Co-teaching in Inclusive Classrooms Using Structured Collaborative Planning

Dusty, Columbia Embury, Eastern Kentucky University
Megan Schneider Dinnesen, University of Cincinnati

Abstract

A pair of co-teachers in a U.S., mid-western, suburban school district participated in a co-teacher training and subsequent research study, in an effort to encourage role changes that would increase the engagement of students with disabilities in the classroom, This case study presents the experiences of two co-teachers teaching in an inclusive, seventh grade science class. The teacher participants were first trained through voluntary participation in countywide, three-day in-service on co-teaching and brain-based learning and then interviewed. Over the course of the ten-week study, the co-teachers used a structured collaborative planning protocol to prepare for weekly co-teaching. Teachers and students were observed in the classroom and data was collected regarding teacher behavior and student engagement. At the conclusion of the ten weeks, teachers participated in a collaborative interview. A grounded theory approach to analysis of the pre- and post-interviews and the structured planning protocols illustrated that when the teachers met consistently and used a structured planning protocol to prepare for co-teaching in their inclusive classroom, they were able to make changes to their classroom teaching behaviors and traditional roles. These changes modified their professional relationships with one another, their roles in the classrooms, and their perceptions of their own roles as co-teachers. Implications for practice are discussed.

Keywords: Co-teaching, inclusive classrooms, collaborative planning

Introduction

Since the inception of the Education of All Handicapped Children Act (P.L. 94-142) in 1975, the body of knowledge regarding the education of students with disabilities has developed tremendously. Parents, educators, and researchers have seen a growing number of students with disabilities enter the general education classroom. In this time, the presence of students with disabilities in the general education classroom has changed from a non-existent role prior to Education of All Handicapped Children Act, to a marginal role in classes such as art and physical education and now to full participation in content classes such as science, reading, language arts, math, and social studies. Currently, more than six million students receive special education support and services in general education classrooms (National Dissemination Center for Children with Disabilities, 2012).

The 1997 reauthorization of the Individuals with Disabilities Education Act Amendments (IDEA) elucidated the regulations for enacting Least Restrictive Environment by clarifying that regardless of disability all children must first receive consideration for placement in the general classroom. The No Child Left Behind Act of 2001(NCLB) dramatically increased school accountability for the performance of students with disabilities. IDEA (2004) mandated the inclusion of students with disabilities and required access to the general curriculum while meeting the individual developmental needs of all children.

The attempt by schools to implement these laws has resulted in a surge of students with disabilities

receiving education in general education classrooms. Students with identified educational disabilities need an individualized education in order to meet students' specialized educational needs and the mandates of compulsory education and special education law.

Meeting Requirements through Co-Teaching

Many schools have made efforts toward inclusivity and individualization through the use of co-teaching. Co-teaching is a common service delivery model for students with disabilities included in the general education classroom (Scruggs, Mastropieri, & McDuffie, 2007). Co-teaching uses two teachers, a general education teacher and a special education teacher to collaboratively plan, deliver content, and evaluate progress for a diverse group of learners in a single classroom (Cook & Friend, 1995). Some experts assert that an effectively implemented co-teaching model ensures that all students with disabilities have access to high quality instruction from an instructor trained as a content expert, while providing benefits for all students by increasing adult support and expertise (Murawski & Dieker, 2004). The effects of co-teaching on academic performance have been inconsistent across cases (Murawski & Swanson, 2001). As more schools implement co-teaching, the lack of substantial research demonstrating positive impact on student learning and behavior is a significant reason for concern.

Implementation of practices that have a proven record of effectiveness is the goal of educators and a requirement of the law (Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005). Co-teaching must employ scientifically validated instructional practices. Translating evidence-based practices into daily classroom routines that yield academic gain is a substantial part of a well-implemented co-teaching classroom (Rice & Zigmond, 2000; Walpole, Justice, & Invernizzi, 2004). Students with disabilities may not be engaged in the general curriculum when practitioners are novices or do not have a clear understanding of how to co-teach. The disengagement for students with disabilities may be somewhat responsible for students with disabilities leaving school early twice as frequently as their peers (Wilson & Michaels, 2006).

Defining Co-teaching

Cook and Friend (1995) delineated six models of co-teaching. These models are: One teach/one assist, One teach/one observe, Station teaching, Parallel teaching, Alternative teaching, and Teaming. No particular model of co-teaching is meant to be used exclusively by a teaching team (Cook & Friend, 1995). Each of these models has strengths and weaknesses and one may work better for a particular lesson than another. Furthermore, teacher familiarity, comfort, and competence in using all of the methods is essential to maintain parity and to ensure that the each teacher uses her or his specific areas of expertise in order to meet the needs of the individual students (Dieker & Little, 2005).

