

# **Improving Pre-Service Middle School Teachers' Confidence, Competence, and Commitment to Co-Teaching in Inclusive Classrooms**

**By Toni Strieker, Bryan Gillis, & Guichun Zong**

## **Introduction**

The ability of university based teacher education programs in the United States to produce competent educators who are ready to meet the challenges of 21st century schooling has been closely scrutinized and hotly debated in recent years (Lewin, 2011). Teacher education currently faces an urgent responsibility to transform its curriculum, pedagogy, structure, and delivery to better prepare pre-service teachers to negotiate the changing landscape in educational policies and practices that influence K–12 classrooms (Boyle-Baise & McIntyre, 2008; Darling-Hammond, 2010; Fullerton & Ruben, 2011; Grossman & McDonald, 2008). According to Hulett (2009), one of the major changes has been the redefining of both general educators' and special educators' roles as a result of legislative mandates such as The Individuals with Disabilities Education Act (IDEA) and the No Child Left Behind

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### *Pre-Service Middle School Co-Teaching*

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Act (NCLB). To effectively teach large numbers of students with disabilities in inclusive classrooms, content teachers and special education teachers must face the reality and challenge of developing effective partnerships that provide equitable instruction and increase the performance outcomes for all students.

According to Grant and Gillette (2006) and Shamberger (2010), classroom teachers often lack the necessary knowledge and skills to deliver instruction effectively to a diverse group, particularly when faced with teaching students with disabilities in the general education classroom and curriculum. One of the skills that classroom teachers often lack is the ability to collaborate. In 2008, Paulsen reported that classroom teachers do not have the collaborative skills necessary to improve learning for diverse students through interaction with their professional colleagues, families, and community members. To address this obvious disconnect between teacher preparation and the reality of teaching in P-12 schools, scholars in teacher education have recommended co-teaching as a viable solution because it partners teachers who possess content knowledge with those with expertise in special education (Bauwens, Hourcade, & Friend, 1989). As early as 1995, Cook and Friend defined co-teaching as two or more certified professionals delivering instruction to a heterogeneous group of students in a single classroom or space. According to Friend (2011), co-teaching generally extends to co-planning, co-assessment and co-instruction. In terms of co-instruction, Friend describes six different models: one-teach/one assist, one teach/one observe, station teaching, parallel teaching, alternative teaching and team teaching.

Since its inception, co-teaching has evolved into one of the most widely used approaches for providing students with disabilities with access to the state-approved curriculum in the general education classroom. With the implementation of NCLB in 2001 and IDEA in 2004, the expectation for general classroom and special education teachers to co-teach has increased substantially (National Center for Educational Statistics, 2008). However, the increased popularity has not led to increased understanding and effective execution of the practice. In 2008, Friend reported that even when teachers are highly experienced, co-teaching is more difficult than it appears. Thus, it is not surprising that these difficulties are compounded when pre-service teachers are required to co-teach as they simultaneously develop the basic pedagogical skills requisite to effectively plan, deliver, and evaluate content area lessons effectively. Pre-service teachers obviously need systematic preparation in order to understand the theory and practice of co-teaching.

In response to this need, teacher educators have begun to explore creative ways to model collaboration and integrate co-teaching into their undergraduate programs. An emerging body of professional literature documents various efforts to restructure teacher preparation programs, curriculum, and pedagogy to prepare pre-service teachers in general education and special education with the knowledge, skills and dispositions to assume the responsibilities of co-teaching (Alvarez-McHatton & Daniels, 2008; Arndt & Liles, 2010; Fullerton & Ruben, 2011; Parker,

Alvarez-McHatton, Allen & Rosa, 2010). Based upon their comprehensive review of collaborative teacher education, Brownell, Leko, Kamman, and King (2008) argue that although various practices and programs have grown in number over the past two decades, there is still not enough information to assess the impact of these changes on the preparation of inclusive teachers. Pugach (2005) concurred, stating “Outcomes of this high level teacher education activity to prepare general education teachers to work with students with disabilities, however, are not as well documented” (p. 552).

To sum, whereas there is a plethora of literature that describes what co-teaching is and the importance of this policy initiative, the research base on the effectiveness of co-teaching and preparation of general education teachers for the task has been inadequate. Very little is known about the complex nature of developing content teachers’ ability to collaborate with special education teachers in a co-teaching environment as a means to improve learning and achievement for all learners. Therefore, the broad intent of this study is twofold. First, we briefly describe our systematic approach that includes interactive seminars, field-based observations and interviews, reflections, and debriefings. Second, we report our findings of a four-year study on the effectiveness of our systematic approach to improve pre-service teachers’ knowledge of and attitudes toward co-teaching in middle school content classrooms. Specifically the research questions that guide this study are:

1. What developing knowledge of and attitudes toward co-teaching with special education professionals do pre-service middle school teachers possess?
2. What, if any, impact does the systematic approach and its various components have on the pre-service teachers’ knowledge of and attitudes toward co-teaching with special education professionals?

### **Theoretical Framing and Review of Literature**

This study is grounded in theory and research on teacher development, particularly as it relates to the inclusion of students with disabilities in content classrooms. Recent studies reveal that general education teacher candidates have specific reservations about inclusion and secondary education majors tend to have high levels of anxiety about including students with special needs and more doubts about their own efficacy to teach students with special needs (McCray & McHatton, 2011; McHatton & McCray, 2007) when compared to their elementary education counterparts. Theorists and researchers in teacher education suggest that teacher candidates’ concerns and anxieties may be alleviated through carefully designed pre-service teacher education programs that promote infusion of special education content across curriculum, particularly in methods courses, employment of pedagogy that emphasizes evidence-based instructional strategies, and effective integration of guided field experiences. They have identified the following core

### *Pre-Service Middle School Co-Teaching*

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values and competencies as essential proficiencies in successful inclusion of students with disabilities in general educational settings: a positive attitude toward increased inclusions of students with disabilities, a high sense of teaching efficacy, a willingness and ability to making curricular and instructional accommodations, skills in collaborative teaming and teaching, and knowledge and skill in areas of positive behavior support (Martinez, 2003).

Learning to become an effective middle grades teacher requires in-depth content knowledge, a clear understanding of young adolescent learners, and a mastery of the varied modes of instruction necessary to reach diverse groups of students. Increased accountability for the performance outcomes of students with disabilities in inclusive classrooms has resulted in significant changes in the roles of classroom teachers in educating these students (Forlin, 2001). Therefore, middle school teachers must be able to use conceptual and practical teaching tools and become aware of their own attitudes, particularly as related to educating the increasingly diverse student body in P-12 schools (Darling-Hammond & Bransford, 2005).

