On the Same Page: Practical Techniques to Enhance Co-Teaching Interactions

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Abstract:
As increasing numbers of students with disabilities are taught in general education classrooms, co-teaching has become an established method of special education service provision. No longer viewed by education professionals as a collaborative model-come-lately, this shared approach of working side by side with a colleague in a classroom can be a rewarding and at the same time frustrating experience. This article offers co-teachers practical techniques to enhance their interactions and, in turn, improve educational outcomes for all of their students.
Keywords: collaboration, and co-teaching; collaboration, general and special education; collaboration, processes; collaboration

Article:
Over the past decade, co-teaching has become a popular approach to special education service provision in which two teachers work together to support diverse students' access, participation, and progress in the general education curriculum (Magiera & Zigmond, 2005; Reinhiller, 1996; Wilson, 2005). Like the sharing of responsibilities between parents or the complementary skills of successful business partners, combining the strengths of general and special educators in the classroom can be deeply beneficial to students and teachers alike. Co-teaching is "an educational approach in which general and special educators work in a coactive coordinated fashion to jointly teach academically and behaviorally heterogeneous groups of students in educationally integrated settings" (Bauwens, Hourcade, & Friend, 1989, p. 18). To effectively provide special education services, co-teachers must work closely together, combining their techniques, goals, and curricula in a way that not only meets their students' unique academic and behavioral needs (Bauwens & Hourcade, 1997; Friend & Cook, 2007) but also rejuvenates the teachers' professional passion and commitment (Arguelles, Hughes, & Schuum, 2000; Reinhiller, 1996).

Co-teaching may be popular, but it does not always come naturally (Mastropieri et al., 2005; Scruggs, Mastropieri, & McDuffie, 2007; Weiss & Lloyd, 2003). The greatest obstacle to successful co-teaching is often the lack of preparedness of the educators involved, for although co-teaching does rely on the research-based instructional practices used in independent instruction, it also requires an additional set of skills that are rarely used when teaching alone (Dettmer, Thurston, & Dyke, 2005; Mastropieri, 2001; Wasburn-Moses, 2005). Co-teaching requires a commitment not only to working within an equal partner-ship but also to developing new competence in areas such as creating shared lesson plans, communicating frequently and effectively with fellow

teachers, and resolving differences in a way that strengthens, rather than weakens, the collaborative relationship (Gately & Gately, 2001; Piechura-Couture, Tichenor, Touchton, Macisaac, & Heins, 2006; Rice, Drame, Owens, & Frattura, 2007). Once these additional skills are mastered and combined with existing instructional practices, a new range of collaborative activities designed to promote teaching and learning can emerge. This article describes practical techniques in four areas (i.e., communication, preparation, instruction, and conflict resolution) that can help co-teachers work together more productively and achieve greater satisfaction while doing so.

Communication

Clear, open, and continuous communication is vital to successful planning and to implementing a shared curriculum (Dettmer et al., 2005; Murawski & Dieker, 2004; Walther-Thomas, Korinek, McLaughlin, & Williams, 2000). Focusing on seemingly simple skills such as effective speaking and listening builds a solid foundation for improving co-teaching interactions. To get started, try the following techniques.

Conduct an Honest Self-Examination

Teachers who are unfamiliar with their own teaching and communication habits find it harder to coordinate with those of another person (Dettmer et al., 2005). To learn more about how professional and personal traits may help or hinder the co-teaching partnership, keep a private journal, fill out an online self-inventory such as the *Keirsey Temperament Sorter II* or the *Communication Style Inventory*, or talk with others to gain insight (Buddy, 2007). When keeping a private journal, try writing about co-teaching interactions that went well and those that did not, then, reflect on which communication tactics helped or hindered those interactions. Work toward eliminating the latter by identifying triggers in the conversation that may provoke miscommunication. For example, when one feels inadequate, accusatory defense mechanisms tend to pop up. When this unproductive dialog is identified, strategies such as private speech can be used to prevent it. The *Keirsey Temperament Sorter II* (http://www.keirsey.com), an online instrument used to assess corporate, career, and personal development, is considered to be a top online personality assessment (Advisor Team, 2005). Similarly, communication style inventories such as *ActualMe* (http:// www.actualme.com) may help co-teachers better under-stand their partner's preferred communication and interaction styles. In addition to providing standard results, reports generated by *ActualMe* provide strategies for interacting across communication styles that co-teachers may find useful. Although the results of online surveys should not be taken as immutable, such scales require only minutes to complete and offer professional partners a way to sit down (together or separately) and gain greater insight into their unique styles and preferences. Talking with others is also an effective way to learn more about the perceptions of others. For instance, one co-teacher may not think he or she is intimidating until hearing that opinion expressed by colleagues. Honest self-examination conducted through journaling, self-assessment, or conversations with others is the first step toward improving important communication skills.