In a study examining co-teacher behavior, Harbort and colleagues found that teachers engaged in co-teaching did not necessarily utilize the different models of co-teaching nor did their roles vary significantly (Harbort et al, 2007). Special educators presented material less than 1% of the time and observed or

drifted 45.24% of the time (Harbort et al, 2007). Co-teaching may serve to increase the inclusion and success of students with disabilities in inclusive classrooms, but simply placing a special educator and general educator in an inclusive classroom does not guarantee improved outcomes for students (Scruggs, Mastropieri, & McDuffie, 2007). Despite the plethora of literature available regarding the various models of co-teaching and manuals for implementing those models in classrooms, tasks and roles of the teachers often remain static.

While it would seem that the combination of a content specialist and a special educator should improve academic outcomes for all learners (Hallahan & Kaufman, 2006; Volonino & Zigmond, 2007), results are mixed. Although the assumption that two specialists coming together to create educational synergy and some positive results continue to encourage co-teaching as a model that benefits all students, other research indicates that the use of co-teaching has not demonstrated a significant difference for students in co-taught classrooms (Goodman, Hazelkorn, Bucholz, Duffy, & Kitta, 2011; Murawski & Swanson, 2001; Zigmond, 2004). Recognizing that implementation itself may not be effective; it makes sense that results on efficacy of the practice have been mixed.

Implementing Co-teaching

Compatibility in co-teachers, self-selection for participation in a co-teaching partnership, structured planning time, and support from school administration are all factors that play an important role in predicting the success of co-teaching (Parker, Allen, McHatton, & Rosa, 2011; Gurgur & Uzuner, 2010). While co-teaching offers collegial support to teachers, those co-teachers must share in the planning and decision-making before, during, and after the teaching in order to develop a relationship based on trust and respect (Gurgur & Uzuner, 2011). In fact, without careful co-planning, co-teaching may not be any more advantageous than having one general educator delivering the content (Gurgur & Uzuner, 2011). Without co-planning, a co-teaching placement will only yield two teachers working reactively or in a parallel way (Murawski & Lochner, 2011).

In focusing on the importance of planning collaboratively in co-teaching, co-teachers must expose students to multiple instructional strategies and this can only be achieved through synthesis and intentional acts of positioning for each teacher within the classroom and the curriculum (Naraian, 2010). Negotiating roles and a willingness to re-explore one's professional identity are at the root of a successful co-teaching team. Without explicit direction or support, general educators seem to assume the role of content delivery, teaching to the larger group; while special educators assume the role of learning specialist circulating and focusing more on each individual's learning style and level of understanding. This method is only one model of co-teaching.

Three practices are necessary for successful co-teaching partners: co-planning, co-instructing, and co-assessing (Murawski & Lochner, 2011). Without all of these elements in place and practice, a classroom is not truly being co-taught. The purpose of this study was to investigate the factors that play a role in changing teacher behavior to include frequent and varied co-

teaching to better match instructional tasks in inclusive classrooms. The specific research questions addressed were as follows: Can changing how co-teachers plan affect classroom co-teacher behavior to include more variability in use of co-teaching models and increasing the role of the intervention specialist? Does co-planning increase role parity for the intervention specialist?

Method

A case study design was used due to the individualized nature of the intervention work of the researcher with the teacher participants. Furthermore, the specific goal in this study was to understand the unique group of teachers, their method for change, and the results of those changes rather than generalization (Stake, 2000).

Participants and Setting. The setting for this study was a small public middle school, which was situated in a suburban community approximately ten miles from a large urban city in southwestern Ohio. A total of 8.9% of the 445 middle school students received special education services, 6.3% of students were eligible for free or reduced lunch, 9.2% of students were from a diverse background, and fewer than 5% of students were English language learners (Ohio Department of Education, 2008).

This article will present one pair of co-teachers from the middle school teaching a collaborative science class for seventh grade students. These two teachers requested to participate in the study after participating in a three-day, countywide in-service on co-teaching and brain-based learning. Both teacher participants were licensed by the state to teach in their content area and had been teaching between three and twenty-two years. Both of the teachers were Caucasian females holding at least one graduate degree in teaching. One co-teacher taught as a special education teacher and her partner taught as a general education science teacher. The teacher participants taught in a middle school with a seven period day. Two of the periods each day were designated for teacher planning. One plan period was a traditional, individual teacher plan period; the other plan period was a team plan period where all teachers on the grade level team would meet together for common planning.

Teacher participants were assigned to at least one period per day designated as a co-taught class in which both teachers were scheduled to teach the same class on the school's master schedule. In those scheduled, collaborative classes, there was a minimum of two students identified to receive special education services. In addition to students with identified disabilities, the seventh grade science class presented here also contained three students classified as English language learners. The following is a brief description of each teacher participant. Pseudonyms have been used for both the teachers and the school to ensure the anonymity of all participants.

