Innovative Practices

Co-Teaching in a Teacher Education Classroom: Collaboration, Compromise, and Creativity

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Introduction

The call for reform of teacher preparation programs by Arne Duncan (2009), U.S. Secretary of Education, has the potential to be the catalyst for a re-emergence of co-teaching in higher education. According to Duncan:

America's great educational challenges require that this new generation of well-prepared teachers significantly boost student learning and increase college-readiness (para. 14)... If teaching is—and should be—one of our most revered professions, teacher preparation programs should be among a university's most important responsibilities (para. 34).

Duncan argues for the need to implement innovative preservice teacher education strategies that will result in an increase in K-12 student achievement. One such strategy that has been shown to impact K-12 student achievement is co-teaching (McDuffie, Mastropiere, & Scruggs, 2009). There are many benefits of co-teaching including opportunities to vary content presentation, individualize instruction, scaffold learning experiences, and monitor students' understanding. Co-teaching in its most effective form can promote equitable learning opportunities for all students. Preparing preservice teachers to be effective co-teachers needs to

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be a significant component of teacher education curricula in higher education. Although co-teaching is not a new phenomenon in higher education (Dugan & Letterman, 2008), the experiences of faculty who co-teach in teacher preparation programs have not been extensively studied (Cruz & Zaragoza, 1998; Jones & Morin, 2000; Kluth & Straut, 2003).

With this in mind, we set out to explore our own co-teaching and collaborative planning experiences in an undergraduate, second language acquisition course, *Language Acquisition*, *Development*, and *Learning*. To illustrate our experiences, we include in this article selected artifacts such as a course description and journal reflections. The institution and the school of education in which the course is offered are new, only five years old. Innovative, new practices are encouraged and expected of faculty. The co-taught course was supported by the administration with the idea that co-teaching could become a common practice at our college.

Co-Teaching in K-12

There is a wealth of information on co-teaching in K-12, including the importance of understanding the teaching approach of one's partner (Keefe, Moore, & Duff, 2004; Murawski, 2003), determining readiness to co-teach (Bradley, King-Sears, & Tessier-Switlick, 1997; Murawski & Dieker, 2004), clarifying roles, responsibilities, and expectations (Friend & Bursuck, 2002; Murawski & Dieker, 2004; Murray, 2004), scheduling shared planning time (Friend & Cook, 2002), and effective communication, including constructive dialogue and conflict resolution (Wood, 1998).

Cook and Friend (1995) proposed a continuum of co-teaching strategies for inclusive practices that is commonly used today across various programs. Figure 1 presents Cook and Friend's six types of co-teaching strategies and applications. Several of these strategies were used during our co-taught course such as: one teach, one observe; one teach, one assist; station teaching; and parallel teaching.

Co-teaching has become a common strategy in K-12 for addressing the increasingly diverse learning needs and academic levels of students in one classroom. One third grade classroom, for example, could potentially have students with reading levels ranging from kindergarten to 6th grade. Co-teaching between special and general educators is now a common approach to effective inclusion in K-12 schools. Public Law 94-142 (1975) and the Individuals with Disability Education Act (1997) are legislative policies that lead to a plethora of inclusive practices that are used today to educate students with diverse cognitive, processing, sensory, and/or physical disabilities in the same general education classroom. While co-teaching in elementary schools is more common than in secondary schools, there has been an increase at the

secondary level, especially across disciplines (Rice, Drame, Owen, & Frattura, 2007).

In a meta-synthesis of 32 qualitative research reports on K-12 co-teaching, Scruggs, Mastropieri, and McDuffie (2007) reported that teachers generally benefited professionally from co-teaching. In many cases, teachers noted increased cooperation among their students in co-taught, inclusive classes and that both students with and without disabilities benefited. Some of the needs expressed by co-teachers included administrative support and planning as well as release time. Additionally, the importance of co-teaching training and the need for teachers to be compatible were cited.

