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Co-Teaching: An Illustration of the Complexity of Collaboration in Special Education

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Although collaboration among service providers has been a hallmark of special education almost since its inception, co-teaching, the sharing of instruction by a general education teacher and a special education teacher or another specialist in a general education class that includes students with disabilities, is a relatively recent application. As a result of recent federal legislation and related policy changes, co-teaching has evolved rapidly as a strategy for ensuring that these students have access to the same curriculum as other students while still receiving the specialized instruction to which they are entitled.

Despite considerable enthusiasm expressed by those who write about co-teaching and those who implement it, co-teaching illustrates the complexity of conceptualizing and studying collaboration in special education. Most inquiry on co-teaching has emphasized co-teachers' roles and relationships or program logistics rather than demonstrating its impact on student achievement and other key outcomes, and far more literature exists describing co-teaching and offering advice about it than carefully studying it.

Contributing to the admittedly equivocal evidence base for co-teaching are factors such as the still emerging understanding of this special education service delivery vehicle, inconsistencies in definitions and implementation, lack of professional preparation,

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and dilemmas related to situating co-teaching in a supportive, collaborative school culture. The future of co-teaching may be dependent on increasing the quantity and quality of research on it and placing co-teaching in the larger context of school reform and improvement.

Collaboration has long characterized special education. For decades, teams have made decisions about the most appropriate educational options for students with disabilities, and close working relationships with parents have been nurtured and strengthened (Friend & Cook, 2010). In the classroom, paraprofessionals have assisted special educators in supporting students with disabilities, and other professionals, including speech-language therapists, school psychologists, counselors, and occupational and physical therapists, likewise have delivered their services working with special education teachers (e.g., Lerner, 1971; Lombardo, 1980; Robinson & Robinson, 1965). However, these traditional partnerships largely were confined to special education and therapeutic settings.

Beginning in the 1980s with the gradually increasing acceptance of the principles of inclusive schooling (e.g., Garvar & Papania, 1982; Will, 1986), the notion began to take hold that special education and related services could be offered in general education settings through partnerships that crossed the traditional boundaries between professionals, and thus the concept of co-teaching emerged (Bauwens, Hourcade, & Friend, 1989). Until the past decade, however, co-teaching generally was justified in terms of beliefs about the best ways to ensure that students with disabilities interacted with peers. That is, its implementation rested largely on a philosophical foundation based on the special education legislative mandate to educate students in the least restrictive environment.

Now, interest in co-teaching has intensified considerably. One key factor contributing to this interest is the No Child Left Behind Act of 2001, including the requirements that all students, including those with disabilities, access the general curriculum; be taught by highly qualified teachers; and be included in professionals' accountability for achievement outcomes. A second key factor is the renewed and increased emphasis on educating students in the least restrictive environment embodied in the most recent reauthorization of the Individuals with Disabilities Education Act of 2004. Co-teaching seems to be a vehicle through which legislative expectations can be met while students with disabilities at the same time can receive the specially designed instruction and other supports to which they are entitled.

The intuitive appeal of co-teaching belies the challenges faced in its design, implementation, and evaluation, as explicated in the increasing professional literature on this topic. From a clear conceptualization of what co-teaching is, through the still nascent research base demonstrating its impact on a variety of factors including professionals' perceptions as well

as student achievement and other outcomes, to the logistical and other challenges identified in co-teaching programs, these classroom partnerships illustrate the potential and complexity of collaboration as contemporary special education evolves to more deliberately and effectively integrate with general education. The purpose of this article is to explore these complexities as well as to offer recommendations for future research and practice that may foster this transition from a dual system of education to a more blended and contemporary educational practice.

UNDERSTANDING CO-TEACHING

Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist for the purpose of jointly delivering instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs (Friend, 2008). Although co-teaching is being implemented for students who are English language learners (e.g., Bahamonde & Friend, 1999; Pardini, 2006) and those who are gifted or talented (e.g., Hughes & Murawski, 2001) as well as for an alternative approach to student teaching (Bacharach, Heck, & Dahlberg, 2008), in this discussion only its application to students with disabilities is considered. Co-teaching in this context has been referred to as a professional marriage (Kohler-Evans, 2006) because of the importance, as in strong personal partnerships, of building a strong and parity-based relationship. For just this reason, other instructional models that place two or more adults in a classroom, such as those pairing teachers with paraprofessionals, volunteers, or student teachers, generally are not appropriate to call co-teaching.