Shelia. Shelia taught as a special educator for seventh grade. She taught for 22 years and ten of those years were at Huallaga Middle School. Sheila had a master's degree in special education and was a unique participant because of her teacher training and licensure. Sheila studied music and math education at the undergraduate level and special education at the graduate level. As a result, she held licensure in multiple areas including special education K-12,

music K-12, and math 7-12. At the time of the study, Sheila had taught with Carey for three years.

Carey. Carey taught for three years as a seventh grade science teacher at Huallaga Middle School. She had two master's degrees. Carey's first master's degree was in middle childhood education of math and science and her second master's degree was in environmental science. Carey held licensure in both math and science for grades 4-9 and also had a business education certificate.

Table 1. Teacher Participants

Name & highest degree	Grade	Licensure	Subject	Role	Years Teaching
Sheila Masters	7	Special education, k-12; math, 7-12; music, k-12	Math and Science	Intervention Specialist	22
Carey Masters	7	Math, 4-9; science, 4-9; business, 7-12	Science	General Educator	3

Data Sources

Data for this study consisted of pre- and post-semi-structured interviews, copies of the structured collaborative planning logs used by the teachers during planning sessions, and observation data taken in the classroom on teacher behavior and student engagement. Pre-interviews were individually conducted and were recorded with a digital voice recorder to insure accuracy through transcription. Post-interviews were conducted collaboratively, that is, the teaching partners were interviewed together and the interview was videotaped to insure clarity regarding which teacher was talking. Pre- and post-study interviews offered the opportunity to collect data addressing the teachers' own perceptions of their roles in the classroom and any changes that occurred. The collaborative planning logs offered insight into the successes, concerns, and specific plans for co-teaching in the classrooms. The observation data collected on co-teacher behavior offered a live look at what co-teachers do in co-taught, inclusive classes.

Materials and Procedures

Pre-interview

The researcher met individually with each teacher prior to conducting any classroom observations. During these meetings, each teacher was interviewed individually and asked to respond to the same questions: a) Describe your role in your shared classroom; b) What do you see as barriers to co-teaching in the ways that

were modeled for you at the training; c) What do you think you would need to overcome those barriers; and d) Why do you want to improve or change your co-teaching? Interviews were recorded via digital tape recorder and were conducted individually to give teachers the opportunity to describe their roles and feelings in a safe setting and without regard to how her teaching partner might interpret responses. After interviews were completed, the researcher used a structured collaborative planning protocol (SCPP) to conduct a conversation with the co-teacher participants. Specifically, the protocol this study used was the Collaborative Assessment Log (New Teacher Center, 2006), which was adapted for the context of this study. The researcher also reviewed curriculum and plans and assisted in planning for co-teaching.

Table 2. Pre and post interview, SPCC questions

Pre-interview questions	Describe your role in your shared classroom	What do you see as barriers to co-teaching in the ways that were modeled for you at the training	What do you think you would need to overcome those barriers	Why do you want to improve or change your co-teaching?	Describe your role in your shared classroom
Post-interview questions	Describe your role in the class and if or how it's changed over the course of this quarter.	Talk about your experiences co-teaching—what you like, don't like, what's easy, and what's challenging?	Describe how you get at the needs of your students—how do you differentiate or dialogue about differentiation?	Is there anything else you'd like to add about the process or product of your participation in this study?	
SPCC questions	What is working in your co-taught classroom?	What challenges or concerns exist in your co-taught classroom?	What are the next steps for the general educator?	What are the next steps for the special educator?	

Structured collaborative planning protocol. Prior to any planning or observations, the researcher facilitated a discussion with co-teaching partners. The SCPP guided the discussion. This structured collaborative protocol design follows a four-step format of guided questions in which both teachers discuss the points. During this conversational assessment teachers are directed to respond to the following prompts: a) What is working in your co-taught

classroom; b) What challenges or concerns exist in your co-taught classroom; c) What are next steps for the general educator; and d) What are next steps for the special educator? The SCPP was completed with the researcher in the first week of the study and teachers were asked to complete a SCPP together each week to use as an assessment and planning tool.

Planning. The researcher planned with the co-teaching pair prior to beginning data collection. An additional training session occurred during the semester at the request of the teaching team. Training consisted of reviewing the strategies for co-teaching and working with teachers to create examples of lessons that would be appropriate for different strategies. Planning with the teachers consisted of using the most recent SCPP to build on strengths and work on concern areas and designing co-taught lessons around the curriculum.