Over the past 20 years, the language used to describe inclusive philosophy, inclusive practices, and inclusive classrooms has been inconsistent, which has led to inconsistencies in the development of coherent teacher preparation programs (Oyler, 2011). For the purposes of this research, the term *inclusion* is defined as the “act of creating environments in which any individual or group can be and feel welcomed, respected, supported, and valued to fully participate. An inclusive and welcoming climate embraces differences and offers respect in words and actions for all people” (Clayton-Pedersen, O’Neill, & Musil, 2007, p. 9). Given that definition, inclusive classrooms are those that actively and intentionally engage diverse learners on an on-going basis in the state-approved curriculum as well as the social and intellectual communities.

This study is also informed by research on the development of pre-service teachers’ attitudes, perceptions, and/or beliefs and how those attitudes influence their feelings of self-efficacy in co-teaching, as well as their views on including students with disabilities in their future classrooms. Results of well-defined studies indicate that elementary (Yellin et al., 2003) and secondary (Henning & Mitchell, 2002; Stella, Forlin, & Lan, 2007) pre-service teachers experience greater feelings of self-efficacy after attending sessions in their education methods classes devoted to inclusive practices. More recently, Brownell et al. (2008) conducted a quantitative study to determine the effects of embedding special education content into pre-service general education assessment courses on 208 teacher candidates’ knowledge of and attitudes toward teaching students with learning disabilities. Results indicated that embedded instruction significantly increased participants’ knowledge of inclusion terminology and assessment adaptation, and improved the confidence levels in meeting the needs of students with learning disabilities.

While the results from quantitative studies provide much needed empirical evidence and paint a broad picture of the impact of efforts to prepare classroom teachers to co-teach, qualitative inquiries reveal that prospective teachers must go

through a more detailed and complex process to develop the requisite knowledge, skills, and commitment to educate students with disabilities effectively in inclusive classrooms. Results of investigations of pre-service general and special education teachers' perceptions towards co-teaching found the subjects to be generally favorable. However, even though these pre-service teachers were open-minded, the general education teacher candidates consistently voiced concerns about their capabilities to include students with disabilities in their classrooms and to co-teach with a special education teacher (Arndt & Liles, 2010; Alvarez-McHatton & Daniel, 2008).

The degree to which general and special education teachers are able to meaningfully collaborate in inclusive classrooms, and the role of higher education to prepare them to do so, has been closely scrutinized over the past decade (McKenzie, 2009). According to Kamens (2007), many teacher education programs lack a systematic approach to preparing pre-service teachers to collaborate with their prospective professional colleagues. Furthermore, Griffin, Jones, and Kilgore (2006) state that fewer than one-third of general educators and fewer than one-half of special educators receive instruction on collaboration during their pre-service preparation. This may be due, at least in part, to the pervasive perception that collaboration is either intuitive (Friend, 2000) or developmental in nature (Salend, 2008).

The current investigation utilizes qualitative methods to describe and analyze how our systematic approach impacts 120 pre-service content middle grades teachers' knowledge of and attitudes toward collaborating and co-teaching with special education professionals. Developed by an interdisciplinary team of university teacher education faculty, this approach delivers co-teaching content through collaboratively taught seminars and field experiences. The purpose of this approach is to move toward building confidence and competence in these pre-service teachers so that they are able to more effectively meet the expectations for co-teaching in middle school content classrooms. Our hope is that by exploring factors that are critical to the understanding of the changing role of teacher education in the development of prospective teachers, our study will contribute to the emerging body of professional knowledge on collaboration and co-teaching in inclusive classrooms.

### **Program Context**

The systematic approach used in this study was designed, developed, implemented, and reviewed by faculty who teach in a large public state university in the Southeastern United States. At this institution, the College of Education annually prepares approximately 960 prospective teachers in early childhood, elementary, middle and secondary education, special education, and instructional technology. Teacher preparation in middle grades education provides the context for the present study.

#### ***Preparation of Prospective Middle Grades Teachers***

The middle grades program emphasizes high expectations for content knowledge

### *Pre-Service Middle School Co-Teaching*

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and skills as well as positive attitudes for educating an increasingly diverse student body in P-12 schools. The teacher preparation program is couched in the middle grades philosophy and emphasizes the integrated nature of the curriculum and the importance of collaboration with colleagues. Once accepted into the teacher education program, middle school teacher education candidates select two of the following content areas: language arts, mathematics, science, social studies, and reading. Typically, during the fall semester of their senior year, pre-service teachers enroll in a methods block comprised of four courses, one of which is a 135-hour (minimum) field experience. Over the course of the semester, the teacher candidates assume increasing responsibility for instruction, ultimately taking control of one class period of middle grades students for two weeks. Throughout this field experience, the classroom teacher and a university supervisor evaluate the candidate's performance on institutional and professional standards. If the candidate adequately demonstrates the required competencies, he or she is recommended to student teach the following semester. Each year, an average of 56 students graduate with a B.S. in Middle Grades Education prepared to teach in two content areas. Of those graduates, approximately 82% self report as White, non-Hispanic origin; 7% as Black, non-Hispanic, 4% as Hispanic, 2% as Asian, 2% as multi-racial, 2% are undeclared.

#### ***Curriculum and Instruction on Collaboration and Co-teaching***

In 2008, the middle grades faculty received feedback from local school administrators and alumni that the graduates of the program were not well prepared to co-teach. Given this feedback, the members of the middle grades faculty (representing all content areas and special education) formed an interdisciplinary team, reviewed the literature (Blanton & Pugach, 2007; Bondy & Ross, 2005) and developed a common understanding of how components of the content on collaboration and co-teaching could be delivered. Specifically, the faculty's commitment and full participation in collaboration and co-teaching assured that the curriculum was taught consistently in the methods block and meaningfully applied during field experiences. The members of this interdisciplinary team collaborate on the introductory seminar, the follow-up seminars, the methods courses, and the supervision of the field experiences. Through the use of collaborative teacher education reforms (McHatton & Daniel, 2008; Van Laarhoven, Monk, Lynch, Wyland, Dorsch, Zurita, & Rouse, 2006), the special education and content area methods faculty co-plan instruction, model co-teaching in seminars and content classes, co-assess candidate work, and co-reflect on the efficacy of the program.