As a partnership between professional peers with different types of expertise, co-teaching can be viewed as a reasonable response to the increasing difficulty of a single professional keeping up with all the knowledge and skills necessary to meet the instructional needs of the diverse student population attending public schools and the complexity of the problems that they bring. The intent of co-teaching is to make it possible for students with disabilities to access the general curriculum while at the same time benefiting from specialized instructional strategies necessary to nurture their learning.

Co-Teaching in Practice

Although it is beyond the scope of this article to describe co-teaching in detail (e.g., see Friend, 2008; Villa, Thousand, & Nevin, 2008), the essence of what occurs in co-taught classes is captured in Figure 1. That is, co-teaching includes the professionals planning and delivering instruction using six approaches and variations of them, with selection based on student needs and instructional intent (Friend & Cook, 2010):

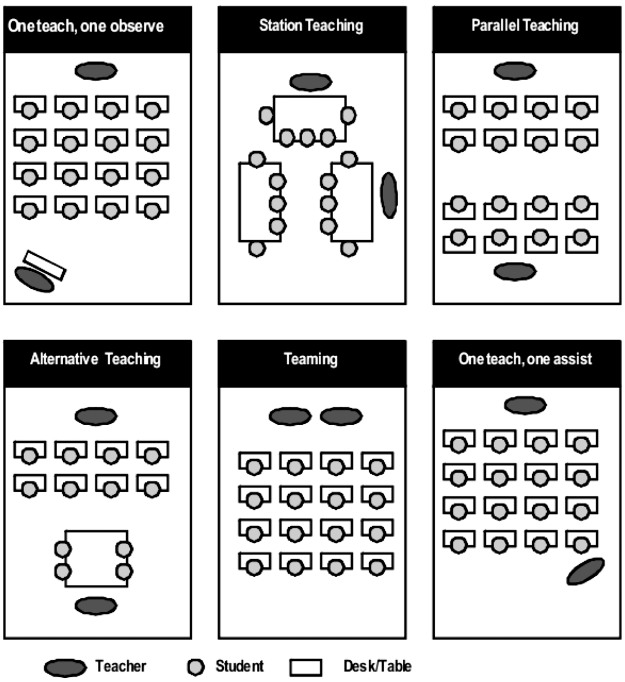

FIGURE 1 Co-Teaching Approaches. From M. Friend & W. D. Bursuck, 2009, *Including Students With Special Needs: A Practical Guide for Classroom Teachers* (5th ed., p. 92). Columbus, OH: Merrill.

1. *One teach, one observe*, in which one teacher leads large-group instruction while the other gathers academic, behavioral, or social data on specific students or the class group;
2. *Station teaching*, in which instruction is divided into three nonsequential parts and students, likewise divided into three groups, rotate from station to station, being taught by the teachers at two stations and working independently at the third;
3. *Parallel teaching*, in which the two teachers, each with half the class group, present the same material for the primary purpose of fostering instructional differentiation and increasing student participation;
4. *Alternative teaching*, in which one teacher works with most students while the other works with a small group for remediation, enrichment, assessment, preteaching, or another purpose;
5. *Teaming*, in which both teachers lead large-group instruction by both lecturing, representing opposing views in a debate, illustrating two ways to solve a problem, and so on; and
6. *One teach, one assist*, in which one teacher leads instruction while the other circulates among the students offering individual assistance.

Within these six approaches, teachers address the individualized education program (IEP) goals and objectives of students with disabilities while at the same time meeting the learning needs of other students in the class. The roles for the teachers are fluid, with each taking on any of the responsibilities suggested by the aforementioned approaches and sharing through appropriate negotiation the design and delivery of instruction and the chores of teaching, such as grading. Co-teaching may occur for just a single class period or for half of a block period in middle and high schools, although any single student with a disability might access co-teaching across one, several, or all academic areas. In elementary schools, co-teaching may occur for a relatively brief period of time (e.g., 30 or 45 minutes in a single subject area) up to all day.