In some teacher preparation programs, general and special education students at the preservice level complete their student teaching

Figure 1 Six Types of Co-Teaching as Defined by Cook and Friend (1995)

Type of Co-Teaching	Application
One Teach, One Observe	Teachers decide in advance what types of specific observational information to gather during instruction and agree on a system for gathering the data. Afterward, the teachers analyze the information together.
One Teach, One Assist	One teacher keeps primary responsibility for teaching while the other teacher circulates through the room providing unobtrusive assistance to students as needed.
Parallel Teaching	Teachers are both teaching the same information but they divide the class and do so simultaneously.
Station Teaching	Teachers divide content and students. Each teacher then teaches the content to one group and subsequently repeats the instruction for the other group. If appropriate, a third "station" could require that students work independently.
Alternative Teaching	One teacher takes responsibility for the large group while the other teacher works with a smaller group.
Team Teaching	Both teachers deliver the same instruction at the same time. One may model while the other speaks. One may demonstrate while the other explains. The teachers may role play or they may take turns delivering instruction.

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experience using a co-teaching approach (Kamens, 2007). Co-teaching is increasingly used with English language learners, who are taught alongside their native English-speaking peers in the general classroom with a literacy specialist's teaming with the general educator. Additionally, professional learning communities (PLCs), which are an effective staff development approach and a potent strategy for school change and improvement, involve, in part, collaborative planning and teaching within and across disciplines. The PLC model provides flexibility for co-teaching thematic and interdisciplinary units. The teacher shortages in critical need areas such as math, science, and special education also call for alternative approaches to preparing teachers. Co-planning and co-teaching between alternative route to licensure (ARL) teachers and teacher mentors is a common practice.

Co-Teaching in Higher Education

There are many advantages of using co-teaching approaches in K-12, and, as such, teacher educators often assign readings on and discuss various collaborative teaching arrangements but seldom model collaborative teaching behaviors (Jones & Morin, 2000). Consequently, "Prospective teachers may be ill-prepared to establish successful teaching partnerships in K-12 classrooms" (p. 51). Researchers argue that the most effective way to learn co-teaching is through hands-on experiences with a wide range of collaborative interactions (Austin, 2001; Kluth & Straut, 2003). Bacharach, Heck, and Dahlberg (2008), who examined 16 university-level co-taught classes, concluded that co-teaching in teacher preparation programs is a promising practice for fostering collaborative skills, increasing student participation, improving classroom instruction and professional growth, and developing student communication skills.

Co-teaching in higher education has certain challenges. In a study that examined the experiences of co-teaching a university-level, graduate course, Waters and Burcroff (2007) found that students initially expressed mistrust of the co-teaching process. Students had difficulty with two educators sharing a classroom on a daily basis. Students reported feeling insecure, concerned, and anxious about the possibilities.

Similarly, Vogler and Long (2003), who co-taught two sections of the same undergraduate social studies/language arts methods course, reported that, when students were asked how they felt about someday being a member of a teaching team, their feelings were mixed. Students' reasons against co-teaching included possible conflicts that could develop between teachers. One student reported, "Some of the ideas or concepts such as getting the lessons stressed by two people is good, but grading and other policies in the classroom could cause conflicts" (p. 125). Another

student felt that classroom management and discipline would not be as effective with two teachers because one might be more flexible with rules and consequences. In contrast, students who expressed an interest in co-teaching noted individualized instruction and the ability to provide multiple perspectives on issues as advantages.

Students in Dugan and Letterman's (2008) study, which examined student self-reported appraisals of collaborative teaching at three New England state universities in 11 team-taught courses, reported that co-teaching resulted in communication and organizational problems that negatively impacted the students' ability to clearly understand expectations in order to earn good grades. Nevertheless, Dugan and Letterman concluded that students, overall, preferred team-taught courses with collaborative teaching methods. The most preferred style of team teaching involved two instructors who were in the classroom together for all class meetings.

Co-teaching does not necessarily align with traditional practices in higher education. As a form of best practice, co-teaching means, two faculty teach the same course at the same time with a typical number of enrolled students who would take a solo-taught course. Co-teaching requires more planning time than that of a solo-taught course. Systems within higher education do not typically have policies in place for alternative course loads and teaching methods. Especially, in times of a budget crisis, which we are experiencing now, it is not cost effective for institutions to pay full-time faculty extra or to give them a load release for participating in a co-taught course.

The potentially largest barriers to co-teaching at the college level may be the policies and practices for promotion, tenure, and merit reviews. These policies often do not include language for how to evaluate the co-taught classes included in the candidate's portfolio, especially as the documentation pertains to quantifying course load and interpreting one course evaluation for two instructors. Faculty who sit on review committees, most of whom have never co-taught a course, often perceive co-taught courses as easier and less time consuming than they do solotaught courses.