While designing the classes and seminars, the faculty paid careful attention to the developmental trajectory of pre-service teachers (Richardson & Placier, 2001). Prior to enrolling in the methods block, each participant must successfully complete a survey course in special education that introduces the primary and secondary characteristics of students with disabilities as well as the research-based instructional strategies necessary to teach students with disabilities effectively in

inclusive classrooms. During the methods block, the participants are given multiple opportunities to revisit the broad principles and practices of special education and apply them to instructing learners with disabilities in content middle grades classrooms. The concrete application of broad principles provides the participants with opportunities for deep and meaningful transfer of knowledge and skills from their required special education course to their clinical field placement. The final reflections assist the participants in defining and refining their thinking about teaching complex curriculum to diverse students, particularly those with disabilities.

### **Our Systematic Approach**

Our systematic approach to preparing our prospective content middle grades teachers consists of the following four components: (a) an interactive seminar on collaboration and co-teaching; (b) required readings and reflections on co-teaching in middle and secondary classrooms; (c) field-based observations and interviews of general and special education teachers who co-teach in a general education content area; and (d) debriefing and sharing sessions in content methods classes.

*Interactive Seminar.* Initially, teacher candidates participate in an interactive seminar that reflects their social constructivist philosophy. The presenters open with a review of the broad principles and practices of special education, emphasizing values related to diversity, inclusive democratic classrooms, and respectful relationships with students and family members. Throughout the session, the need for intentional relationship building among all adults who teach on grade level teams in middle schools—content teachers, special education teachers, teacher assistants—is stressed.

Following this overview, the focus of the seminar shifts to the roles of collaboration and co-teaching in the creation of inclusive schools. For these purposes, co-teaching is broadly defined as “two or more professionals delivering substantive instruction to a diverse or blended group of students in a physical space” (Cook & Friend, 1995). Research-based practices, including models of co-teaching, are viewed on video (on Education Production, 2005) and participants discuss the advantages and disadvantages of each through a think-pair-share activity. Candidates are told that as prospective classroom teachers they are expected to assume leadership roles in establishing a common inclusive language and a set of beliefs that all students can learn. It should be noted that much of the seminar’s content and structure is informed and guided by the assessment of the pre-service teachers’ background knowledge. Initially, the pre-service teachers are asked to complete a K-W-C chart (What do you *Know*, What do you *Want to Know*, and What *Concerns* regarding co-teaching do you have) (see Appendix 1). After sharing information from the charts in small groups and with the entire group, the individual results are collected by faculty.

*Required Readings and Reflections.* Upon completion of the seminar, pre-service teachers are required to read two journal articles on co-teaching and reflect upon their learning using a reading response log (see Appendix 2). All are required to

### *Pre-Service Middle School Co-Teaching*

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read Dieker and Murawski's (2003) overview of co-teaching in secondary schools. Then based upon their areas of interest, they may select either an article on co-teaching in content areas (Mastropieri, Scruggs, Graetz, Norland, Gardizi, & McDuffie, 2005) or an article on the specific benefits of co-teaching in secondary math classes (Magiera, Smith, Zigmond, and Gebauer, 2005).

*Field-based Observations and Interviews.* The major assignment in the methods block is the observation of a one-hour co-teaching episode that includes a general educator and special educator in a content area middle school classroom. Candidates then conduct follow-up interviews using a semi-structured framework (see Appendix 3). After the observations and interviews are completed, the candidates write a 3-5 page paper that reflects upon and critiques the co-teaching observation, the co-teacher interview, and incorporates the discussions from the seminars and the required readings on the professional literature. These reflections are submitted to faculty and discussed in debriefing sessions.

*Debriefing Sessions.* Debriefing sessions are scheduled in each content methods course and facilitated by two members of the faculty who represent general and special education. The purpose of the sessions is to provide opportunities for pre-service teachers to share their observations, interviews, critiques, and insights with the faculty who teach their methods courses. These sessions are designed to assist pre-service teachers' understandings of how the broad principles and practices of special education that they learned in their special education survey course apply specifically to middle grades classrooms and how collaboration and co-teaching provide the infrastructure for inclusive classrooms and schools. During the sessions, teacher candidates are expected to articulate what they have learned and how they will apply their new learning to future practice.

## **Methods**

### ***Self-study in Teacher Education Research***

Within the educational research community, there have been a growing number of published research studies in teacher education that adopt a self-study approach (Grossman, 2005; Loughran, 2007). Dinkelman (2003) suggests that self-study in teacher education has the potential to animate the idea of teaching as reflection, model an inquiry-based approach to pedagogy, and generate rich understandings about promoting reflective practice. Zeichner (2007) calls upon teacher educators engaging in self-study to better situate the individual research within programs of research in order to "contribute to the improvement of teacher education practice and to our broader knowledge about particular questions of significance to teacher educators and policy makers" (p.43). This study responds to his call by situating the present research in the larger research programs on improving general education teacher candidates' knowledge, skills, and dispositions to effectively include students with disabilities.



**Participants**

The teacher educator research team requested and received institutional review board permission from the university to conduct the research. From the fall of 2008 through the fall of 2012, 256 middle school pre-service teachers registered in the methods block. From those 256 students, 120 pre-service teachers self-selected to participate and signed the IRB-approved consent form. Ninety-nine (83%) of the participants were female. With a range of 22-59, the average age of the participants was 29. Thirty-nine (33%) percent of the participants selected social studies as their main content area, 29 (24%) selected science, 29 (24%) selected language arts, and 23 (19%) selected mathematics. See Table 1 for a further breakdown of the demographic data, depicting the characteristics of the participants by gender and concentration.

All of the participants completed two 45 course hour content area methods courses, 45 course hours in a classroom management course, and a field experience course requiring a minimum of 135 hours of clinical experience in a local public middle school.

**Data Sources and Data Collection Procedures**

A qualitative research design was used to investigate the impact of our approach on participating teacher candidates' knowledge, skills, and attitudes toward co-teaching. The main data sources consisted of artifacts from participants' completed activities—K-W-C charts, think-pair-share activity documents, reading logs based upon the two peer-reviewed journal articles, and the 3-5 page written reflections, which are informed by the aforementioned artifacts as well as the middle school co-teaching classroom observation and the interview of co-teaching professionals.