Use Venn Diagrams to Identify Each Partner's Strengths and Needs

Venn diagrams are drawings that identify areas of difference and overlap (Baxendell, 2003) and are a great tool for identifying professional strengths and areas for growth in co-teaching partnerships. In addition to using more general applications, try using Venn diagrams to share the results of self-assessments. Visually comparing these results often highlights complementary skills that co-teachers can use to build a more positive learning environment for students. For example, one teacher may be exceptionally creative but have difficulties taking a project to fruition, whereas the other teacher brings fewer ideas for new curricula but excels at following through. Venn diagrams can be used to strengthen the relationship between co-teachers by helping the pair work toward achieving a common belief system, a shared worth ethic, and complementary strengths—three factors that occur in successful partnerships (Allen-Maley & Bishop, 2000). The examples in Figure 1 show how beginning co-teachers used a Venn Diagram to get to know one another, sharing their perceived professional strengths and needs. The co-teachers then used this information to negotiate their roles and responsibilities as they co-planned a unit. The general education teacher identified the big ideas in the unit, whereas the special education teacher focused on task analyzing the content, infusing technology, and adapting materials.
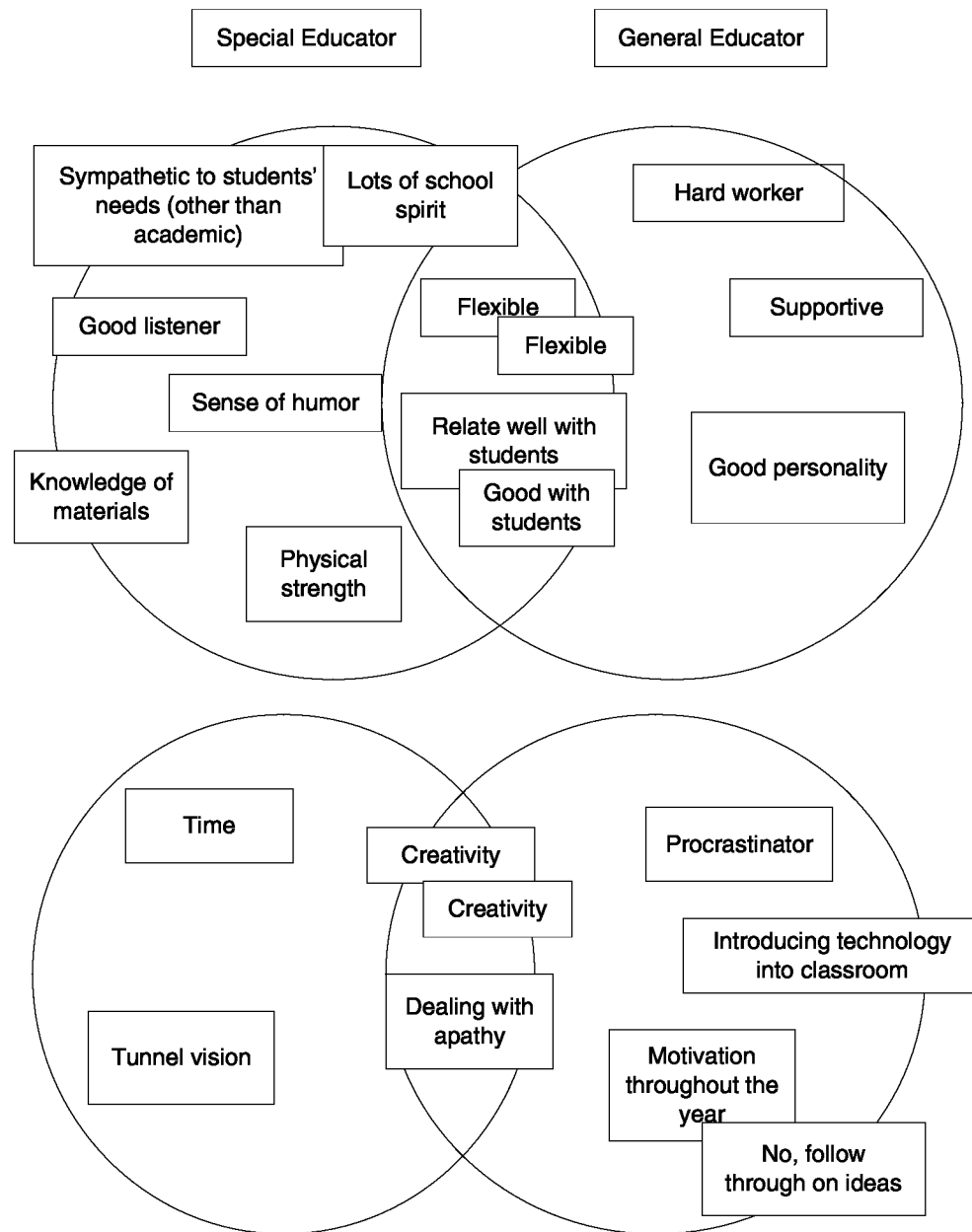
Special Educator   **General Educator**

Sympathetic to students' needs (other than academic)

Lots of school spirit

Hard worker

Flexible

Flexible

Supportive

Good listener

Sense of humor

Relate well with students

Good with students

Good personality

Knowledge of materials

Physical strength

Time

Creativity

Creativity

Procrastinator

Introducing technology into classroom

Dealing with apathy

Tunnel vision

Motivation throughout the year

No, follow through on ideas

Figure 1. Venn diagrams of strengths and areas for growth in beginning co-teaching partners.

Analyze Patterns of Communication

Even with special attention, communication habits are hard to change (Cramer & Stivers, 2007). One way to help each person in the co-teaching partnership hear how he or she actually sounds is to audiotape some planning sessions (Dettmer et al., 2005; Gottman, Notarius, Gonso, & Markman, 1976). Use a simple cassette recorder or a more sophisticated digital recording device to record the interactions between co-teaching partners. (Remember, of course, to secure each partner's consent before recording the interactions.) Transcribe the tapes separately or together, and then analyze the dialogue to gain greater insight into the relationship. Focus on tone as well as the actual words used: Often, it is not *what* is said but rather *how* it is said that encourages productive interactions. When analyzing the recordings, look and listen for communication blunders, such as rapid-fire messages that sound stressed, judgmental, or oppositional. These messages often sabotage the conversation, resulting in exchanges that come across more like verbal combat than professional dialogue (Garmston & Wellman, 1998). To avoid such "unproductive debates" (see Glover, 2007, p. 60) and to allow clear, honest, and respectful communication to flourish between partners in the future, remind one another to stay relaxed, listen attentively, and choose words carefully (Capelluti, 2004; Fennimore, 2001). Achieve optimal and lasting results by intermittently analyzing audio-recorded planning sessions in this manner and using the

results as a basis for choosing specific, measurable, and observable ways to improve future inter-actions. For instance, if tone is a recurrent problem, set a joint goal to slow down, speak softly, and maintain eye contact while conversing. If, however, audiotaping makes one or both co-teachers uncomfortable, opt for a different approach to analyze and to change patterns of communication. Laud (1998) suggested writing down what one plans to say before the interaction and considering the possible effect it may have on another person. Maintain a log to record ongoing interactions, analyze them by looking for instances of good and poor communication, and plan for ways to increase the former and decrease the latter.