The Structure and Development of the Course

In light of our desire to establish best practices in our new school of education, we reflected on our school's mission as well as on our own professional and personal goals. Based on this reflection, we developed an approach for co-teaching in our school of education that could be used throughout the college, within and across disciplines. As we sat down to

plan for the course, three questions emerged from our dialogue. First, what professional characteristics contribute to an effective co-teaching team? Second, how do co-teachers plan and deliver effective instruction? Third, how do preservice teachers view co-teaching and the design of a co-taught course? These three questions frame our discussion and reflections in this article.

Background

The course was taught in a school of education at a new, baccalaure-ate-serving college in the Southwest. The college opened in 2002 as the first four-year state college in the state and currently serves approximately 3,000 students. The college offers more than 35 degrees, with 11 in the school of education. Teaching excellence is a key component of the college mission and is evident in what is valued in promotion and tenure and merit guidelines as well as through awards and in hiring practices.

We, the co-instructors of the course, share an interest and experience in training teachers to develop cultural competence skills, including working with English language learners. Each of us has taught the course, as solo instructors, several times in previous semesters. Lori, one of the co-instructors, is a 47-year-old Hispanic female with 14 years experience in higher education and expertise in special and secondary education. Lori is tenured and had been with the college one year at the time that this course was taught. Kevin, the other co-instructor, is a 35-year-old Caucasian male with eight years experience in higher education and expertise in secondary pedagogy and social-cultural foundations of education. Kevin is in a tenure-track position and had been with the college for three years at the time that this course was taught.

During the fall 2007 semester, 18 students were enrolled in *Language Acquisition, Development, and Learning*, a required course in both the elementary and secondary degree programs. Of the 18 students, 14 were female and four were male; nine were Hispanic, seven were Caucasian, and two were Asian/Pacific Islander. Two students were secondary education majors and 16 students were elementary education majors. Six students were taking the course as their final course before student teaching.

Ambiguity and Flexibility: Characteristics of Effective Co-teachers

We had preconceived ideas about one another prior to beginning the experience. Kevin, for example, knew Lori for one year prior to entering into the co-teaching partnership. She had a total of 14 years experience as faculty in higher education, was older, tenured, and had taught more

diversity-related courses at the college level than Kevin. In addition, she had six years of successful co-teaching experience at another college. Kevin's preconceived notion about Lori was that she would know more than he did and, as a result, judge him negatively. Lori, however, observed that Kevin was knowledgeable about socio-cultural issues and had heard from students that he was an effective and well-respected instructor. After talking with Kevin, she learned that he believed in and practiced a constructivist approach to instruction, which was different from Lori's cognitive-behavioral approach to teaching and learning. Lori's background in special education teacher preparation taught her that the constructivist approach did not always provide the scaffolding and structure that some students need to learn. She was skeptical about teaming with someone who was a strong advocate for the constructivist approach to learning.

We learned throughout the semester that it was all right to be flexible when it came to instructional decisions, assessment, and problem solving. We learned that co-instructors do not have to share the same teaching philosophy in order to co-teach successfully. The differences provided an opportunity for professional development for each of us. Lori learned from Kevin how to design activities that require students to construct the content as a means to learn new concepts. Kevin expanded his understanding of direct instruction to include scaffolding, guided practice, and independent practice. As a result of our flexibility and openness to differing teaching philosophies, we learned that trust, being accountable, and respect for one another are critical characteristics of effective co-teaching partners.

Collaboration and Compromise: Planning of Instruction

We met weekly, two months before the course began, to develop the course syllabus and content. The syllabus was a combination of each of our previous syllabi. We compromised on assignments, identified course objectives and learner outcomes, and agreed to structure the course by thematic units with weekly lesson plans. We developed a unit plan template (Figure 2), and we used the college's lesson plan template (Figure 3) to guide our planning.