One aim of the investigation was to determine the attitudes of pre-service teachers toward co-teaching and inclusion. According to Arndt et al., (2010), teacher attitudes are linked to their feelings of self-efficacy, and self-efficacy ultimately influences teaching effectiveness. In an effort to capture and describe the attitudes of the teacher candidates toward co-teaching and inclusion, the interdisciplinary team of faculty members designed a qualitative study to investigate participants' attitudes by examin-

**Table 1**  
**Characteristics of Participants in the Study by Gender and Concentration Area**

Concentration Area	Males (n = 21)	Females (n = 99)	Total (n = 120)
Science	5	24	29
Mathematics	6	26	23
Language Arts	3	26	29
Social Studies	7	23	39
Reading*	0	0	0

\* Reading is a new concentration, with no students participating in the study.

## *Pre-Service Middle School Co-Teaching*

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ing the artifacts that resulted from candidate completion of activities and assignments, including K-W-C charts, think-pair-share activities, reading logs, written reflections on co-teaching observations, and interviews in middle school classrooms.

### **Data Analysis**

To analyze the data, we employed the constant comparative method to identify and develop patterns and themes in the participants' understanding of effective co-teaching. This method is recommended in interpretative studies that involve large data sets with multiple sources (Strauss & Corbin, 1990). The data analysis followed a sequence of reading, interpreting, rereading, noting patterns, categorizing, and identifying themes. At the first level of analysis, we each read and coded all participants' completed think-pair-share activities, K-W-C charts, reading logs, and written reflections on co-teaching observations and interviews.

The initial coding categories were derived from the conceptual literature on co-teaching. As the investigation unfolded, we also inductively identified emergent themes from the data as they were collected, coded, and frequently reviewed. Through this constant comparison of data, theoretical categories were finalized. For example, it seemed initially that there were five major perspectives that participants had expressed toward co-teaching. However, further investigation clarified that some data did not easily fit into these existing categories. Thus, some categories were either combined or renamed. This return to the data source, followed by modification or generation of ideas, continued until the findings could be presented in some detail.

### **Findings**

Our analysis of multiple sets of qualitative data indicate that the systematic co-teaching preparation approach was effective in increasing pre-service teachers' awareness of the challenges of co-teaching as well as their confidence, competence, and commitment to co-teaching. Specifically, the participants reported that through this approach, they increased their knowledge of the: (a) critical components of co-teaching, particularly co-planning, co-instruction, including the use of specific co-teaching models, and the effectiveness of those models; (b) importance of balance in the roles and responsibilities of co-teachers; (c) the role of communication between the co-teachers; and (d) multiple roles of the special educator in inclusive classrooms, particularly as related to content knowledge and differentiation of instruction. Finally, participants reported that their co-teaching project had changed their attitudes through their recognition of the challenges that teachers face on a daily basis. They paid particular attention to how students with disabilities were included in co-taught classes and expressed their commitment to all students' learning.

### **Critical Components of Co-Teaching**

Our review of the artifacts, clearly indicated through the written reflections,

demonstrates the participants' emerging knowledge of the importance of the critical components of co-teaching, particularly co-planning and co-instruction through the implementation of the six models of co-teaching (Friend, 2011).

*Co-planning.* In their reflections, many participants discussed the importance of co-planning lessons and materials. Collectively, participants' comments reflected their perceptions of both effective and ineffective co-teaching practices. For example, Paula, a pre-service science teacher, expressed her awareness:

To me, the experience exemplified what we have talked about co-teaching and how it should be modeled. The co-teachers are excellent and work extremely well together. I was so impressed with the preparation these teachers take for every lesson. They collaborated and planned daily, sometimes before or after school or whenever time permitted. They discuss any questions, comments, or concerns they may have during planning. The co-teacher will stop by in the morning and double check with the general education teacher and her students before the day starts. She was well prepared and knowledgeable of the materials discussed in the lesson.

Many participants found that finding time to plan and prepare posed a major roadblock for those wanting to co-teach. Carl, a pre-service language arts teacher, stated:

Outside of the classroom, the two seem to have great chemistry. Since the special education teacher does not share planning time with the general education teacher, it is difficult to fit in planning time during the school day. Many times, the two will meet before school and after school to plan activities, lessons, and units.

*Co-instruction.* While the majority of participants reported that their co-teachers used the *one-teach/one-assist* model, only a few mentioned the use of *parallel and station teaching*, or *team teaching*. For example, Paula discussed her observation of the *one-teach/one-assist* model in a co-taught science classroom in spring of 2010:

I was very impressed and amazed at how well it (co-teaching) truly does work. The special education teacher saw the classroom as hers. She wasn't afraid to step in and discipline students when necessary, mainly just getting the students back on task. She helped her special education as well as her general education students by circling and highlighting key words in the warm-up.... They worked well with one another, each having equal air time. Each teacher knew the content and both had something to say during the lesson and split the lecture up nicely. Students asked both teachers questions and never distinguished one teacher as being the special educator and the other being the general educator.

Other participants identified areas for improvement and the impact of ineffective co-teaching. Carrie, a pre-service social studies teacher, stated that she:

...witnessed parallel teaching in this classroom, but these instances were very brief—usually those took place during 10-15 minute mini lessons. The style that seemed to be most utilized is *one-teach/one-assist*. Unfortunately, in doing so, the special education teacher appeared to be somewhat of an assistant in the classroom instead of a certified teacher.

**Balanced Roles and Responsibilities**

Many participants noted that in order for the co-teaching practice to be effective, the roles and responsibilities of the co-teachers must be equal and balanced. For example, Ashley, a pre-service social studies teacher, remarked:

Roles are balanced but their roles are different. Even though the special education teacher appears to be an assistant sometimes, she has the responsibility of making sure that lessons are differentiated as well as making sure that RTI is implemented properly. Simply observing a lesson, one might think that the content teacher bears the bulk of responsibility. However, after speaking with both teachers, I realized that a great deal of the special education teacher's responsibility is behind the scenes.

Several of the participants noted that equality and balance resulted in the students viewing both teachers as authority figures. For example, in reflecting on her observation of a first year co-teaching team in a seventh grade classroom in fall semester of 2009, Kim, a pre-service math teacher, noted the synergy that existed between the two co-teachers in this class of 21 students, many of whom had disabilities:

The special education teacher started the class by reviewing the warm up problems for the whole class while the content teacher was working on the paperwork for a newly transferred student. Then both teachers worked seamlessly, handing students back their tests, describing the lesson and activity for the day, providing directions for group and individual activities.... It was almost like watching a tennis match. They bounced the "ball" back and forth, without interrupting each other or losing the flow of the interaction. It seemed natural to all parties that the two teachers were equal and the leaders of the class.