Preparation

Thoughtful planning, whether conducted independently or with a co-teaching partner, is a vital part of designing effective instruction (Gunter, Estes, & Mintz, 2007). Poorly planned activities rarely end well. Although finding the time to plan may seem impossible, effective co-teachers manage to set aside at least 45 minutes a week for uninterrupted planning (Bos & Vaughn, 2006; Kohler-Evans, 2006). Because shared planning time, especially 45 minutes of it, is often difficult to come by, generating creative, flexible solutions serves both teachers well. This is where technology can come in handy. For example, busy co-teachers who do not have time to meet before, during, or after the school day can use free online interactive videoconferencing (e.g., Skype, SightSpeed, iChat) in the evening or on weekends. If Internet access is a problem, a good old-fashioned telephone or mobile device will suffice. Teachers who have multiple co-teaching partners may find it easier to hold shorter meetings more often. Instead of meeting with each co-teacher for 45 minutes once a week, try penciling in 10 minutes with each partner four or five times a week. Regardless of the manner in which meetings between co-teachers take place, use the following techniques to get the most out of it.

Develop Protocols for Meetings

Because teaching time is by nature student-centered, co-teachers must hold meetings where they can exchange ideas, make decisions, and carry out everyday tasks with-out interruptions (Dettmer et al., 2005). Although finding times and places to plan together regularly may seem like more work, the benefits of doing so should prove as motivating as they are rejuvenating. Asking administrators to cover your classes once a week to make time for co-planning may be more palatable if there is evidence that the time will be used wisely. Crafting a meeting agenda beforehand is one way to illustrate effective and efficient use of planning time. Meeting agendas also promote joint ownership and action during collaborative planning sessions, helping co-teachers reap the rewards of the positive climate that results (Friend & Cook, 2007). Before every co-teaching meeting, identify the purpose, the goals, and the meeting location. Settle any issues of timing, advanced preparation, and other logistics in advance so that partners can focus the discussion on the matters at hand. Every meeting should result in resolution of at least one issue or completion of the planning of at least one shared item. Guidelines for developing meeting protocols include deciding whether a meeting is needed, preparing and sticking to a written agenda, agreeing on a code of conduct, participating constructively in the dialogue, and evaluating the results (Washington University in St. Louis, n.d.).

Because meetings are based on conversation, an effective protocol will include the type or types of talk that will help achieve the identified co-teaching goals. Geller (2006) describes five types of conversation: relationship talk (i.e., sharing personal aspects of one's life), possibility talk (i.e., sharing visions, goals, objectives, or plans), action talk (i.e., discussing behavior-driven tactics to accomplish goals, plans, and visions), opportunity talk (i.e., discussing choices available to meet goals as well as the roles and responsibilities of partners), and follow-up talk (i.e., discussing goal attainment or lack thereof and any changes that need to take place). Each type of talk serves a different purpose and is not mutually exclusive; thus, a meeting agenda may include several, if not all, of the types of talk.

Use Timelines

Shared timelines and schedules are a good way to ensure that professionals work in unison in the classroom (Friend & Cook, 2007). Together, map out goals for specific units, months, marking periods, or semesters. Evaluate joint progress by referring regularly to these goals, and make changes as needed. Using visual organizers in this way not only helps coordinate instruction but also creates a record of benchmarks that can be

used to track students' progress throughout the year and provides a measure of accountability for all teachers involved. The visual organizer in Table 1 illustrates how one pair of co-teachers used timelines to plan, carry out, and evaluate an instructional unit. Notice the amended outline, created when the teachers failed to adhere to their original objectives. When the unit failed to progress as planned, the partners reviewed the timeline and realized their original goals were too ambitious. They remained flexible and adjusted the timeline. Taking those few minutes to jot down the timeline for unit design and delivery allowed the co-teachers to more effectively manage their limited planning and instructional time and to avoid playing the bail-and-blame game.

TABLE 1
Timeline and Amended Timeline for a Co-Taught Unit

Date	Action
2/4	Hold initial planning meeting; choose unit topic; determine responsibilities.
2/5	Give Gen. Ed. teacher a copy of the unit to review and amend.
2/6	Meet to review revisions.
2/7	Collect all materials; discuss last-minute details.
2/8	Begin co-teaching units; meet after school to reflect and discuss any needed changes.
2/9	Continue co-teaching; make changes as needed.
2/13	Meet after school to evaluate progress; make changes as necessary.
2/15	Continue co-teaching; make changes as needed.
2/22	Finish units; meet after school to reflect on effectiveness of units and co-teaching.

Amended timeline: 2/8/06

Date	Action
2/4	Hold initial planning meeting; choose unit topic; determine responsibilities.
2/5	Give Gen. Ed. teacher a copy of the unit to review and amend.
2/6	Meet to review revisions.
2/7	Collect all materials; discuss last-minute details.
2/8	Because of ARFI meeting and illness, push unit implementation to the next week.
2/9	Begin co-teaching units; meet after school to reflect and discuss any changes.
2/13	Continue co-teaching; make changes as needed.
2/15	Meet after school to evaluate progress; make changes as necessary.
2/22	Continue co-teaching; make changes as needed.
2/23	Meet after school to complete student rubrics.
2/24	Complete self/partner evaluations.
2/27	Finish units; meet after school to reflect on effectiveness of units and co-teaching.