The Evolution of Co-Teaching

The origins of what today is called co-teaching can be traced to several related trends from the second half of the 20th century. First, during the 1950s educators in the United States and other developed countries were questioning traditional school structures and procedures and their efficiency and effectiveness (Hanslovsky, Moyer, & Wagner, 1969). One response was the development of alternative models, including what was called team teaching. Whether implemented in elementary, junior high, or high schools, team teaching generally included the delivery of a core lesson by a teacher deemed to be most expert among all the available teachers on the identified topic (Shaplin, 1964). Thus, in a high school English department, the teacher who had focused on the study of early 20th century American poets would lead that unit of instruction with a group of 100 or more students who were grouped for that purpose. The logic was rooted in efficiency and effectiveness of instructional delivery. It was more efficient to deliver a lecture on the topic once instead of four times, and the single lecture would be given by the teacher most knowledgeable about the topic. After such instruction, students were divided into groups for discussion, follow-up assignments, and assessment.

These smaller groups were led by the remaining available teaching staff members. This conceptualization of team teaching provided a model that called for educators to work together closely and divide teaching responsibility, even if not typically engaged in the simultaneous delivery of instruction. A variation of this instructional model occurred at the elementary level in so-called open schools where a team of four teachers would share the planning and some teaching for a group of 100 children, all located in a single area sometimes referred to as a ''house.''

Across time, these practices changed somewhat. Team teaching now typically refers to two elementary teachers who may share a double-size classroom divided by a sliding wall; they open that barrier and collaborate

to teach their combined students. It also is used to refer to middle school arrangements where four or five teachers share 100 or 125 students, collaborating to plan instruction, even it if is delivered separately. Finally, high school team teaching now usually refers to interdisciplinary studies where, for example, history is taught through literature by combining two class groups and two teachers, each with expertise in one of the academic areas.

At the same time that team teaching models were being explored in general education, the field of special education was rapidly developing. During the 1960s, leaders in the field were voicing questions about the efficacy of traditional separate special education (e.g., Dunn, 1968), and parents were challenging the barriers their children with disabilities faced in receiving an appropriate education (Leafstedt et al., 2007). During this period of litigation and legislation designed to remedy these educational inequities, educators gradually expanded the ways in which special education services were delivered. A natural extension of the consultation and resource (i.e., part-time special class) services sometimes offered was a need for the general and special educators to work more closely together to ensure that instruction was appropriate across the settings (e.g., Warger & Aldinger, 1986). This shared work, grounded in the concept of educating students in the least restrictive environment, resulted in the first experiments in special educators crossed the threshold of the general education classroom and began to work there to deliver services (Garvar & Papania, 1982).

During the late 1980s and 1990s it became increasingly apparent that outcomes for many students with disabilities were not satisfactory, and over the past decade significant steps have been taken in federal and state law and policy to remedy this situation (McLaughlin & Rhim, 2007). The clearly raised expectations for academic achievement for students with disabilities, including the mandate that they be taught by teachers highly qualified in the appropriate content areas and that they be educated in general education settings unless compelling evidence indicates an alternative arrangement would be more appropriate, provided a final and significant impetus to co-teaching.

As might be expected, the result has been a rapidly increasing number of reports describing co-teaching programs, a multitude of state and local district initiatives to prepare teachers for and implement co-teaching, and extensive discussion of co-teaching challenges (e.g., Cook & Friend, 1995; Friend, 2007; Scruggs, Mastropieri, & McDuffie, 2007).

Unique Characteristics and Conceptual Confusion

At least brief mention should be made of two characteristics that distinguish co-teaching from its team teaching roots. First, both the team teaching first used in the 1950s and its current iteration rely on sharing intact class groups. That is, it keeps a constant teacher-student ratio of approximately 1:25.

However, in co-teaching that ratio improves significantly to approximately 2:25. This teacher-student ratio should offer the opportunity to maximize all students' learning, provided, of course, that both educators are truly functioning as teachers.

The second unique feature of co-teaching compared with team teaching concerns the expertise of the professionals. In team teaching both professionals have similar areas of expertise and priorities, including addressing curriculum competencies, pacing, and classroom management. In co-teaching, the general educator holds these critical pieces, but the special educator adds expertise related to the process of learning, the highly individualized nature of some students' needs, and an emphasis on teaching until mastery. The significant differences in the areas of expertise of the co-teaching professionals add a depth and richness to the co-taught class that is different from a classroom led by two general educators and should benefit all the learners.