Many of our participants, however, observed inequalities in the roles and responsibilities of the co-teaching teams that led them to perceive the co-teaching partnership as ineffective. Several participants noted that co-teachers who employed one-teach/one-assist were not viewed as equal partners in the teaching and learning process. For example, Allan, a pre-service language arts teacher, observed:

The roles were completely evident to the students. The "real teacher" taught the main lessons and interacted with the majority of the students, while the special education teacher worked with the kids that just didn't get it. When the general education teacher taught her lessons, the special education teacher walked around the room, observing behavior and on rare occasions, took notes on student progress.

**Communication**

Participants also discussed positive interaction and effective communication between general education and special education teachers as key factors that contribute to effective co-teaching. Amy, a pre-service language arts teacher, shared, "I was greatly impressed by how well the co-teachers I observed worked together. The classroom teacher and the special education teacher interact very well together. They communicate effectively and have the students' best interests at heart." Jared,

a pre-service language arts teacher, stated, “Both teachers that I talked to about co-teaching told me that communication is the hardest thing.” Kayla, another pre-service language arts teacher remarked, “Co-teaching is like a marriage—lots of giving and lots of talking.”

### ***Role of Special Education Teacher***

Pre-service teachers discussed how their experiences improved their understanding and appreciation of the work and contribution that special education teachers bring to co-taught classrooms. This finding is significant because it has the potential to create productive co-teaching collaborations. For example, Mallory reported:

After seeing how the special education co-teacher from my math class runs around all day, the first question I asked him during the interview was: “What is your daily schedule?” This semester he is only teaching math, but he co-teaches in two classes, has two resource classes, and he has to split his time between two classes in one period. After expressing my shock at how busy he was, I asked if he had a voice in scheduling the students and in designing their own schedules. He explained to me that although they can put in a request, they are normally placed where they are needed. I will definitely take this into consideration when I am working with a co-teacher in the future.

Many participants noted that the special education teachers’ content knowledge base was key to effective co-teaching. Mark stated, “The special education teacher has a content background in mathematics, so she takes the role of the math co-teacher. She is very familiar with eighth grade curriculum and does the differentiation work for the entire math department.”

Other participants commented on the lack of content knowledge as being a key factor in the ineffectiveness of co-teaching between a classroom teacher and a special education teacher. Jeannie, who observed a social studies class, stated:

Another aspect of the interview with the special education teacher I found to be interesting and totally in sync with one of the articles I read was that she feels she is not prepared to teach the content for the classes she is co-teaching. I believe this is one aspect that may contribute to the notion of the general education teacher being “in charge” of the classroom rather than sharing his role and responsibility 50-50.

Many, however, felt that special education teachers’ pedagogical content knowledge was reflected in their ability to differentiate for students. For example, Nikita, a pre-service science teacher, stated:

Their favorite methods of differentiated instruction are contracts, flexible groupings, and assignment choices. When they are doing flexible groups they always make sure to take an equal number with both of them. They don’t split the kids based just on who is with the special education teacher and who is not.

Jon, a pre-service science teacher, observed:

### *Pre-Service Middle School Co-Teaching*

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I am impressed by the fact that the teachers switch up the methods of differentiated instruction to meet the students needs. During the interview they told me that they gave an assessment on the periodic table and the states of matter. When they reviewed the grades, they decided that they should use flexible grouping as a method of differentiated instruction. They will now divide the students into groups based on the grades from the assessment, and as the students' knowledge increases, they can move up to a higher group where they will be given more challenging work.

#### **Attitudinal Impact**

Data analysis of multiple data sets that include pre-service teachers' initial and final reflections regarding co-teaching suggest the systematic approach was effective in improving their understanding and attitudes toward co-teaching. Many participants described how their perspectives have changed over the semester. For example, in the majority of the reading response logs, pre-service teachers in all content areas acknowledged that they were unfamiliar with co-teaching prior to reading the articles. Once enlightened, many were concerned that they would not be able to find examples of positive and successful co-teaching implementation in actual middle school classrooms. In analyzing participants' reading response logs (see Appendix 2), we found that many candidates used words such as "overwhelmed," "stressed," even "fearful" or "horrified" to describe their initial emotions about co-teaching responsibilities. At the conclusion of the co-teaching project, after completing observations, reflections, and debriefings, many candidates discussed how much they have learned over the semester and expressed much more positive attitudes toward co-teaching and commitment to collaborative practice in their future profession. Joe, a math education pre-service teacher's reflection exemplified this change:

Co-teaching is something new to me. I am starting to see how each of the various models will work in different content areas and in different situations. This experience will definitely help me in the future. I can see what works well and what things need more planning than I might anticipate. It is important to be invested in the co-teaching relationship. I can't expect to come in, do what I believe is my part as a general education teacher, and expect the special education teacher to handle all of the special education students. I must be willing to help and commit to all of the students.... The readings along with what I am observing in my field placement give me hope that co-teaching can work successfully. It eases some of the anxiety that I have toward being placed in a co-teaching situation.

As they reflected on various learning activities and assignments related to co-teaching during the semester, some participants talked more holistically about the impact of exposure to the systematic approach on their developing knowledge, skills, and attitudes toward co-teaching. Most highlighted the role of observation, interview, and reflection in shaping their understanding of co-teaching and its implementation in actual middle school classrooms. Those who were able to observe successful co-teaching practices in middle school classrooms expressed much more

positive attitudes toward the practice. Participating candidates also discussed the connections between the readings and classroom observations. Many described how their views toward co-teaching have changed over the semester and expressed a sense of preparedness for the reality of teaching in middle school classrooms.

For example, Patty, a pre-service social studies teacher, commented, "I found this assignment was very informative and useful. Co-teaching is becoming more common practice in public schools and as a new teacher, the more we know about it the better we will be prepared for the future." Sam, a pre-service science teacher, added, "I really enjoyed observing these teachers even though it wasn't the best example of co-teaching in a classroom. I was able to see what was working and what wasn't and how it can be improved." Carrie, a pre-service language arts teacher, stated:

The other element of this experience that impresses me is that it is not only the special education students that benefit from the co-teaching arrangement.... Even though a student may not be classified as having special needs, it is important to realize that all students learn in different ways, so having the additional differentiated materials readily available serves to empower all of the students in the class.