We rotated weekly tasks such as researching content, writing the lesson and unit plans, preparing presentation slides, photocopying, monitoring the Web Campus aspect of the course, contacting guest speakers, and gathering materials for in-class activities. In our lesson plans, we noted who would be responsible for facilitating each section of the lesson. We met two days before each class, for approximately three hours,

Figure 2 Sample Unit Plan

Dates September 6-27, 2007 (4 weeks; week 2-5)

Co-Planners Lori and Kevin

Theme The Context of English Language Learners

Weeks Week 1 of Unit 2:

What's in a Name?

Who are English Language Learners (ELLs) in the U.S.? What are the types of bilingual students in U.S. schools?

What is the profile of ELLs in Clark County School District (CCSD)?

The politics of language in society and in school

Week 2 of Unit 2:

How do cultural differences affect teaching and learning?

- Intercultural Communication Differences
- Linguistic Patterns of Cross-cultural Communication

Existing school programs to meet the needs of ELLs

Stages of Second Language Acquisition

- Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP)
- Classroom tools for determining stages of language proficiency
- Factors that affect second language development
- Language acquisition theories

How can I get to know my ELLs?

• Cultural activities for the entire class

Week 3 of Unit 2:

Language, power, social standing, and identity

ELLs with disabilities

Assessing English language proficiency

 Process and procedures used in school district for identification and service delivery

Guest Speaker: Reality Spanish: A Natural Way to Learn a Second Language (Example of Krashen's theory)

Week 4 of Unit 2.

Assessing English Language Proficiency: Process and Procedures Used in CCSD for Identification and Service Delivery: Guest Speaker In-class discussion of Krashen Assignment

Readings

Chapters 1, 2, and other readings to be announced

Objectives

- Demonstrate knowledge of terms associated with English as a Second Language (ESL) instruction.
- Identify various theories in first and second language acquisition.
- Describe the stages of second language development.
- Demonstrate knowledge of the factors that impact second language development and the relationship between language and power and language and identify.
- Identify the political, social, and cultural issues related to language teaching.
- Distinguish between bilingual and ESL programs.

Figure 2. Sample Unit Plan (continued)

Identify assessments used in the screening, identification, and service delivery for English language learners with and without disabilities.

Suggested speakers on the following topics: Speakers/Video

Assessment of English Language Proficiency

Reality Spanish (an example of the Natural Way of Learning a Second Language)

Dual Language Programs in Clark County School District Video: Fear and Learning at Hoover Middle School

Strategies Co-teaching

Mnemonic devices for six approaches

Cooperative learning activity: Numbered Heads

Activities The Flower and the Stem

> Wheel of Fortune Jeopardy On the Spot

Assignments Family Language History Map and Reflection 15% 10%

Stephan Krashen Assignment

Theories: Theories: Behaviorist, Innatist, Interactionist

Key Players Key Players: Ogbu, Hall, Krashen, Chomsky, Freeman & Freeman

Assessment Informal Assessments during and after each session.

Checks for understanding.

Ticket out the door.

Student-generated review questions for entire class.

Midterm in October.

Assigned Tasks Lori: work on PowerPoint slides, unit plan, prepare name placards.

Kevin: work on PowerPoint slides, lesson plan, prepare for pre-

and post-activities for week 1 of unit.

Post Unit Reflection

to review our unit and lesson plans, discuss future lessons, and assign new tasks, as needed. We also met after every class for approximately 45 minutes to debrief and reflect on the day's lesson.

In reflecting on our planning process, we agreed that it was a good decision to organize the class by units instead of by a rigid weekly schedule. We anticipated that having two instructors in the classroom would likely increase the quality and quantity of student-teacher interactions. We found that direct instruction, when presented by two instructors, provided a perfect opportunity for differentiating instruction for learners. While Kevin, for example, was presenting information on the six levels of second language acquisition, Lori asked questions to scaffold the students' level of understanding. Lori purposefully asked clarifica-

Figure 3 Lesson Plan

Content Objective(s):

Students will learn about co-teaching as a service delivery option for all students, English Language Learners in particular.

Students will apply what they learned about co-teaching in a teaming activity.

Language Objective(s):

Students will listen to a presentation on co-teaching and take notes.

Students will tell what they know about co-teaching.

Students will read research summaries on co-teaching and share out.

Students will briefly describe key concepts learned during a group review session.

Key Vocabulary:

Co-teaching, station teaching, parallel teaching, alternative teaching.