Finally, a discussion of co-teaching characteristics would not be complete without noting the confusion with related terms that often exists. Specifically, the term *co-teaching* sometimes is used interchangeably with collaboration. Although co-teaching should be highly collaborative, the latter term refers to how professionals and others interact in a variety of situations, including meetings, teams, and parent conferences. Narrowing the meaning of collaboration to apply to just the classroom setting detracts attention from the importance of collaboration across all contemporary school endeavors and belies the well-established knowledge base on this broader topic (e.g., Evans, 1991; Kochhar-Bryant, 2008).

The other term sometimes used interchangeably with co-teaching is *inclusion*. Some professionals equate the philosophical belief system of welcoming all students into the learning community (whether or not that means sitting in a general education setting all day) with the not uncommon practice of providing a special education teacher to any classroom where students with disabilities are present. This misunderstanding often leads to concern about adequate staffing and leads some general educators to perceive that they should not be expected to work by themselves with students with disabilities. Both misunderstandings can negatively affect program success.

THE EVIDENCE BASE FOR CO-TEACHING

The intuitive appeal of co-teaching as a means for improving the educational outcomes of students with disabilities cannot be denied. An explosion of recent literature on this topic illustrates this allure (e.g., Friend, 2008; Mastropieri et al., 2005). Three topics are most commonly addressed as co-teaching programs and practices are studied: (a) teachers' roles and relationships, including their perceptions of co-teaching and its impact and effective-

ness; (b) issues related to program logistics, including common planning for co-teachers and scheduling students into co-taught classes; and (c) the impact of co-teaching on student learning, behavior, and perceptions, including academic achievement, attendance, and discipline reports.

Professional Roles and Relationships

Although the research base on co-teaching is growing, many of the studies thus far report on professionals' perceptions of its implementation or effectiveness, or they concern observations of its implementation. For example, Keefe and Moore (2004) interviewed high school teachers to study their perceptions of co-teaching. They found that the teachers identified three themes that described their practices: First, they addressed the nature of the collaboration, noting the importance of teacher compatibility (and, hence, teacher choice of partner) and the centrality of effective communication.

Second, the educators discussed the roles and responsibilities of the teachers, indicating that special educators tended to take on the role of helper rather than co-teacher, partly due to their lack of content knowledge. Third, teachers reported that outcomes for students generally were positive and included less stigma for students with disabilities and more individualized attention for other students. Some special educators were ambivalent about co-teaching, reporting that it was not an appropriate service option for some students.

A second example of recent research on co-teaching exploring roles and relationships is found in Magiera and her colleagues' middle school observational study considering the additive benefit of a co-taught class over a single-teacher class (Magiera, Smith, Zigmond, & Gebaner, 2005). Using time sampling methodology, the researchers found that general education teachers spent significantly less time interacting with students with disabilities when a special educator was present in the classroom. Acknowledging that the study was designed to look at typical rather than model practices, these researchers reported that the co-teachers had had little preparation for their roles and spent the majority of instructional time with students in large groups. The authors concluded that little benefit was accruing to the students with disabilities in these classes.

Scruggs and his colleagues (2007) synthesized qualitative research on co-teaching, and their work provides a third example of research on teacher roles, relationships, and perceptions. Among other results, they found that co-teachers generally believed their practices were beneficial to students, but the educators indicated that co-teaching should only be voluntary, not an assignment forced on those who do not want to participate. They reported that successful co-teaching teams shared expertise during teaching and found ways to motivate their students. Teaching teams that struggled demonstrated less collaboration, with differences in teaching styles leading to conflict

instead of compromise. These authors found that special educators often assumed the role of being a classroom assistant rather than a teaching partner.

Co-Teaching Program Logistics

Perhaps because co-teaching does not fit into traditional ways in which special education services have been delivered, issues related to the logistics of establishing programs remain significant. The most frequently mentioned logistical matter is the need for common planning time for co-teachers. For example, Kohler-Evans (2006) surveyed teachers in 15 school districts regarding their co-teaching experiences. The issue they most frequently named as affecting their relationship with their co-teaching partner was common planning time.

Other researchers have reported similar findings. For example, Murray (2004) conducted a multiyear project with 40 general education teachers in three urban high schools. When the teachers were asked for items to include in a "dream list" of special educator responsibilities, they noted common planning time on at least a weekly basis as a critical factor. Even after discussion of the feasibility of all items noted, planning time (at least twice per month) remained on the list as crucial.