A typical planning session would involve the teachers first identifying the content to be covered over the course of the unit. The researcher would then choose several of the concepts to illustrate at least two co-teaching approaches to the content. The teachers would then select the strategy most effective for teaching the material and then continue to develop the lesson plan. For example, when the teachers were preparing for a lesson on ecosystems, the researcher offered a short description of what the lesson could look like using station teaching and also what the lesson could look like using parallel teaching. The teachers discussed the strengths and weaknesses of each approach based on the content and the students and then selected the strategy. Once the strategy was selected, the teachers began planning the lesson. Feedback from the researcher was only offered regarding co-teaching strategies; the teachers were responsible for selecting the strategy they would use. The teachers were encouraged to select strategies based on the best fit for the content of the lesson, the students in the classroom, and their personal areas of expertise, comfort, and needed development.

Observations

Observations began approximately three weeks after school began. The researcher sat in the classrooms to be observed twice before data collection started to help desensitize students to the presence of additional adults in the classroom. Each observation was approximately thirty minutes in length.

Exit Interviews

At the conclusion of the study the researcher conducted exit interviews with the teachers. This time the interview followed the more collaborative and conversational format of the SPCC and the interviews were conducted in pairs. Teachers were asked to a) Describe your role in the class and if or how it’s changed over the course of this quarter; b) Talk about your experiences co-teaching—what you like, don’t like, what’s easy, and what’s challenging; c) Describe how you get at the needs of your students—how do you differentiate or dialogue about differentiation; d) Is there anything else you’d like to add about the process or product of your participation in this study? Interviews were recorded via video.

Data Analysis

The audio and video recordings were transcribed immediately following each interview by the researchers. Transcripts from both pre- and post-interviews were given to the teacher participants to verify accuracy of information. After the teacher participants verified accuracy, the researchers individually reviewed all individual and paired interview transcriptions, field notes and SCPP logs.

The researchers began with line-by-line analysis of the data from the interviews. This microanalysis helped to begin the initial identification of categories and relationships. Data from the SCPP logs were reviewed using the same microanalysis technique. The researchers coded and conceptually organized the data individually first, and then discussed codes and organization together (Strauss & Corbin, 1998). Disagreements between researchers were analyzed, negotiated, and re-coded before the axial codes were identified. Data was organized into colored displays and both authors discussed and analyzed emergent themes.

The collaborative analysis process relied heavily on asking questions and comparing ideas and themes. Member checking ensured the trustworthiness of this study (Hatch, 2002). At the conclusion of data analysis, findings were referred back to the teacher participants to verify the accuracy with which the author reflected the experiences and interpretation of the data. Teacher participants had the opportunity to discuss concerns with the researcher and revisions were negotiated as needed.

Findings

Three distinct categories regarding areas of change emerged through the data analysis: change of roles, change in teacher behavior (planning and teaching), and change in attitude or buy-in. This seventh grade science co-teaching team, Carey and Sheila, exhibited multiple changes from the beginning to end of the study. The actual co-teaching strategies used in this classroom prior to beginning the study and in the first weeks of data collection initially lacked diversity and consisted of mostly one teach/one assist. This team's behavior changed over the course of the study in terms of implementing strategies not previously used by the team. While both teachers stated verbally that they wanted to see an increase in both the quantity and the quality of their co-teaching in order to more effectively reach students in their inclusive classroom, change was uncomfortable and slow. However, by the end of the study, this team had made observable changes in their co-planning and co-teaching implementation using the SCPP.

Sheila and Carey completed six SCPP documents during the study. Four of these documents were completed without researcher facilitation. Even after the study ended, this team still contacted the researcher to help plan co-taught lessons. During the 45-minute post-study planning session, however, the researcher never offered any co-teaching suggestions because, unlike the initial planning sessions, both teachers planned actively. Carey and Shelia engaged in brainstorming and discussion and both teachers offered suggestions for using co-teaching strategies. While this team may have changed slowly, the change was dynamic and the researchers

are hopeful that the change is long lasting.

Data from the SCPP

What is Working? In the initial planning session using the SCPP process, Shelia and Carey addressed strengths in planning and organization, identified specific skills unique to each teacher, personal characteristics, and curriculum requirements. The team agreed that Sheila excelled in offering "alternative perspectives, reminders, and options for students as well as refocusing students" and that these strengths worked well in their class initially. Another skill that worked for this team was that Carey took responsibility for organizing the content and the course. This team was consistent in continuing to acknowledge strengths in areas related to these themes throughout the planning and SCPP sessions and identified individual lessons that had gone well in addition to changes they made that they viewed as positive.

At each planning session using the SCPP, the team focused on changes made or attempts at new strategies in the *What's working?* category. Those examples that went particularly well were acknowledged during this time. Changes to planning times such as, "use planning time on Tuesday and keep Wednesday after school as a back-up" in the second SCPP changed to "plan times during school vs. after school" as a positive in the third SCPP. These teachers used this category to chart progress over the course of the study.