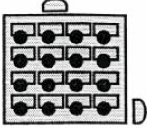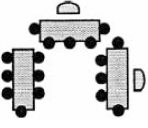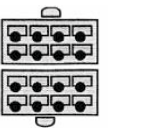Reprinted with permission of the authors, Rene Bailey and Beth Thead.
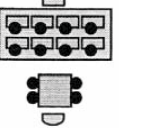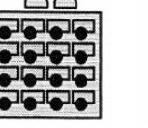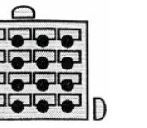
Design Lesson Plans Together

Before creating any concrete co-teaching plans, you must choose a co-teaching model. Although there are many different models that co-teachers can use, deciding in advance can help to clarify the ways in which partners interact in the classroom. Friend and Cook (2007) developed six approaches that can guide effective co-teaching: (a) one teaching, one observing, (b) station teaching, (c) parallel teaching, (d) alternative teaching, (e) teaming, and (f) one teaching, one assisting. Use the one-teaching, one-observing model if collecting academic or behavioral student data is what matters. Try station teaching, where both teachers actively provide instruction while students rotate through preplanned instructional centers or stations, when co-teaching styles differ or if smaller teacher– student ratios are preferred. Opt for parallel teaching, in which the class is divided into two groups and each co-teacher instructs one group, when both partners possess adequate content knowledge but smaller instructional configurations better meet students' diverse needs. Consider alternative teaching when a small group of students would benefit from instruction that differs from the whole class. Go for teaming when co-teaching partners really hit it off; synergy and parity make or break this approach. Use the one-teaching, one-assisting model sparingly, reserving its use primarily for unplanned co-teaching interactions. Each time co-

teachers meet, albeit formally or informally, discussion should center on choosing a model or models that support the curriculum, meet diverse student needs, and promote attainment of subject matter or skills. More thorough descriptions, examples, and straightforward illustrations of these approaches can be found on the DVD *The Power of Two* (Friend, Burrello, & Burrello, 2005) or in Friend and Cook's (2007) textbook.

Figure 2
Co-Teaching Planning Form

Collaborative Planning Form Subject: _____   Period(s): _____   Prepared by: _____

Teach/Observe   Stations   Parallel   Alternative   Team   Teach/Assist

Lesson Overview: Standards Addressed: Reading Addendum 2.4; Math 2.2
Reading Comprehension
Skills With Problem Solving
Steps to Story Problem Solving

Tasks to be Completed	Co-Teaching Model	Special Educator's Role/Responsibilities	General Educator's Role & Responsibilities
1. Anticipatory Set: a) Class *Whip Around* b) Beginning *Ticket Check-in*	1. Teach/ Observe	1a) Lead class *Whip Around* discussion 1b) Present *Ticket In*	1a) Observe *Whip Around* 1b) Observe *Ticket In*
2. Direct Instruction a) 3 digit subtraction b) Story problem	2. Parallel Teaching	2a) Review subtraction with 3 digits (remind to start in one's place) 2b) Model working story problem	2a) Review subtraction with 3 digits (remind to start in one's place) 2b) Model working story problem
3. Guided Practice a) Story problem	3. Parallel Teaching	3a) Guide students through a problem as a group	3a) Guide students through a problem as a group
4. Independent Practice a) Story problem	4. Parallel Teaching	4a) Assign independent problem (provide assistance as needed)	4a) Assign independent problem (provide assistance as needed)
5. Closure a) Review story problem steps b) *Free-flow writing:* What have they learned? How has it helped?	5. Teach/Observe	5a) Observe review of steps 5b) Observe *Free- flow writing*	5a) Teach new word problem to whole group while reviewing steps 5b) Lead *Free- flow writing*
Criteria for student success	Co-Teaching Model	Special Educator's Role & Responsibilities	*General Educator's Role & Responsibilities*
1) All students participate in class-room anticipatory set activities	1) Teach Observe	1) Assign students check, check plus, or check minus for *Ticket In*	1) Monitor and record students' behavior during *Whip Around* discussion
2) All students participate in story problem discussions and problem solving	2) Parallel Teaching	2) Grade independent story problem using story problem rubric	2) Grade independent story problem using story problem rubric
3) All students engage in *Free-flow writing*	3) Teach/Observe	3) Monitor and record student behavior and engagement during *Free-flow writing*	3) Grade *Free-flow writing* with check, check plus, or check minus Monitor and record student behavior and engagement during *Free-flow writing*
Learning Strategies (Evidence based): High Access	Co-Teaching Model	Special Educator's Role & Responsibilities	General Educator's Role & Responsibilities
1) Instructional Strategies	1) Teach/Observe	1a) *Ticket In* 1b) *Whip Around*	1a) Observe *Whip Around* 1b) Observe *Ticket In*
2) High Access instructional strategies	2) Parallel Teaching	2a) Open ended Discussion-Group 2b) *Thumbs up* 2c) Reciprocal Teaching	2a) Open ended Discussion-Group 2b) *Thumbs up* 2c) Reciprocal Teaching
3) High Access instructional strategies	3) Teach/Observe	3a) Observe *Free-flow writing* 3b) Observe *Thumbs up*	3a) Lead *Free-flow writing* 3b) Lead *Thumbs up*
Strategies to implement positive behavior support (Evidence based classroom behavior management):	Co-Teaching Model	Special Educator's Role & Responsibilities	General Educator's Role & Responsibilities
1) SRR Dollars	Parallel Teaching Teach/Observe Assist	1a) Observe *Safety, Respect, Responsibility* b) Provide clearly stated expectations c) Assist with stating expectations	1a) Observe *Safety, Respect, Responsibility* b) Provide clearly stated expectations c) Assist with stating expectations
2) 4:1 Ratio	Parallel Teaching Teach/Observe Assist	2) Deliver 4:1 Ratio	2) Deliver 4:1 Ratio
3) Participation Folder	Teach/Observe	3) Assist in implementation participation folder	3) Assist in implementation participation folder

Adapted from "The four 'knows' of collaborative teaching," by E. Keefe, V. Moore, & F. Duff, 2004, *Teaching Exceptional Children*, 36, pp. 36-42; and from *Interactions: Collaboration for School Professionals* (5th ed.), by M. Friend & L. Cook, Boston: Allyn & Bacon. Copyright 2006 by Pearson Education. Reprinted by permission of the publisher.
Best practice content reflected in the adapted lesson plan drawn from Feldman, K., & Denti, L. (2004). High-access instruction: Practical strategies to increase active learning in diverse classrooms. *Focus on Exceptional Children*, 36 (4), 1-12; from Elbow, P. (1986) Embracing Contraries: Explorations in Teaching and Learning. NY: Oxford University Press; and, from Sugai, G., & Horner, R. (2002). The evolution of discipline practices: Schoolwide positive behavioral supports. *Child & Family Behavior Therapy*, 24 (1-2), 23-50.