Best Practices:

PreparationScaffoldingGrouping OptionsAdaptation of contentModelingWhole ClassLinks to backgroundGuided practiceSmall groupsLinks to past learningIndependent practicePartnersStrategies incorporatedVerbal scaffoldsIndependent

Procedural scaffolds

Integration of ProcessesApplicationAssessmentListeningHands-onIndividualSpeakingAuthentic (Meaningful)GroupReadingLinked to objectivesWrittenWritingPromotes engagementOral

Teaching Strategies:

KWL-Co-teaching

Mnemonic devices for six approaches

Cooperative learning activity: Numbered Heads

Warm Up Activity:

Emotion and Learning Activity (Dr. Glasser): Introduction to set the stage for the semester. *Kevin Teaches, Lori Assists* (20 minutes)

Lesson Sequence:

- (1) Go over syllabus and Unit Plan. (15 minutes). Teaming
- (2) On the Spot: Get to Know Your Peers Activity (15 minutes). Kevin Teaches, Lori Assists Anticipatory Set: KWL on co-teaching (10 minutes). Kevin Teaches, Lori Assists
- (3) Co-teaching PowerPoint and discussion (45 minutes). Lori Teaches, Kevin Assists
 - A. What is co-teaching?
 - B. Why co-teach?
 - C. How is co-teaching used in public schools?
 - D. A model for co-teaching
 - E. What does research say about co-teaching?

Activity: Numbered heads

F. Co-teaching approaches

Activity: Mnemonic

G. Teaming approach: What are the roles of each person?

Figure 3. Lesson Plan (continued)

(4) Activity (40 minutes). Teaming

In small groups of three to four students, have students pick a topic and practice teaming. Have students assign roles. Select teams to present (20 minutes).

Accommodations:

Captionist, laptop computer, and audio microphone for a student who is hard of hearing.

Supplementary Materials:

PowerPoint handouts, handout on approaches to co-teaching, colored markers.

Review/Assessment:

Students share out the six approaches to co-teaching and explain why co-teaching is an effective service delivery model. (10 minutes)

Reflection:

tion questions of the class to clarify their understanding of the difference between a 1st grader who is at stage 1, pre-production, and a 7th grader who is at stage 1, pre-production. For example, what might the vocabulary look like for a 1st grader at stage 1 as opposed to that of a 7th grader at stage 1? In another situation, Lori introduced a new term, *newcomer program*, while explaining the category of English language learners and how they may fall into certain language development levels. Kevin followed up by writing the new term on the whiteboard with a definition.

The students in the course varied in their prerequisite skills relative to course content, language and literacy skills, age, and education degree that was being earned. The instructors utilized various questioning techniques to get at the diverse background knowledge and level of understanding of the students in the course. Specifically, Lori and Kevin modeled questions and answers along the Bloom's taxonomy of critical thinking (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956). Varying the level of questioning by cognitive difficulty is an effective strategy to use with English language learners. Starting with factual and descriptive questions about a concept then moving to analysis, synthesis, and evaluation questions about the same concept challenges students to develop their language and think critically. Lori and Kevin modeled the pedagogy in their own teaching. They took turns asking and answering questions at varying degrees of difficulty, and engaged in "think alouds" as a form of modeling the strategy for use with K-12 English language learners.

Our co-planning meetings were intense and long at the beginning of the semester, sometimes lasting 4-5 hours for a 3 hour course. We knew that communication, compromise, and planning were essential to the success of the course. Out of excitement and a shared commitment to inquiry, dialogue, and reflection, it was common for us to interrupt one another during our meetings. Hearing interpretations of content and instructional strategies through each other's words was an essential component of our co-planning process as well as our professional development.

Our differing perspectives on the effectiveness of constructivist versus cognitive-behavioral approaches to teaching and learning became more similar as we communicated more openly about our views during our meetings and participated in each of the approaches throughout the semester. Overall, we found that the professional development that is gained from the communication between co-teaching colleagues brings coherence to ideas and enriches one's desire to expand his or her knowledge of pedagogy.