In the first SCPP the teachers stated that "Carey organizes content and Sheila organizes kids," but by the third SCPP they noted Sheila's improved confidence "in jumping into the middle of a lesson," indicating a change in Sheila's more passive role in relation to the content. The teachers indicated that Carey's assistance in changing this passivity was instrumental to transforming their co-teaching. In the fourth SCPP the team acknowledged that Carey had begun turning to Shelia during class to open content discussions whereas in the past Sheila would have remained passive. They noted that this change was working well for them.

Teachers also used this section of the SCPP to acknowledge specific lessons or strategies that had gone well such as "tag-team jeopardy" or Shelia's "student-brain talking" in class. The *What's working?* portion of the SCPP functioned as a journal of sorts for this team to consider for the next week's planning. This section of each successive SCPP continued to remain robust and illustrate how actively this particular team attempted to make changes together.

Current Focus, Challenges, or Concerns. Unlike the *What's working?* part of the SCPP, this portion remained constant throughout the study. Carey and Sheila consistently struggled with having enough time together, Sheila's outside commitments pulling her from class, struggling with differentiation for students learning English as a second language and using the student teachers effectively in class.

Next Steps. Specific and individualized measurable goals on next steps were consistent themes for the next steps. For Carey, most of those steps involved planning-related instruction delivery, setting aside planning time, and course planning. Sheila's next steps generally involved her pre-planning for lessons by

"getting materials in advance and asking for background information", establishing plan times, differentiating content and managing her student teacher's time when Sheila was pulled from class.

Interview Data

The changes in how these teachers identified themselves mirrors, in some ways, the changes seen over the course of the SCPP planning sessions. Sheila and Carey demonstrated changes in their level of planning and participation and in doing so reflected on and amended their roles within their co-teaching partnership.

Pre-interviews. Sheila, the seventh grade special educator, was the initiator for increased active co-teaching. Sheila had partnered with Carey, the seventh grade science teacher to attend training for co-teaching and this invitation to participate in the training was an invitation for change. Sheila felt strongly that improving their co-teaching would benefit all of their students saying, "Well, I think [co-teaching is] to get more information to more kids – first of all – that's why we're teachers in the first place. And, whatever we do in those classes often spreads to the other classes as well." In addition to that, Sheila thought that developing their professional co-teaching relationship would improve the teaching experience for both of them. She stated,

> That is one of the reasons that I invited Carey to come to the workshop. I know…well, I'm pretty sure that Macy (another co-teaching partner) will retire at the end of this year. The next person will be different, but whatever we get working this year I can say – 'these are some things we did in previous years that worked well.' But, Carey's young – she'll be here for a while, hopefully we'll both be here for a while. And, I thought this would be a good way to help develop a relationship with her I feel I have more with other teachers.

Sheila's insecurity with her professional relationship with Carey influenced her lack of an active role and the lack of parity in the classroom. Prior to starting the study Sheila said,

> Sometimes I think about something I want to say but I don't say it because I'm not sure about the reaction or I don't feel as comfortable in there; and, I feel like if I say too much it could--not ruin the relationship but--I want it to be a working relationship…because I just don't know where I stand as much.

Sheila described her role in science class with Carey as a consultant or modifier and said she was much less involved and active than in math with her other co-teaching partner. Sheila described her role as "to keep [students] on task and question/answer thing." Carey described Sheila in a similar way saying, "Sheila is more support. She'll do a lot of reminders or repeating things. She'll go to different tables and check with every group and give pointers and help to re-emphasize, [give] one-on-one support, show alternative paths." In terms of actively engaging in teaching during the class however, both teachers agreed that Sheila did little of that.

Shelia stated,

> Sometimes in that class when I do kind of ask a clarifying question I kind of feel like I'm interrupting what's going on…I can't do some things in there that I can do in the other room and I'm not always given permission.

Initially there was inequity in both perception of roles and teacher behavior. Carey's perception of her role in the class likely contributed to this lack of parity and insecurity for Sheila. When asked about her role in the class Carey described herself saying, "I'm the lead teacher. I do all the grading, but if I asked [Sheila] to grade something she would – I know she helps other teachers – but, I'm just like, 'oh, I can do it.'" Carey designed the curriculum and schedule for instruction well in advance. Sheila stated, "Carey can tell me today what she's doing the day before Christmas."

However, Carey valued Sheila's experience, knowledge and skills. As a new teacher, she saw Sheila as a guide in handling difficult situations with students. Carey stated, "So, a lot of times if a parent concern comes up we'll talk things out – even if it's a normal, regular, kid – I'll ask Sheila a lot of times since she's done things longer and more thoroughly than I have." For Carey, the real barrier to more equitable co-teaching roles was that she and Sheila only worked together for one bell per day. Carey saw this as a lack of fairness issue to the children saying,

> The one thing I kept thinking is if she and I get together, we design a great lesson where she and I are doing some of the great co-teaching strategies – I only have her for one class. I'd need her for all five classes. Yeah, so if those kids are truly getting the best lesson – am I not really giving the best lesson to the rest of the kids? And that just doesn't seem fair, you know?