### **Discussion and Implications**

The passage of NCLB in 2001 and IDEA in 2004 led to policy changes at the federal, state, and local levels with substantial implications for teacher education. One of the major effects was increased pressure to prepare a workforce of educators with the knowledge and skills necessary to meet the needs of a diverse population of students who historically have underperformed in schools (Pugach et al., 2011). Teacher preparation programs in the United States responded to these policy changes and pressures in a number of ways, ranging from full integration of general and special education programs (Blanton et al., 2007) and expansion of collaborative teacher education models designed for elementary and secondary levels (Oyler, 2011) to specifically designed collaborative components of pre-service classes (Alvarez-McHatton et al., 2008). Our approach represents the third response in that it combines faculty co-teaching of pre-service classes with seminar and field experiences (Van Laarhoven, et al., 2006) to develop a specific knowledge base and skill set around collaboration and co-teaching.

We feel that this is important and necessary work. Historically, middle and secondary teachers have focused upon teaching their content rather than teaching their content to students, particularly those with disabilities. This attitude typically expresses itself in the form of personal identification with a specific content as in, "I'm going to be a math teacher." Exclusive attention to content has often served as a barrier to teachers assuming responsibility and accountability for the education of their students with disabilities. Prior to the initiation of our systematic instructional approach, most of the pre-service middle grades teachers did not see teaching students with disabilities as their responsibility. We feel that this attitude

### *Pre-Service Middle School Co-Teaching*

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was exacerbated to some extent by the fact that special education content (including collaboration and co-teaching) was viewed as specialized pedagogical content knowledge, a separate sphere of knowledge that only special education teachers could access (Arndt & Liles, 2010; Bondy & Ross, 2004). We feel that our approach was effective in breaking down these perceived barriers due to the intentional design of the curriculum that emphasized a common language and understanding of collaboration and co-teaching as well as its co-taught delivery across all content areas. The co-teaching done by the faculty ultimately provided a model for prospective content teachers to incorporate into their repertoire of skills.

As Friend reported in 2008, co-teaching is a “simple solution that is not so simple after all.” Given the complexity of the charge, it is important for teacher educators to acknowledge, identify, and intentionally address the concerns of pre-service teachers as an integral part of the instructional program. These findings suggest that with exposure to such a program, the feelings of teacher candidates’ self-efficacy improves as does confidence in their ability to positively impact the performance of students with disabilities. As previously noted, the researchers observed a marked difference between candidates’ initial attitudes toward and awareness of co-teaching as reflected in the introductory seminar activities. Many had never heard of co-teaching, and others confessed to having negative opinions of what co-teaching involved.

Finally, these findings indicate that curriculum development must consider and respect the developmental trajectory of pre-service teachers such that their learning is meaningful and deep. In order for prospective middle grades teachers to understand the realities of co-teaching they must have multiple opportunities to study, discuss, reflect, and apply the principles of co-teaching and collaboration. All of the teacher candidates who participated in this study successfully completed at least one survey course in special education that included discussions on collaboration and co-teaching. However, it was not until they were able to observe co-teaching in middle school content area classrooms, and subsequently interview the classroom and special education teachers who co-taught in that classroom, that they began to more fully understand the power and the challenges of collaboration and co-teaching.

### **Future Research and Limitations of the Study**

The need for more intentional, systematic approaches to teaching and learning about collaboration and co-teaching implies a significant need for change in teacher preparation programs. In 2006, Griffin, Jones, and Kilgore reported that less than one-third of all pre-service teachers enrolled in elementary, middle or secondary programs were provided with formal instruction on collaboration. There are numerous reasons for the dearth of preparation in this critical area. Friend (2000) suggests that many faculty members who develop teacher education programs view collaboration as intuitive and therefore do not see the need for more intentional preparation. In



other cases, the faculty recognizes the need for preparation in collaboration, but feels forced to prioritize accreditation requirements (Ross and Blanton, 2004). In this situation, the program designers often elect an infusion model, which embeds the content into existing coursework. Infusion is used when the program designers feel that content does not necessitate the development of a complete course, or they feel that the teacher education curriculum has no more room for new courses due to content required for accreditation purposes. The infusion method is criticized as highly ineffective (Stayton & McCollum, 2002) due to a lack of quality control (Cook, 2002; Otis-Wilson, Winn, Griffin, & Kilgore, 2005). As early as 2002, Cook noted that it was unlikely that all who were assigned to teach courses on collaboration where the content was infused actually had the expertise. Finally, the very nature of the content of collaboration necessitates faculty who teach methods courses to work closely with those who supervise field experiences. Collaboration of faculty across university courses and structures must be systematically monitored or these relationships can create and exacerbate quality control issues.

There were several limitations to the study. The most significant limitation is that research participants are from one middle school teacher education program in a particular region in the United States, which reduces external validity of the study. Secondly, the data sources collected in the study are all of participants' self-reports and reflections. Future studies can be strengthened by collecting follow-up data during student teaching by means of interviews and classroom observations of co-teaching. Despite these limitations, we feel that the results of this investigation have had a positive impact upon faculty and students alike and will resonate with faculty in other colleges of education who are engaged in reforming teacher education programs, particularly those who are attempting to design and deliver content on collaboration and co-teaching.

## References

- Alvarez-McHatton, P., & Daniel, P. (2008). Co-teaching at the pre-service level: Special education majors collaborate with English education majors. *Teacher Education & Special Education, 31*(2), 118–131.
- Arndt, K., & Liles, J. (2010). Pre-service teachers' perceptions of co-teaching: A qualitative study. *Action in Teacher Education, 32*, 15–25.
- Bauwens, J., Hourcade, J. J., & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. *Remedial and Special Education, 10*, 17-22.
- Bondy, E., & Ross, D. (Eds.). (2005). *Preparing teachers for inclusive teaching: Meeting the challenges of teacher education reform*. Albany, NY: State University of New York Press.
- Boyle-Baise, M., & McIntyre, J. (2008). What kind of experience? Preparing teachers in PDS or community setting. In M. Cochran-Smith, S. Feiman-Nemser, & J. McIntyre (Eds.), *Handbook of research on teacher education: Enduring issues in changing contexts* (3rd ed., pp. 307-331). New York: Routledge.
- Blanton, L. P., & Pugach, M. C. (2007). *Collaborative programs in general and special education: An action guide for higher education and state policy makers*. Washington,