After reviewing the models and making a selection, decide together how to put them into action. Approaching co-teaching situations with well-developed instructional plans ensures that classroom interactions between the partners are as satisfying as they are successful. The planning format that is best for co-teaching can differ from

standard lesson plan templates in important ways, including space in which to describe shared goals and areas that formalize work flow patterns and divisions of responsibility. Select or develop a lesson plan form designed specifically for co-teaching, being sure to incorporate the co-teaching models. Keefe, Moore, and Duff (2004) designed a template many co-teachers find helpful. The authors of this article adapted this lesson plan template by inserting visual symbols to represent Friend and Cook's (2007) different co-teaching models and adding the key words *beginning*, *middle*, and *end* to the rows under the column titled Lesson Elements (see Figure 2 for a sample plan). As can be seen in Figure 2, these adaptations prompt co-teaching partners to consider how their roles and responsibilities should change throughout the lesson.

Instruction

Teacher effectiveness is one of the most important factors affecting school achievement (Sanders & Horn, 1998; Wright, Horn, & Sanders, 1997). It is not surprising, then, that in the current era of standards-based reform wherein all students are expected to achieve more academically, authorities have called for improvements in teacher effectiveness (Imig & Imig, 2006). To optimize students' learning of co-taught content, consider the following suggestions:

Teach Together and Monitor Student Progress

Good co-teaching involves two teachers who are actively teaching and monitoring students, not one teacher and an additional pair of hands. Because planning time is so scarce, it is easy for co-teachers to overrely on the teach-and-assist model, in which one teacher is relegated to the role of an instructional aide (Kloo & Zigmond, 2008; Friend & Cook, 2007). Instead, of falling prey to this trap, aim for both teachers to pro-vide instruction in the classroom. Remind one another to limit use of the one-teaching, one-observing model and the one-teaching, one-assisting model to the beginning and ending of lessons and to maximize use of station teaching, parallel teaching, alternative teaching, and teaming when teaching the most important parts of lessons. The structure of the adapted co-teaching lesson plan included in Figure 2 helps co-teachers do just that; the challenge, of course, is to stay the course when carrying it out. And remember, under Individuals with Disabilities Education Improvement Act of 2004, education professionals are required to monitor and report the academic and behavioral progress of students with disabilities. Use the advantage of having two teachers not only to enhance instructional delivery but also to collect adequate pupil performance data. For example, while one partner is teaching, the other can conduct 1-minute samples of target pupils' on-task behavior or collect curriculum-based measurement data (e.g., number of math problems completed correctly in 1 minute) from a representative sample of students, comprised of high-achieving learners, typical learners, low-achieving learners, and learners with an Individualized Education Program (IEP).

Let Data Guide Decision Making

Although the goal of co-teaching is to improve student outcomes, Austin (2001) found that many co-teachers make decisions about instructional effectiveness based on subjective opinions rather than concrete data. Strengthening the capacity of co-teachers to make quality decisions about student development requires use of more objective means (Gable, Arllen, Evans, & Whinnery, 1997). Frequent joint review of repeated and multiple quantitative measures of pupil performance (i.e., test scores, report card grades, curriculum-based measurement data) can help co-teachers make sound judgments about their instruction. Special educators can be especially helpful in collecting pupil performance information, graphing the data, and offering guidelines for interpreting the results. Co-teachers can then work together to deter-mine the appropriate grouping, accommodations, modifications, and assessment alternatives. Figure 3 provides an example of a data-informed decision-making matrix that two co-teachers used to coordinate their students' academic and behavioral accommodations, adaptations, and supports in the general education classroom. Initially, the co-teachers sat down together and reviewed the students' IEP documents as well as their progress-monitoring data. Next, the teachers completed the matrix, using the resulting summary to make data-informed decisions about each student's level of need. As can be seen, some of their students demonstrated a need for many instructional and behavioral supports, whereas others required only a few. Later, the co-teachers used the matrix as a quick-glance reference to make certain each student received what he or she needed each day in the class-room. In addition to providing insight into student needs, this pragmatic approach allowed the co-teachers to quickly cut

through differences of subjective opinion that had threatened to become personal and refocus their interactions on the original shared purpose, helping all students learn more.

Reflect on Co-Taught Lessons

Reflective practitioners are more effective than those who do not create regular opportunities to discuss and reflect on co-taught lessons (Dieker & Murawski, 2003). When reflecting on co-taught lessons, partners need to focus discussion in two areas: student achievement and teacher satisfaction. Begin by providing sincere, positive, and specific praise to one another, both as motivational feedback and as honest recognition of a job well done. As the discussion unfolds, continue to offer at least two positive statements for each area that is discussed as a need for improvement. End the reflective dialogue on a positive note, and identify a shared goal for the next co-taught lesson. Moreover, make certain the reflective dialogue is guided by objective data rather than personal opinions.
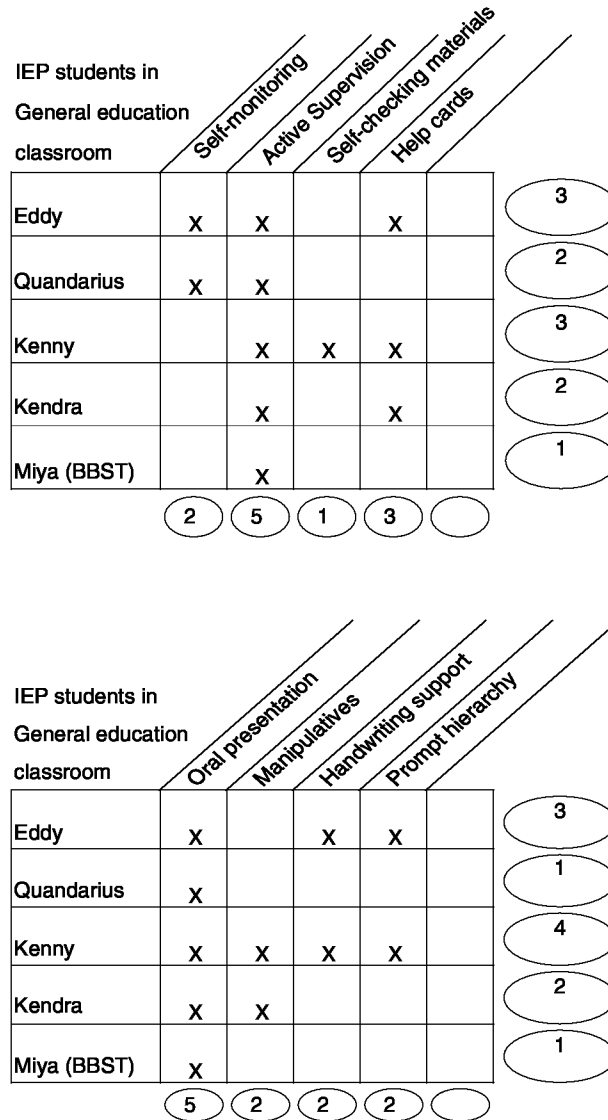
IEP students in General education classroom	Self-monitoring	Active Supervision	Self-checking materials	Help cards		
Eddy	X	X		X		3
Quandarius	X	X				2
Kenny		X	X	X		3
Kendra		X		X		2
Miya (BBST)		X				1
	2	5	1	3		

