, when the relationship among those involved is strengthened, and when the people involved increase in their ability to resolve conflicts in the future* (Villa, Thousand, & Nevin, 2004, p.98).

Lastly, coursework on collaboration should emphasize positive student outcomes as the result of collaboration between school professionals and between schools and families. Educators' beliefs that collaboration, and specifically co-teaching, is beneficial to the students does support inclusion of students with disabilities in the general education classroom. Teachers must be trained on how to document students' academic and behavioral progress so that the effects of their collaboration are empirically noted. Models of student progress monitoring emerging from the Response to Intervention initiative could be used to document the affect of teacher behavior on student growth. Activities and assignments should be designed wherein the types of instructional strategies, adaptations to curriculum, and use of accommodations are paired with ongoing data collection. Collaboration skills training needs to expand to consider the collection and use of data in planning instruction and designing materials by both special educator and general educator, as well as the sharing of this information with parents.

Lastly, this study explored the link between pre-service special educators' experiences with collaboration and their perceived self-efficacy of future professional practice. Expanded research on the construct of teacher efficacy should include collaborative behaviors and scenarios between teachers. Gibson and Dembo (1984) found that teacher beliefs in their ability to promote learning in students despite mitigating challenges conformed to Bandura's (1977) theory of self-efficacy. Teachers who believe they have the skills to promote positive learning experiences structure their classrooms differently than teachers who have low efficacy beliefs (Allinder, 1994; Gibson & Dembo, 1984, 1985) and are less susceptible to teacher burnout (Brouwers & Tomic, 1999). Evidence shows that teachers with high efficacy rates have better performing students (Bandura, 1997). Teacher efficacy has traditionally been examined using rating scales developed around student-centered events. Bandura (1997) recommended, *the assessment of teachers' perceived efficacy should be broadened to gauge its multifaceted nature* (p. 243). New developments in measuring this construct which include statements regarding teachers' beliefs in their collaborative skills would succeed in diversifying the many roles and responsibilities of a teacher in today's classroom and provide a more comprehensive view of this social learning construct. The findings presented here could aid in the construction of such a measure.

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