### *Pre-Service Middle School Co-Teaching*

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- DC: Council of Chief State School Officers. Retrieved from <http://www.aacte.org/index.php?/Traditional-Media/Resources/>
- Brownell, M., Leko, M., Kamman, M., & King, L. (2008). Defining and preparing high-quality teachers in special education: What do we know from the research? *Personnel Preparation: Advances in Learning and Behavioral Disabilities*, 21, 35-74.
- Clayton-Pedersen, A., O'Neill, N., & Musil, C. M. (2007). *Making excellence inclusive: A framework for embedding diversity and inclusion into colleges and universities' academic excellence mission*. Retrieved from [www.aacu.org/inclusive\\_excellence/documents/MEIPaperLastRevised12308.pdf](http://www.aacu.org/inclusive_excellence/documents/MEIPaperLastRevised12308.pdf)
- Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Teaching Exceptional Children*, 28, 1-16.
- Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. New York: Teachers College Press.
- Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: John Wiley & Sons.
- Dieker, L., & Murawski, W. (2003). Co-teaching at the secondary levels: Unique issues, current trends, and suggestions for success. *The High School Journal*, 86(4), 1-13.
- Dinkelman, T. (2003). Self-study in teaching education: a means and ends tools for promoting reflective teaching. *Journal of Teacher Education*, 54(1), 6-18.
- Forlin, C. (2001). Inclusion: Identifying potential stressors for regular class teachers. *Educational Research*, 43(3), 235-245.
- Forum on Education Production. (Producer). (2005). *The power of two*. (DVD). Available from [www.forumoneducation.org/videos/](http://www.forumoneducation.org/videos/)
- Friend, M. (2011). *Special education: Contemporary perspectives for school professionals* (3rd ed.). Upper Saddle River, NJ: Merrill/Pearson Education.
- Friend, M. (2008). Co-teaching: A simple solution that isn't so simple after all. *Journal of Curriculum and Instruction*, 2(2), 9-19.
- Friend, M. (2000). Myths and understandings about professional collaboration. *Remedial and Special Education*, 21(160), 130-132.
- Fullerton, A., & Ruben, B., (2011). Development and design of a merged secondary and special education teacher preparation program. *Teacher Education Quarterly*, 38(2), 27-44.
- Grant, C., & Gillette, M. (2006). A candid talk to teacher educators about effectively preparing teachers who can teach everyone's children. *Journal of Teacher Education*, 57, 292-299.
- Griffin, C. C., Jones, H.A., & Kilgore, K. L., (2006). A qualitative study of student teachers' experiences with collaborative problem solving. *Teacher Education & Special Education*, 29, 44-55.
- Grossman, P. (2005). Research on pedagogical approaches to teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education* (pp. 425-476). Mahwah, NJ: Lawrence Erlbaum.
- Grossman, P., & McDonald, M. (2008). Back to the future: Directions for research in teaching and teacher education. *American Educational Research Journal*, 45(1), 184-205.
- Henning, M. B., & Mitchell, L.C. (2002). Preparing for inclusion. *Child Study Journal*, 32(1), 19-29.
- Hulett, K. (2009). *Legal aspects of special education*. Upper Saddle River, NJ: Merrill/Pearson Education.
- Kamens, M. W. (2007). Learning about co-teaching: A collaborative student teaching experience for pre-service teachers. *Teacher Education & Special Education*, 30, 155-166.

- Lewin, T. (2011, July 21). Training of teachers is flawed, study says. *New York Times*. Retrieved from <http://www.nytimes.com/2011/07/21/education/21teaching.html>
- Little, M., & Dieker, L. (2009). Co-teaching: Two are better than one. *Principal Leadership*, 9(8), 42-46.
- Loughran, J. (2007). Research teacher education practices: responding to the challenges, demands, and expectations of self-study. *Journal of Teacher Education*, 58(1), 12-20.
- Magiera, K., Smith, C., Zigmond, N., & Gebauer, K. (2005). Benefits of co-teaching in secondary math classes. *Teaching Exceptional Children*, 37(3), 20-24.
- Martinez, R. (2003). Impact of a graduate class on attitudes toward inclusion, perceived teaching efficacy and knowledge about adapting instruction for children with disabilities in inclusive settings. *Teacher Development*, 7(3), 473-494.
- Mastropieri, M., Scruggs, T., Graetz, J., Norland, J., Gardizi, W., & McDuffie, K. (2005). Case studies in co-teaching in content areas: Successes, failures, & challenges. *Intervention in Schools & Clinics*, 40(5), 260-270.
- McCray, E., & McHatton, P. (2011). "Less afraid to have them in my classroom": Understanding pre-service general educators' perceptions about inclusion. *Teacher Education Quarterly*, 38(4), 135-155.
- McHatton, P. & McCray, D. (2007). Inclination toward inclusion. Perceptions of elementary and secondary education teacher candidates. *Action in Teacher Education*, 29(3), 25-32.
- McKenzie, R. (2009). A national survey of pre-service preparation for collaboration. *Teacher Education & Special Education*, 32(4) 379-393.
- National Center for Educational Statistics. (2008). *The national's report card*. Retrieved from <http://nces.ed.gov/nationsreportcard>
- No Child Left Behind Act. (2001). PL 107-110, 115 Stat. 1425, 20, U.S.C. §§ 6301 et seq.
- Oyler, C. (2011). Teacher preparation for inclusive and critical (special) education. *Teacher Education & Special Education*, 34(3), 201-218.
- Parker, A., Alvarez-McHatton, P., Allen, D., & Rosa, L. (2010). Dance lessons: Preparing pre-service teachers for co-teaching partnerships. *Action in Teacher Education*, 32(1), 26-38.
- Paulsen, K. (2008). School-based collaboration: An introduction to the collaboration column. *Intervention in Schools & Clinics*, 43(5), 313-315.
- Pugach, M., Blanton, L., & Correa, V. (2011). A historical perspective on the role of collaboration in teacher education reform: Making good on the promise of teaching all students. *Teacher Education & Special Education*, DOI: 10.1177//08884064114-6141 <http://tese.sagepub.com>
- Pugach, M., & Blanton, L. (2009). A framework for conducting research on collaborative teacher education. *Teacher and Teacher Education*, 25, 575-582.
- Pugach, M. (2005). Research on preparing teachers to work with students with disabilities. In M. Cochran-Smith & K. M. Zeichner (Eds), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 549-590). Mahwah, NJ: Lawrence Erlbaum Associates.
- Richardson, V., & Placier, P. (2001). Teacher change. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 905-947). Washington, DC: American Educational Research Association.
- Salend, S. J. (2008). *Creating inclusive classrooms* (6th ed.). Columbus, OH: Pearson.
- Shamberger, C. (2010). Early career teachers' perceptions of their preparation for and initial experiences in co-taught classrooms. (Unpublished Dissertation). University of North Carolina.
- Stella, C. S., Forlin, C. C., Lan, A. M. (2007). Pre-service secondary teachers in Hong Kong.