Post-interview Data. The statements of these teachers at the exit interview demonstrated transformation of this team over the course of the quarter was significant and exciting. While Carey and Sheila began the study not fluent at using multiple co-teaching strategies, they ended the study as a transformed team in both their actual teaching practices and their perceptions of their roles. When asked about her role at the end of the study Carey said, "I'm still more of a disciplinarian and more of the planner…it's not just 'The Carey Show' now. There's back and forth. Before, we worked together a lot on tests but now we've done more during class."

Sheila echoed this statement saying, "I have a more active role. I feel more confident about the content and the kids see me more as a teacher than in some other years… [I'm] doing more." At this statement Carey added, "They come to Sheila now for more questions, more clarification, whereas before it was just [her] small niche but now any kid will come to [her]." Sheila said she felt more connected to the class after this experience saying, "In the past I wouldn't always know what was going to happen, but now I have to know because I am a part of it. It puts me in a different mindset."

This shift was noted by Carey too and she saw that change as positive for their students when she said,

> I like you doing more because you are learning the concept more and you would always pipe

> in with little things but now it's bigger questions, deeper thoughts, and taking it to a new level. You are connecting things and pulling other subjects in and with your knowledge of the curriculum-- it's really enhancing things as well.

Discussion

Planning, co-teaching proficiency, and team buy-in are all factors that contribute to how well and how often co-teachers will teach using multiple strategies for co-teaching. This study asked the teachers in inclusive, co-taught classrooms to make changes to their teaching behavior in order to create a more inclusive classroom and to more effectively meet the needs of all students in an inclusive classroom. Teachers were trained and then asked to change their teaching behavior by increasing the frequency and diversity of the co-teaching strategies used. Through analysis of the data from the SCPPs, a theme that emerged was that teacher planning was necessary to change teacher behavior. That is to say, when teachers plan to use special educators in different ways in their classrooms they follow through with those plans and change their teaching behaviors. Teachers must plan for specific roles and goals in co-teaching in order to change their teaching behavior in the classroom.

Dynamic changes occurred with the teaching team of Carey and Sheila. This team planned almost weekly for both content and co-teaching style using the SCPP. They showed competence in planning using the SCPP without researcher facilitation. The level of commitment needed to follow through with this type of intense planning is high and challenging given the multiple demands placed on general and special educators. A framework for defining their roles facilitated self-assessment and changes in each teacher's approach to co-teaching. As a result, these teachers noted that they experienced favorable changes from the beginning of the study to the end of the study. At the conclusion of the study this pair was still learning more varied strategies. Change, though, was apparent when compared to their skill levels and implementation of multiple strategies at the start of the study. Initially, Carey and Sheila consistently used the one teach/one assist strategy and occasionally used alternative or parallel teaching. By the conclusion of the study, the team regularly co-taught using not only those strategies, but team teaching and station teaching as well.

Teacher perception of roles. As a result of participating in this study the co-teaching team increased collaborative planning and the participation of the special educator in the classroom. To evaluate whether or not these changes in behavior would have any impact on how the teachers viewed their roles and viewed the roles of their teaching partner, pre- and post-interviews were conducted. Several themes emerged from the interviews regarding teacher role.

Special educator role changes. The special educator in this study initially described her role in the general education classroom using words like, "support", "modifier", "consultant" and "help". The general education co-teacher also described the special education teacher using the same words. These words, while appropriate words to describe work with children, indicated a

level of separateness from the classroom, the content and the students. These teachers described their roles with words that indicated their distance from the general education classroom, validating the literature describing the lack of parity that exists between many co-teachers. As a result of participation in this study, teachers changed their behaviors. They were asked to adopt more active teaching roles, to engage in equitable planning and teaching more regularly, and to increase ownership in the classroom through more varied and frequent use of co-teaching strategies.

Sheila's class with Carey offered noteworthy changes in teacher behavior and roles. Initially, Sheila described her role in her class with Carey as a "modifier" and a "consultant", but at the conclusion of the study she described her role quite differently. "I have a more active role. I feel more confident about the content and the kids see me more as a teacher than in some other years. I'm doing more." Regular participation in the planning for and co-delivery of instruction through varied co-teaching strategies clearly had a significant impact on the role of this special education teacher in this co-taught general education classroom. Perhaps because of the nature of co-teaching in a general education classroom, it should be expected that the special education teachers' perception of their roles would change, but those roles were only able to change because the teachers were willing to plan for and implement changes long-term.