Other logistical matters raised in research concern scheduling and staff assignment. For example, Idol (2006), in completing an evaluation of inclusive practices in eight elementary and secondary schools, found that participants preferred that students with disabilities placed in general education settings be accompanied by a teacher. They held this belief even though they recognized such an arrangement was not feasible in terms of number of special educators available and scheduling. This result mirrored others' earlier inquiry on the practical dilemmas of creating co-teaching as a special education service delivery vehicle (e.g., Morocco & Aguilar, 2002; Walther-Thomas, 1997; Weiss & Lloyd, 2003).

Student Outcomes in Co-Teaching

Co-teaching research to date has paid only scant direct attention to outcomes for students with disabilities, a striking fact given the current emphasis in the field of special education on raising standards and improving academic achievement. In one study that did directly address this central topic, Rea, McLaughlin, and Walther-Thomas (2002) found that students with learning disabilities in co-taught classes performed better on measures such as report card grades and attendance than students in single-teacher classes. However, student performance on high-stakes tests was comparable across the types of classes. Idol (2006) likewise reported that scores on high-stakes tests were little affected by co-teaching, and this was true both for students with and without disabilities.

Murawski (2006) studied student achievement in a slightly different way, comparing the achievement of students with disabilities in resource (i.e., separate) classes, co-taught classes, and general education classes without co-teaching. Like other researchers, she found no significant differences across settings, commenting that the failure to find increased achievement in co-taught classes may have been the result of lack of training and, thus, uneven implementation.

In addition to direct studies of student outcomes in co-teaching, several authors have queried students about their perceptions of this vehicle for receiving special education services. Wilson and Michaels (2006) surveyed 346 students in secondary schools (127 students with disabilities and 219 typical learners) regarding their perceptions of co-teaching. The students reported that they favored co-teaching, would participate in another co-taught class if given the opportunity, and received better grades in co-taught classes compared with other classes. The students reported that more help was available in the co-taught class, multiple instructional approaches were employed, multiple teaching styles and teacher perspectives were offered, and more skill development was possible. Although many students saw no drawbacks to co-teaching, some noted that they could not get away with anything in such classes, that standards were higher than in other classes, and that the multiple teacher perspectives could be confusing. Students without disabilities stated that the co-taught class provided higher levels of abstraction, concept development, and literacy skill development than other classes. This study indicates that, even if specific achievement outcomes cannot be identified, secondary students see a wide range of benefits to participating in a two-teacher class.

CONSTRUCTING MEANING FROM AN INCOMPLETE KNOWLEDGE BASE

In many ways, co-teaching demonstrates the potential as well as the complexity of collaboration that joins the fields of general education and special education. On its face, co-teaching seems like a relatively straightforward way to ensure that students with disabilities receive the education to which they are entitled by both educational and civil rights legislation and its interpretation. Working from the assumption that most professional educators are in the field because they want to help their students succeed, it would seem a simple matter for two teachers to blend their expertise so that a shared and diverse group of students would learn more than might be possible if either teacher had sole responsibility. Such is not the case. Many pieces must be in place for co-teaching to be successful, and many questions must still be answered.

Common Understandings and Differentiated Applications

A beginning point for ensuring that co-teaching's potential can be truly explored is reaching a common understanding of what this service delivery option entails, or, at the very least, clarifying minimal criteria that predict quality (that is, effectiveness) in such partnerships. Among the questions that should be considered are these:

- Does co-teaching at the elementary level have the same parameters for implementation as co-teaching in middle and high schools?
- Is there a minimum amount of time that should be spent in the co-taught classroom for this instructional option to be effective?
- How should decisions be made concerning the students for whom co-teaching might be the most effective mechanism for the delivery of special education services?
- How should co-teaching be distinguished from the various types of supports that other adults might provide in the general education classroom, including those provided by paraprofessionals or parent volunteers and those delivered by specialists through consultation?

At the same time that clear understandings are addressed, more consideration should be given to the way that co-teachers implement their practice (Kloo & Zigmond, 2008). That is, are certain co-teaching approaches more effective for certain grade levels, certain subjects, or certain types of instruction? Rather than attempting to judge the merits of co-teaching by treating it, in essence, as a monolithic single intervention, this more careful delineation of co-teaching applications would enable professionals to better accomplish the goal of co-teaching, that is, increasing the extent to which instruction is tailored to meet individual student needs.