Support and Creativity: Delivery of Instruction

Learning to co-teach is a developmental process. When two instructors are in a new co-teaching partnership, the easiest form of co-teaching is when one teaches and one assists (Cook & Friend, 1995). This was true for us. Our planning lent itself to this form of teaming. We were getting comfortable with each other's personalities, content knowledge, and pedagogical style; therefore, taking turns presenting the content while the other assisted made sense. Sometimes this was planned; other times, it happened spontaneously. On one occasion, Kevin pulled Lori into his whole-group dialogue with an "on-the-spot" question that was not prearranged or previously discussed. Lori responded to the question and then referred the dialogue back to Kevin. In this regard, Vazquez-Montilla, Spillman, Elliott, and McConney (2007) noted, "Spontaneous contributions during co-teaching can be effective but teams have to work together and it takes time for partners to feel comfortable enough to contribute off the cuff" (p. 50).

As the semester continued, we challenged ourselves to utilize more extensive co-teaching approaches, as defined by Cook and Friend (1995), in our instruction. We soon found ourselves planning and implementing parallel teaching and station teaching (Figure 1). In reflecting on the various types of collaborative approaches that we used, we observed a relationship between an increase in the complexity of our co-teaching approaches and an increase in the quantity and quality of student engagement. For example, parallel and station teaching provided more individualized instruction which increased the amount of interaction and engagement among students and between students and instructors.

Creativity was exhibited in our selection of activities and assignments. For example, we used the game Jeopardy to assess student learn-

ing for the midterm examination. We provided a list of ten categories for students to consider as Jeopardy headings. Students were asked to select only five categories from the list of ten and to write questions and answers for each monetary level in the template. Using a blank web-based Jeopardy template, students developed their own questions and answers to content covered in the first half of the semester. Each question had to correspond with a level of Bloom's taxonomy (Bloom et al., 1956). For example, a \$100 question had to be written as a level-one (knowledge) question. A \$500 question had to be written as either a level-five (synthesis) question or a level-six (evaluation) question.

At first, Lori was concerned that the assessment of content would be overshadowed by the game itself. Thus, we decided to collect and review all templates two weeks before the midterm examination. Once we approved all templates, students switched templates with a randomly assigned partner on the examination date and completed the examination. The examination was proctored in a computer lab on campus. Reading students' questions and answers prior to the examination date was a good form of progress monitoring. It helped us to determine the students' knowledge level of the taxonomy and where we needed to refocus on content and/or questioning skills. Although all students developed accurate lower-level questions, according to Bloom's et al. (1956) taxonomy, more than half of the students did not write accurate higher-level questions (levels five and six). We worked individually with students who needed assistance with their examination questions.

A few students were concerned about the point values associated with assignments in the course and expressed their concerns during class. Specifically, they were concerned about how their assignments would be graded. Students wanted to know whether their assignments would be graded by each of us or split between us to grade or whether we would alternate grading with each assignment. This was a great opportunity to reflect on our grading structure, something we had not given much attention prior to the raising of this concern. As a result of students' comments, we decided, from that point on, to alternate the grading of assignments and to assign assignments to each other based on equity and our areas of strengths.

Other course assignments included subscribing to Stephen Krashen's mailing list and presenting an analysis of Krashen's discussion postings on various Teaching English to Students of Other Languages (TESOL) topics. Krashen is a renowned bilingual education and TESOL researcher and educator. For a different assignment, students read selected chapters from Stephen Cary's (2007) book, *Working with English Language Learners: Answers to Teachers' Top Ten Questions*, and taught a lesson

to the class relative to content covered in assigned chapters. Students also completed a cyber-assignment that required them to locate three websites, one each on theory related to second language acquisition, on lesson plans designed for English language learners, and on a professional organization for teachers that involves teaching linguistically-diverse students, and to write a review of each site. Additionally, students wrote a Sheltered Instruction Observation Protocol (SIOP) lesson plan and a family language history reflection paper that chronicled their language learning and teaching experiences.

Course Evaluation: Students' Views on Co-teaching and the Course Design

All items in the course evaluation received a 4.0 or higher based on a 5-point Likert scale. Students anonymously shared written comments on the design of the course and of co-teaching in the final course evaluation. Their comments indicated that they enjoyed the "real-life" modeling of co-teaching. One student noted, "This was the first time I experienced co-teaching. The professors provided us with great examples of how to do it [co-teach]." Another student stated, "With co-teaching, one can say something and the other rephrases it and this helps with understanding content." Several students indicated that they would like to co-teach when they are in the classroom. One student noted that, although co-teaching seems like a lot of work, the benefits in the end seem worth it.