General educator role changes. Prior to the start of the study, the general educator identified herself in relation to content and curriculum. There was a sense of ownership of the content and a responsibility. This extended to assessment through assignments and tests as well. Carey stated, "I'm the lead teacher. I do all the grading… I'll make up the worksheets or the lesson…" This perception of the general educator as the lead teacher or deliverer of content was echoed by the special educator. Sheila described Carey's role by saying that she was the "main deliverer of instruction and information."

The general educator's personal view as the deliverer of content may point toward the general educator's relationship with content. After making changes to their teaching to include structured collaborative planning and a more active role for the special educator, the general educator expressed frustration with having the special education teacher for only part of the day saying:

When can we plan? When can I pull you into my room? We design these really great co-taught lessons but we can only do it with one class…so what [I didn't like] was just wanting [the special education teacher] all day long.

That tension may exist as a result of the change in the role of the general education teacher through careful planning and implementation of a range of co-teaching strategies.

When Carey said, "I'm still more of a disciplinarian and more of the planner, but it's not just 'The Carey Show' now--there's back and forth", she illustrated one of the changes that now characterized their co-teaching. "Before, we worked together a lot on tests, but now we've done more during class" says Carey, offering an example of some of the more significant changes in the teaching practice of these teachers. These changes also help to explain her

increased frustration with not having her co-teaching partner more often.

As co-teaching partners increased the quality and quantity of their co-teaching, the sense of accountability for the special education teacher increased along with the sense of interdependence with her by the general educator. When dependence and accountability increased, so did the level of frustration when the special educator was pulled from that general education class or planning for meetings, documentation, or other student needs.

Regular facilitated reflective planning session. To further understand the impact of teacher reflection in planning on teacher behavior, future studies should establish consistent expectations and timeframes for teachers to conduct the collaborative assessment log process in planning. Scheduling the sessions in advance and having the researcher facilitate these reflective processes in planning will allow for consistency in implementation. Regularly scheduled and facilitated reflective planning sessions will also help future researchers to identify specific themes or supports required.

Teachers openly acknowledged that the accountability provided by having the researcher present regularly for observations and planning played a significant factor in the follow-through of the teams. Future research will need to address how an accountability factor can be built into the process for teachers so that progress can continue.

Implications for Practice

The widespread use of co-teaching coupled with the lack of research showing use of co-teaching strategies beyond one teach/one assist indicate a clear need for further training and support for teachers undertaking this strategy as a means to reach diverse learners in the general classroom. The varied amount of investment of time and preparation offered by each of the teaching teams in this study illustrate the need for continued scaffolding for teachers new to co-teaching and a framework for reflection and planning for all co-teachers.

Preparing teachers to co-teach; to select strategies based on the content to be taught, and provide opportunities for teachers to continue to build their co-teaching skills is essential. While many teachers participate in professional development, what made the difference for these teachers in making real changes to their planning and co-teaching was support provided on an ongoing basis. Schools and districts that want teachers to follow through with adopting co-teaching as an effective strategy for positively changing student outcomes in inclusive classrooms will need to build follow up support into co-teaching professional development for teachers and administrators.

Partnership was a theme echoed by each of the teachers and the need for accountability through a mentor, coach, administrator or other invested party is clear. Co-teachers expressed a need and desire for someone to create accountability for them in planning and implementing multiple co-teaching strategies. They agreed that changes may not have been as substantial without the accountability factor the researcher provided through the SCPPs and other documentation.

Accountability may be provided, in part, by administrators. An administrator who actively monitors and supports co-teaching teams could

provide this accountability and structure. The administration in the school for this study provided some key supports for co-teaching by allowing for team planning, supporting teacher professional development in co-teaching, and allowing follow-up to be provided through research in the school.

Additional suggestions for practice include co-teaching training for administrators to insure she or he will know what to look for in classrooms and understand the types of support that effective co-teachers need. In this way, an administrator could function to provide accountability as well as become a resource for co-teachers in planning and implementation.

Conclusion

This investigation considered the role of reflective planning through the use of structured collaborative planning protocol on changes to teacher behavior. Planning comprises a key component of effective co-teaching and can have a significant impact on teaching practices (Walther-Thomas, Korinek, McLaughlin & Williams, 2000). This study provides a case demonstrating teachers who plan more frequently and gear their planning toward co-teaching use more varied co-teaching strategies and implement those strategies more frequently. When the teachers used the structured collaborative planning process to guide their planning they showed marked changes in their description of their own roles. Those changes in description indicated increased participation and sense of responsibility for the special educator and more creative lessons, collaboration, and an increased sense of a shared classroom.

References

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

Dieker, L. & Little, M. (2005). Secondary Reading: Not just for reading teachers anymore. *Intervention in School and Clinic, 40*(5), 276-283.

Education for All Handicapped Children Act, 20 U.S.C. Sections 1400-1461 (1975).