IEP students in General education classroom	Oral presentation	Manipulatives	Handwriting support	Prompt hierarchy		
Eddy	X		X	X		3
Quandarius	X					1
Kenny	X	X	X	X		4
Kendra	X	X				2
Miya (BBST)	X					1
	5	2	2	2		

Figure 3. Decision-making matrices of academic and behavioral accommodations and modifications students need to access the general education curriculum.

Data used to reflect on student achievement during the co-taught lesson should include direct measures of performance, such as the number of students who answered questions correctly or who accurately completed the graphic organizer. Trying to reflect on teacher satisfaction in data-informed ways, however, may prove more challenging. To do so, try one of the co-teaching assessment tools that have become widely available. Instruments such as the *Co-Teaching Rating Scale* (Gately & Gately, 200 1) or *the Co- Teacher Relationship Scale* (Noonan, McCormick, & Heck, 2003) can help co-teaching partners evaluate and reflect on their

interactions with accuracy and objectivity. Choose a scale that reflects both teachers' professional goals, and commit to using it at least twice a year. If co-teaching partners are uncomfortable with the idea of formally assessing new or emerging co-teaching skills, they can agree to keep the results confidential. If all else fails, use these three questions to guide joint reflection: What went well during the lesson? What did not go well during the lesson? What are the goals for the next lesson?

Conflict Resolution

Differences of opinion are only to be expected in a setting where two or more adults share authority and responsibilities (Garmston, 1998; Gottman et al., 1976; Melamed & Reiman, 2000). As co-teachers, the idea is not to avoid all potential conflict but to use situations where opinions differ to strengthen and improve the co-teaching interaction. When differences do threaten to turn sour, try specific tactics.

Respect Cultural Differences

Groups and cultures can differ greatly in the ways they approach basic values, motives, assumptions, and aspirations (Cozart, Cudahy, Ndunda, & Van Sickle, 2003). Recognize that cultural differences are complex structures that can deeply affect not only customs and attitudes but also how different co-teaching partners perceive the same situation. Make time to share personal stories and narratives. These conversations convey partners' culturally driven value and belief systems, helping to build a safe and trusting climate (Cozart et al., 2003). Rubenstein (1997) also recommends becoming more knowledgeable about cultural diversity. Read books and magazines or talk with individuals from different cultural groups to increase understanding about what behaviors others find offensive. Use simple techniques, such as paraphrasing, monitoring nonverbal clues, and communication tools (e.g., visual or graphic organizers, photographs), to stave off strife that arises from language differences (Garmston, 2006; Rubenstein, 1997). Finally, use differences between co-teaching partners as a way to enrich the classroom experience. For example, during co-taught math lessons incorporate opportunities for students to learn about each partner's heritage by using various instructional experiences supported by an array of materials (e.g., foreign coins, international data, and non-English word problems; see Rubenstein, 1997). Doing so helps co-teaching partners avoid dis-agreements about whose instructional approaches and materials are superior, while allowing them to provide culturally sensitive pedagogy (Cozart et al., 2003).

Discuss Minor Issues Before They Escalate

Although cultural differences may contribute to conflicts that arise between co-teachers, day-to-day inter-actions can also deteriorate because work ethics, organizational skills, and problem-solving approaches differ. Regardless of the source of contention, if a dis-agreement does emerge between co-teaching partners, discuss the matter neutrally without offending one another (Melamed & Reiman, 2000). This approach not only helps to diffuse the situation but also provides a much-needed sense of psychological safety (Garmston, 2005). To establish parameters for a trying conversation, preface it with a phrase such as "I have a question about the third grade promotion standards" (Funston, 2004). Then, to gather alternative points of view, Neuman (2006) recommended asking why questions such as "Help me understand why you feel that way" (p. 58). Alternatively, co-teachers can think aloud about the different points of view involved and about how they might be making things difficult. Accurately identifying the problem is a wise investment of both teachers' time and energy (Friend & Cook, 2007), leading to a more satisfying resolution that saves time in the long run. Brainstorm solutions that will solve the issue rather than "win" the argument: One-sided concerns and emotions should not dominate the conversation. To prevent new problems from emerging, take notes, nod occasionally, wait to speak, and restate important points (Pierce & Fields, 2003). Most important, keep an open mind, focus on like-minded positions, and be ready to compromise (Tacy, 1999; Walther-Thomas & Carter, 1993).