Based on observations, informal discussions, and the course evaluation, students were able to distinguish between the six types of coteaching (Cook & Friend, 1995). Students reported they felt comfortable participating in class and enjoyed the interaction among classmates during whole-group instruction and lessons that involved parallel and station teaching. Students also noted that the assignments were beneficial to them as future teachers. This was rewarding for us to read and confirmed the benefits of the countless hours of collaboration and compromise during our initial planning of the course.

The time restrictions related to having two instructors in the class-room were noted by students in the course evaluation. Four students commented that the course was not long enough and that there was too much information taught in three hours. One student stated, "There is a lot of information and we move very fast through the information." Another student wrote, "I wish we could complete some tasks in full length. Due to time, we don't get to do this some days." When instructors are co-teaching, content and concepts are presented in an interactive

manner between the instructors, hence providing differing perspectives and more opportunities for engagement among instructors and students. The depth of the discussions showed us the students were thinking critically. Lori and Kevin felt it was worth adjusting time allocated for individual objectives in order to cover the depth of selected content versus breadth.

One student felt that the textbook was geared mainly toward elementary teachers. While we knew this to be true, we reflected on the student's comment and agreed that we could have used our co-teaching to compensate for the secondary content through more examples, questioning, and an increase in secondary-level content in the activities. Another student was concerned about the level of background knowledge that students brought to class. The student wrote, "All students in a 400 level course should be on the same level of understanding. It was frustrating to me to rely on other students whose knowledge level and work ethic are not compatible with a 400 level course." This could be the case in any course, solo or co-taught. As we continue to work on a model of co-teaching that is conducive to our school and college, it will be important to build in effective instructional strategies to develop background knowledge and differentiate instruction (e.g., multi-modal instruction, tiered assignments) for our increasingly diverse college student population.

Final Reflections

Educational reform that leads to an increase in K-12 student achievement starts with effective teacher preparation programs that include curricula for addressing the learning, language, and social needs of a diverse student population. There is evidence that co-teaching practices in K-12 schools, within and across disciplines, is one way to address diverse learning needs and increase student achievement. Preservice teachers who graduate from teacher preparation programs where coteaching approaches are taught and modeled in pedagogy courses will be in high demand for K-12 teaching positions. The potential for them to impact student achievement, if placed in co-teaching settings, is great. While anecdotal in nature, our experiences in co-teaching reinforced the notion that the benefits of co-teaching in a teacher preparation program outweigh its challenges. Benefits that resulted from this study included the value of different perspectives in the teaching role, the opportunity to differentiate instruction more effectively, and professional development opportunities that surface when faculty co-teach.

When co-teachers choose one another and communicate throughout

the semester about their styles, preconceived notions, fears, and growth, the experience is positive for both the instructors and students. Collaborative planning time is critical in co-teaching. Planning meetings prior to and during the course, coupled with debriefing meetings after each class, were important for us to maintain the course continuity, monitor the integrity of the content and instruction, and communicate with one another. Developing units to structure the course versus weekly sections worked well in our co-teaching experience. Two heads were better than one when it came to creativity in the development and implementation of the course content.

For us, co-teaching served as both a teaching strategy in the classroom and a strategy for faculty development in our roles as teacher educators. The experiences that we gained from co-teaching provided rich opportunities for reflection on our teaching practices, ourselves as individuals, and our students' learning. These reflective opportunities allowed us to move beyond the practical application of "how to co-teach" into a "how to grow as a teacher and reflective practitioner."

Colleges and schools of education should encourage faculty to practice co-teaching. Institutional policies could be revised to include innovative teaching approaches that come with stipend or load release benefits. It is especially important that education faculty teach and model effective K-12 practices in preservice education courses. The co-planning artifacts discussed and presented in this article can serve as a starting point for higher education practitioners to consider as they explore co-teaching at the college level.