Goodman, J.I., Hazelkorn, M., Bucholz, J.L., Duffy, M.L., & Kitta, Y. (2011). Inclusion and graduation rates: What are the outcomes? *Journal of Disability Policy Studies, 21*(4), 241-252.

Gurgur, H. & Uzuner, Y. (2011). Examining the implementation of two co-teaching models: Team teaching and station teaching. *International Journal of Inclusive Education, 15*(6), 589-610.

Gurgur, H. & Uzuner, Y. (2010). A phenomenological analysis of the views on co-teaching applications in the inclusion classroom. *Educational Sciences: Theory and Pratice, 10*(1), 311-331.

Hallahan, D. P. & Kauffman, J. M. (2006). *Exceptional learners: An introduction to special education* (10th ed.). New York, NY: Allyn & Bacon.

Harbort, G., Gunter, P., Hull, K., Brown, Q., Venn, M., Wiley, L., & Wiley, E. (2007). Behaviors of teachers in co-taught classes in secondary school. *Teacher Education and Special Education, 30*(1), 13-23.

Hatch , J. A. (2002). Doing qualitative research in education settings. Albany: SUNY Press.

IDEA (2004). Individuals with Disabilities Education Improvement Act. PL 108-446, 108th Cong., 20 U.S.C. 1400 et seq. (2004) (enacted).

Murawski, W.W. & Lochner, W.W. (2011). Observing co-teaching: What to ask for, look for, and listen for. *Intervention in School and Clinic, 46*(3), 174-183.

Murawski, W. W. & Dieker, L. A. (2004). Tips and strategies for co-teaching at the secondary level. *Teaching Exceptional Children*, *36*(5), 52–58.

Murawski, W. & Swanson, H. (2001). A meta-analysis of co-teaching research: Where are the data? *Remedial and Special Education, 22*(4), 258-267.

Naraian, S. (2010). General, special, *and*…inclusive: Refiguring professional identities in a collaboratively taught classroom. *Teaching and Teacher Education, 26*(8), 1677-1686.

National Dissemination Center for Children with Disabilities (2012). Retrieved from http://nichcy.org/schoolage on May 21, 2012.

National Center on Educational Restructuring and Inclusion. (1995). National study on inclusive education. New York: City University of New York.

New Teacher Center. (2002). *Continuum of teacher development*. Santa Cruz, CA: New Teacher Center.

No Child Left Behind Act of 2001. Pub.L.107-110. (2001). Retrieved November 21, 2007 from http://www.access.gpo.gov/nara/publaw/107publ.html.

Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Karris, K. R. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children, 71*(2), 137-148.

Ohio Department of Education (2008). Retrieved December 20, 2008 from

http://ilrc.ode.state.oh.us/schools/School_Questions.asp?sel=044081,Winton%20Woods%20City,014548,Winton%20Woods%20Middle%20School,Hamilton%20County.

Parker, A., Allen, D., McHatton, P.A. & Rosa, L. (2010). Dance lessons: Preparing preservice teachers for coteaching partnerships. *Action in Teacher Education 32*(1), 26-38.

Rice, D. & Zigmond, N. (2000). Co-teaching in secondary schools: Teacher reports of developments in Australian and American classrooms. *Learning Disabilities Research and Practice, 15*(4), 190-197.

Stake, R. E. (2000) 'The Case Study Method in Social Inquiry', in R. Gomm, M. Hammersley and P. Foster (eds.) Case Study Method, pp. 19–26. London: Sage. [Originally published in Educational Researcher (7 February 1978): 5–8].

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research*. Thousands Oaks, CA: Sage.

Scruggs, T., Mastropieri, M., and McDuffie, K. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children, 73*(4), 392-416.

Volonino, V. & Zigmond, N. (2007). Promoting research-based practices through inclusion? *Theory into Practice, 46*(4), 291-300.

Walpole, S., Justice, L. M., & Invernizzi, M. A. (2004). Closing the gap between research and practice: Case study of school-wide literacy reform. *Reading and Writing Quarterly*: *Overcoming Learning Difficulties, 20*(3), 261–283.

Walther-Thomas, C., Korinek, L., McLaughlin, V., & Williams, B. (2000). *Collaboration for inclusive education: Developing successful programs.* Needham Heights, MA: Allyn & Bacon.

Wilson, G. & Michaels, C. (2006). General and special education students' perceptions of co-teaching: Implications for secondary-level literacy instruction. *Reading & Writing Quarterly, 22*(3), 205-225.

Zigmond, N. (2004, Sept.). Research findings paint dark picture of co-teaching. *Inclusive Education Programs, 11*(9), 1-3, 6.

Dusty Columbia Embury is Assistant Professor, Department of Special Education, Eastern Kentucky University, Richmond, Kentucky

Megan Schneider Dinnesen is Doctoral Candidate, University of Cincinnati, Cincinnati, Ohio