**Pre-Service Middle School Co-Teaching**

Asia-Pacific *Journal of Teacher Education*, 35, 161-179.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Press, CA: Sage.

Van Laarhoven, T., Monk, D. D., Lynch, K., Wyland, S., Dorsch, N., Zurita, L., & Rouse, J. (2006). Project ACCEPT: Preparing pre-service special and general educators for inclusive education. *Teacher Education & Special Education*, 29, 209-212.

Yellin, P. G., Yellin, D., Claypool, P. L., Mokhtari, K., Carr, R., Latiker, T., & Szabo, S. (2003). I'm not sure how to handle these kids, especially, the, uh, you know special ed. kids. *Action in Teacher Education*, 25(1), 14-19.

**Appendix I**

**K-W-C Strategy**

What We Know      What We Want to Know      What Concerns Do We Have

Name: \_\_\_\_\_

What We Know? What We Want to Know? What Concerns Do We Have?

Collaboration & Co-Teaching

K	W	C

**Appendix 2**

**Reader Response Log**

*Directions:* All are required to read and reflect upon Dieker & Murwaski's (2003) journal article on co-teaching as well as another of your choice. Recommendations are Mastropieri, Scruggs, Graetz, Norland, Gardizi, and Meduffie (2005) or article on the benefits of co-teaching in secondary math classes by Magiera, Smith, Zigmond, and Gebauer (2005). Other selections must be approved by your instructor. After making your selection and reading the article, reflect deeply on the simple questions provided below. Bring the completed log to your method's class for our debriefing.

L. Dieker & W. Murwaski (2003). *Co-teacher at the secondary level: Unique issues, current trends and suggestions for success*. The University of North Carolina Press.

1. What new ideas did I read about, or what old ideas were revisited?
2. What emotions did I feel?
3. What questions do I have?
4. What do I plan to do with the information?

Other Responses:

### **Appendix 3**

#### **Framework For Conducting Co-Teaching Observation, Interviews and Reflection**

Directions: For this assignment, you are required to observe one co-taught classroom for one complete class period in one of your two fields of study. Based upon your observations, answer as many questions as possible. Once you have completed the observation, conduct a brief interview of the co-teachers.

Name: \_\_\_\_\_ Observation Date: \_\_\_\_\_  
Class Observed: \_\_\_\_\_ Interview Date: \_\_\_\_\_  
Titles of Persons Observed & Interviewed: \_\_\_\_\_

##### *Co-Presence in the Classroom*

Things to Observe:

- (1) Were both co-teachers present in the classroom during the entire instructional period? If not, how many times per week are the co-teachers available?
- (2) Are the names of both teachers posted on the door and inside the classroom? Do both teachers have clearly defined desks or workspaces in the classroom?
- (3) Is there a paraprofessional in the classroom? If so, what is she doing?

Things to Ask:

- (1) What is the weekly schedule for co-teaching? Is the special education teacher scheduled in the class every day at the same time?
- (2) How long does it take the special education teacher to get from one class to the next?
- (3) Do the teachers have a voice in scheduling the students? In designing their own schedules?
- (4) Who is responsible for the paraprofessionals? Who supervises them? Plans their schedules? Tells the classroom teacher if the schedule changes?

##### *Co-Presenting (Instruction) & Assessing*

Things to Observe:

- (1) Identify and describe the model(s) of co-teaching used.
- (2) Identify and describe the differentiated practice used.
- (3) Do the teachers have equal "air time"? Do students view both adults as "teachers"? Does everyone seem comfortable with the co-teaching?

### *Pre-Service Middle School Co-Teaching*

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- (4) How did the classroom teacher interact with the special education teacher? With the students? How did the special education teacher interact with the classroom teacher? With the students?
- (5) Do the teachers and students have clear roles and responsibilities in the classroom? Describe what they are.
- (6) Do both teachers evaluate and grade the work of all students, or is the grading divided? If so, how?

Things to Ask:

- (1) What are their favorite co-teaching strategies? Duet? Parallel? Interest groups?
- (2) What are their favorite methods of differentiated instruction? Flexible groups? Differentiated questions? Tiered Assignments? Individual contracts?
- (3) Do they feel that their students are making adequate progress on their IEP's? 504 plans? ELL plans?
- (4) Have they been able to use collaboration and co-teaching to facilitate the implementation of RTI?
- (5) How have they used collaboration and co-teaching to improve parent contact?

#### *Co-Planning, Co-Problem-Solving & Co-Reflection*

Things to Ask:

- (1) How do they find time to plan? How do they find time to reflect upon student progress? Do they co-plan daily? Weekly? Once a month? Once a semester?
- (2) Who is responsible for planning the instruction of the paraprofessionals?
- (3) Did these co-teachers find time to discuss critical issues about teaching and learning? Assessment and grading? Classroom management? Pet peeves?
- (4) Do these teachers rely on their principal or supervisors to resolve issues that arise or can they work out conflicts with parents, students, paraprofessionals, by themselves?

#### *Final Interview Questions for Co-Teachers*

- (1) What are the challenges that I can expect as a new teacher?
- (2) How can I prepare to be an effective co-teacher?

#### FRAMEWORK FOR REFLECTION

- (1) Review your notes from your observation and interview and combine them under the following categories:
- (a) Co-presence in the classroom;
  - (b) Co-instruction and assessment;
  - (c) Co-planning and reflection;
  - (d) Challenges to new co-teachers; and
  - (e) Future uses in your classroom.
- (2) Write a 3-page summary and reflection. Do not identify the teachers that you observed or the schools in which they work. Use the rubric provided in class to summarize key points of the observation and interview. Reflect upon the three things that favorably impressed you and the three things that you have questions about.