Think First, Act Later

In times of disagreement, never respond impulsively by entering into a heated argument (Pierce & Fields, 2003). Instead, turn full attention to understanding one another's messages in a rational, productive manner (Garmston, 1998; Melamed & Reiman, 2000). Remaining calm requires several unique skills. Garnston and Wellman (1998) recommended trying suspension and the balcony view (p. 3 1). Suspension is an internal

monitoring technique in which one sets aside immediate cognitions and impulses, deferring judgment to a later time when they can be further examined, either individually or with a partner. Alternatively, the balcony view is a self-talk skill that allows one to acknowledge (during conversation) the differing thoughts, opinions, and feelings of self and others and to make a strategic decision about whether to press forward or drop it altogether. Breathing is another widely recognized technique (Garmston, 2006). Distinguishing cognitive from affective conflict is also helpful. Affective conflict is antagonistic, whereas cognitive conflict is issue-related (Garmston, 2005). Ignoring the former and exploring the latter to resolve it in healthy ways go a long way toward improving difficult interactions. To do so successfully day after day, however co-teachers need to take care of themselves, making it a priority to eat, sleep, socialize, and strike a balance between work and play. Finally, although it may seem trite, communication experts (Gottman et al., 1976) recommend being polite, especially when your partner is acting unreasonably or impolitely. Behaving politely communicates caring and consideration, defusing tense interactions and strengthening the co-teaching relation-ship (Pierce & Fields, 2003).

Turn Differences Into Learning Opportunities

The strength in co-teaching emerges from the partnership itself, not from one of the co-teachers acting as an expert who holds all the right answers (Friend, 2007; Murawski & Dieker, 2004). Appreciate differences of opinion as opportunities to further develop the partner-ship by focusing on the new insights that will be gained through many conversations, rather than fixating on the outcome of one specific interaction (Garmston, 2005). Effective co-teachers work hard to maintain one another's self-confidence and self-esteem and follow through with actions that match their words (Bouck, 2007; Dieker & Murawski, 2003): They listen first and then speak and act with integrity (Keil, 2005). Moreover, co-teaching partners who acknowledge, deal with, and learn from conflict when it arises between them are more likely to positively affect pupil performance (Garmston, 1998). To help one another recognize the value in continuous improvement and commit to pursuing it, try visualizing a teeter-totter (Cramer & Stivers, 2007). During this mental exercise, remind one another that when one partner moves the other is influenced and vice versa. Ideally, the growth that results from continuous professional and personal influences will lead to mutual benefit, leaving both co-teachers yearning for more.

Conclusion

Co-teaching provides practitioners with an opportunity to better meet the academic and behavioral needs of an increasingly diverse school-age population. However, for such professional collaboration to reach its full potential, a genuine commitment is needed. Casting aside preconceived, separate notions about teaching and learning in order to work toward constructing shared beliefs, assumptions, and styles requires ample time and strategic effort (Rice & Zigmond, 2000; Roth & Tobin, 2004). Effective co-teaching is as much an art as it is a science. Embracing one but not the other can diminish the effectiveness of co-teaching, in turn creating feelings of frustration and mistrust between partners. This article offers a variety of practical techniques, drawn from the literature, that are designed to support new co-teachers as they endeavor to establish a common identity and to help veteran professionals strengthen their partnerships. If co-teaching partners are willing to invest time and effort in enhancing communications skills, finding regular planning time, improving instructional approaches, and resolving conflicts, they not only can reverse unproductive interactions but can even prevent them entirely.

References

Advisor Team. (2005). The Keirsey Temperament Sorter–II. Retrieved November, 15, 2007, from http://www.advisorteam .org/index.html

Allen-Malley, M., & Bishop, P. A. (2000). The power of partners: Two-teacher teams. Schools in the Middle, 9, 26-30.

Arguelles, M. A., Hughes, M. T., & Schumm, J. S. (2000). Co-teaching: A different approach to inclusion. Principal, 79, 50-5 1.

Austin, V. L. (2001). Teachers' beliefs about co-teaching. Remedial and Special Education, 22, 245-255.

Bauwens, J., & Hourcade, J. (1997). Cooperative teaching: Pictures of possibilities. Intervention in School and Clinic, 33, 81-86.

Bauwens, J., Hourcade, J. J., & Friend, M. (1989). Cooperative teaching: A model for general and special

education integration. Remedial and Special Education, 10, 17-22.

Baxendell, B. (2003). Consistent, coherent, creative: The 3 C's of graphic organizers. Teaching Exceptional Children, 35, 46-53.

Bos, C. S., & Vaughn, S. (2006). Strategies for teaching students with learning and behavioral problems (6th ed.). Boston: Allyn & Bacon.

Bouck, E. C. (2007). Co-teaching ... not just a textbook term: Implications for practice. Preventing School Failure, 51, 46-50.

Buddy, J. W. (2007). Using personality traits and effective communication to improve collaboration. School Library Media Activities Monthly, 23, 26-29.

Capelluti, J. (2004). Speak no evil. Principal Leadership, 4, 7-8. Cozart, A. C., Cudahy, D., Ndunda, M., & Van Sickle, M. (2003).

The challenges of co-teaching within a multicultural context. Multicultural Education, 10, 43-45.

Cramer, S., & Stivers, J. (2007). Don't give up! Practical strategies for challenging collaborations. Teaching Exceptional Children, 39, 6-11.

Dieker, L. A., & Murawski, W. M. (2003). Co-teaching at the secondary level: Unique issues, current trends, and suggestions for success. High School Journal, 86, 1-13.

Dettmer, P., Thurston, L. P., & Dyck, N. J. (2005). Consultation, collaboration, and teamwork for students with special needs (5th ed.). Boston: Allyn & Bacon.

Elbow, P. (1986) Embracing contraries: Explorations in teaching and learning. NY: Oxford University Press.

Feldman, K., & Denti, L. (2004). High-access instruction: Practical strategies to increase active learning in diverse classrooms. Focus on Exceptional Children, 36 (4), 1-12.

Fennimore, B. S. (2001). The power in your words. School Administrator, 58, 43.

Friend, M. (2007). The coteaching partnership. Educational Leadership, 64, 48-52.