References

- Austin, V. L. (2001). Teachers' beliefs about co-teaching. Remedial & Special Education, 22(4), 245-255.
- Bacharach, N., Washut Heck, T., & Dahlberg, K. (2008). Co-teaching in higher education. *Journal of College Teaching & Learning*, 5(3), 9-16.
- Bloom, B., Englehart, M., Furst, E., Hill, W., & Krathwohl, O. (1956). *Taxonomy of educational objectives: The classification of educational goals: Handbook 1. The cognitive domain.* White Plains, NY: Longman.
- Bradley, D. F., King-Sears, M. E., & Tessier-Switlick, D. M. (1997). *Teaching students in inclusive settings: From theory to practice*. Boston: Allyn & Bacon.
- Cary, S. (2007). Working with English language learners: Answers to teachers' top ten questions. Portsmouth, NH: Heinemann.
- Cook, L., & Friend. M. (1995). Co-Teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*, 28(3), 1-16.
- Cruz, B. C., & Zaragoza, N. (1998). Team teaching in teacher education: Intracollege partnerships. *Teacher Education Quarterly*, 25(2), 53-62.
- Dugan, K., & Letterman, M. (2008). Student appraisals of collaborative teaching.

- College Teaching, 56(1), 11-15.
- Duncan, A. (2009). Teacher preparation: reforming the uncertain profession—Remarks of Secretary Arne Duncan at Teachers College, Columbia University. Retrieved from http://www2.ed.gov/news/speeches/2009/10/10222009.html
- Friend, M., & Bursuck, D. W. (2002). *Including students with special needs: A practical guide for classroom teachers*. Boston: Allyn & Bacon.
- Friend, M., & Cook. L. (2002). *Interactions: Collaboration skills for school professionals*. New York: Longman.
- Helms, M. M., Alvis, J. M., & Willis, M. (2005). Planning and implementing shared teaching: An MBA team teaching case study. *Journal of Education for Business*, 8, 29-34.
- Jones, S. L., & Morin, V. A. (2000). Training teachers to work as partners: Modeling the way in teacher preparation programs. *The Delta Kappa Gamma Bulletin*, 67(1), 51-55.
- Kamens, M. W. (2007). Learning about co-teaching: A collaborative student teaching experience for preservice teachers. *Teacher Education and Special Education*, 30(3), 155-166.
- Keefe, E. B., Moore, V., & Duff, F. (2004). The four "knows" of collaborative teaching. *Teaching Exceptional Children*, 36(5), 36-41.
- Kluth, P., & Straut, D. (2003). Do as we say and as we do: Teaching and modeling collaborative practice in the university classroom. *Journal of Teacher Education*, 54(3), 228-240.
- McDaniel, E. A., & Colarulli, G. C. (1997). Collaborative teaching in the face of productivity concerns: The dispersed team model. *Innovative Higher Education*, 22(1), 19-36.
- McDuffie, K. A., Mastropieri, M. A., & Scruggs, T. E. (2009). Differential effects of peer tutoring in co-taught and non-co-taught classes: Results for content learning and student-teacher interactions. *Exceptional Children* 75(4), 493-510.
- Murawski, W. W. (2003). Co-Teaching in the inclusive classroom: Working together to help all your students find success (grades 6-12). Medina, WA: Institute for Educational Development.
- Murawski, W. W., & Dieker, L. A. (2004). Tips and strategies for co-teaching at the secondary level. *Teaching Exceptional Children*, 36(5), 52-58.
- Murray, J. (2004). Success story of schools' co-op. Times Educational Supplement, 4586, 28.
- Palincsar, A. S., & Brown, A. (1984). Reciprocal teaching of comprehension-fostering and comprehension monitoring activities. *Cognition and Instruction*, 1(2), 117-175.
- Rice, N., Drame, E., Owen, L., & Frattura, E. M. (2007). Co-instructing at the secondary level. *Teaching Exceptional Children*, 39(6), 12-18.
- Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*, 73(4), 392-416.
- Vázquez-Montilla, E., Spillman, C., Elliott, E., & McConney, A. (2007). Coteaching in teacher education: Expectations, inspirations, and limitations. *Florida Educational Leadership*, 7(2), 47-51.

- Vogler, K. E., & Long, E. (2003). Team teaching two sections of the same undergraduate course: A case study. College Teaching, 51(4), 122-126.
- Waters, F. H., & Burcroff, T. L. (2007). Collaborative teaching at the university level: Practicing what is preached. *The Teacher Educator*, 42(4), 304-315.
- Wood, J. (1998). Styles of interaction used by learning assistants: The effectiveness of training. International Journal of Language & Communication Disorders, 33, 614-619.