Friend, M. (Co-Producer with L. Burrello & J. Burrello). (2005). The power of two (2nd ed.) [DVD]. Bloomington, IN: Elephant Rock Productions.

Friend, M., & Cook, L. (2007). Interactions: Collaboration skills for school professionals (5th ed.). Boston: Allyn & Bacon.

Funston, E. (2004). What we've got here is failure to communicate. Education Digest, 69, 31-33. 2004.

Gable, R. A., Arllen, N. L., Evans, W. H., & Whinnery, K. M. (1997). Strategies for evaluating collaborative mainstream instruction. Preventing School Failure, 41, 153-158.

Garmston, R. J. (1998). Graceful conflict. Journal of Staff Development, 19, 56-58.

Garmston, R. J. (2005). How to turn conflict into an effective learning process. Journal of Staff Development, 26, 65-66.

Garmston, R. J. (2006). Skillful paraphrasing allows groups to examine what is being said. Journal of Staff Development, 27, 65-66.

Garmston, R., & Wellman, B. (1998). Teacher talk that makes a difference. Educational Leadership, 55, 30-34.

Gately, S., & Gately, F. (2001). Understanding co-teaching components. Teaching Exceptional Children, 33, 40-47.

Geller, S. (2006). The power of safety communication. Industrial Safety & Hygiene News, 40, 16-17.

Glover, E. (2007). Real principals listen. Educational Leadership, 65, 60-63.

Gottman, J., Notarius, C., Gonso, J., & Markman, H. (1976). A couple 's guide to communication. Champaign, IL: Research Press.

Gunter, M. A., Estes, T. H., & Mintz, S. L. (2007). Instruction: A models approach (5th ed.). Boston: Allyn & Bacon.

Imig, D. G., & Imig, S. R. (2006). The teacher effectiveness movement: How 80 years of essentialist control have shaped the teacher education profession. Journal of Teacher Education, 57, 167-180.

Keefe, E., Moore, V., & Duff, R. (2004). The four "knows" of collaborative teaching. Teaching Exceptional Children, 36, 36-42.

Keil, V. L. (2005). Communicating for results. Principal Leadership (High School Ed.), 5, 28-3 1.

Kloo, A., & Zigmond, N. (2008). Co-teaching revisited: Redrawing the blueprint. Preventing School Failure.

Kohler-Evans, P. A. (2006). Co-teaching: How to make this marriage work in front of the kids. Education, 127, 260-264.

Laud, L. E. (1998). Changing the way we communicate. Educational Leadership, 55, 23-25.

Magiera, K., & Zigmond, N. (2005). Co-teaching in middle school classrooms under routine conditions: Does the instructional experience differ for students with disabilities in co-taught and solo-taught classes. Learning Disabilities Research and Practice, 20, 79-85.

Mastropieri, M. A. (2001). Is the glass half full or half empty? Challenges encountered by first-year special education teachers. The Journal of Special Education, 35, 66-74.

Mastropieri, M. A., Scruggs, T. E., Graetz, J., Norland, J., Gardizi, W., & McDuffie, K. (2005). Case studies in co-teaching in the content areas: Successes, failures, and challenges. Intervention in School and Clinic, 40, 260-270.

Melamed, J. C., & Reiman, J. W. (2000). Collaboration and conflict resolution in education. High School Magazine, 7, 16-20.

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

Neuman, S. (2006). Asking the right question. Principal, 85, 58-59.

Noonan, M. J., McCormick, L., & Heck, R. H. (2003). The Co-Teacher Relationship Scale: Applications for professional development. Education and Training in Developmental Disabilities, 38, 113-120.

Piechura-Couture, K., Tichenor, M., Touchton, D., Macisaac, D., & Heins, E. D. (2006). Coteaching: A model for education reform. Principal Leadership, 6, 39-43.

Pierce, K., & Fields, L. (2003). How to defuse difficult conversations. Principal Leadership (Middle School Ed.), 4, 3 6-3 9.

Reinhiller, N. (1996). Coteaching: New variations on a not-so-new practice. Teacher Education and Special Education, 19, 34-48. Rice, N., Drame, E., Owens, L., & Frattura, E. M. (2007). Co-instructing at the secondary level: Strategies for success. Teaching Exceptional Children, 39, 12-18.

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

Roth, W-M., & Tobin, K. (2004). Coteaching: From praxis to theory. Teachers and Teaching: Theory and Practice, 10, 161-180.

Rubenstein, R. N. (1997). Communication strategies to support preservice mathematics teachers from diverse backgrounds. In National Council of Teachers of Mathematics Yearbook (pp. 214-221). Reston, VA: NCTM.

Sanders, W. L., & Horn, S. P. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation and research. Journal of Personnel Evaluation in Education, 12, 247-256.

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

Sugai, G., & Horner, R. (2002). The evolution of discipline practices: Schoolwide positive behavioral supports. Child & Family Behavior Therapy, 24(1-2), 23-50.

Tacy, P. (1999). The art (and necessity) of communication. Independent School, 58, 76-79.

Walther-Thomas, C. S., & Carter, K. L. (1993). Cooperative teaching: Helping students with disabilities succeed in mainstream classrooms. Middle School Journal, 25, 33-38.

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

Wasburn-Moses, L. (2005). Roles and responsibilities of secondary special education teachers in an age of reform. Remedial and Special Education, 26, 151-158.

Washington University in St. Louis. (n.d.). Meeting protocol guide-lines. Retrieved September 11, 2009, from http://aisweb.wustl. edu/hr/empld.nsf/ pages/Protocol

Weiss, M. P., & Lloyd, J. (2003). Conditions for co-teaching: Lessons from a case study. Teacher Education and Special Education, 26, 27-41.

Wilson, G. L. (2005). This doesn't look familiar! A supervisor's guide for observing co-teachers. Intervention in School and Clinic, 40, 271-275.

Wright, P. S., Horn, S. P., & Sanders, W. L. (1997). Teacher and class-room context effects on student achievement: Implications for teacher evaluation. Journal of Personnel Evaluation in Education, 11, 57-67.