Professional Preparation and Ongoing Professional Development

In addition to developing common understanding and applications, a critical need exists for the key stakeholders involved in co-teaching to be better prepared for its implementation. Three groups of educators are directly affected. First, special educators must understand how their knowledge and skills facilitate learning in co-teaching. In addition, they must have the other collaboration skills (e.g., see Friend & Cook, 2007) that enable them to negotiate roles and responsibilities in the co-taught class and to provide the necessary instructional supports for students with disabilities. Without both sets of skills, it is more likely that they will remain classroom assistants (Scruggs et al., 2007) than become instructional partners.

Although the topic of co-teaching is gradually finding its way into special education teacher preparation programs (Duke, 2004), it is equally important

that co-teaching receive attention in the preparation of general education teachers. As Hudson and Glomb (1997) noted, "It if takes two to tango, then why not teach both partners to dance?" (p. 442). Co-teaching coverage is sporadic in elementary education programs and just beginning to emerge in middle and high school teacher preparation. Further, because co-teaching departs so significantly from the traditional "one teacher per classroom" model, it is not reasonable to expect educators to understand and implement it without specific instruction in the pertinent knowledge and skills. How can the potential of co-teaching be realized if educators are not professionally socialized to partner in classrooms and share in teaching? Early efforts are occurring in this arena, for example, through shared methods courses or field experiences that build novice educators' skills for co-teaching (e.g., Kamens, 2007).

The problem of teacher education extends beyond initial preparation. Much of the current teaching workforce has had little preparation for co-teaching roles. The implication is that high-quality professional development related to co-teaching is urgently needed. Especially for those asked to implement co-teaching, initial professional development should be accompanied by coaching and other supports demonstrated to change teacher practice (e.g., Nelson, Slavit, Perkins, & Hathorn, 2008). And although it seems obvious, the importance of teaching partners together participating in this professional development cannot be overemphasized.

A final group of professionals for whom co-teaching should be a priority is school administrators. Principals and other site administrators cannot be expected to lead staff members through this fundamental change or to integrate it with other school improvement efforts without increasing their understanding of it (Reynolds, Murrill, & Whitt, 2006). These leaders have the responsibility to partner teachers, arrange schedules and common planning time, and resolve dilemmas that arise. They also explain co-teaching to parents and community members and ensure that programs are accountable and sustainable.

Integration of Co-Teaching Into Larger School Reform Efforts

Another piece of the co-teaching puzzle concerns its integration with other school reform and improvement efforts. In this domain, a number of questions remain: for example, how does co-teaching function as one option for providing educational services to students with disabilities without eliminating other equally important (and legislatively mandated) options on a continuum of services, such as consultation and instruction in separate settings? What is the role of co-teaching in the provision of instructional services to students who are English language learners, students who enter kindergarten with limited school readiness skills, and other students at risk for academic failure? Does it have a role in other initiatives such as the rapidly developing response-to-intervention process (Kratochwill, Volpiansky, Clements, & Ball,

2007)? Additional attention to this topic is provided in the article in this special issue authored by Waldron and McLeskey (this issue).

Development of a Research Base

In 2001, Murawski and Swanson asked, "Where's the data?" in their review of the co-teaching literature (p. 258). Their question still has validity. Undoubtedly, the most important element in a discussion concerning the current status and future of co-teaching is the need for research. To date, co-teaching inquiry generally has barely begun to provide a meaningful evidence base on which to construct efficacious practices. At least part of the reason for this situation concerns the challenges of conducting research on co-teaching. First, researchers must be sure that co-teaching is clearly defined in order to ensure a general level of comparability of services. In addition, consistency must be established through measures of fidelity of implementation (Mowbray, Holter, Teague, & Bybee, 2003). That is, in co-teaching studies, researchers must be confident that the practice implemented is defensible as co-teaching and that it is consistently practiced.

A second research dilemma concerns the need for study across grade levels, subjects, and student learning characteristics. Without a significant research base that establishes co-teaching efficacy or lack thereof for elementary, middle, and high school students; in English/language arts, math, science, and social studies; and targeting students with mild to moderate learning or behavioral difficulties as well as those with significant intellectual and physical or sensory impairments, it is not possible to set realistic expectations for co-teaching implementation. Although certain principles related to effective co-teaching undoubtedly hold across grade levels, student groups, and subjects, others may vary considerably. Without research more precisely addressing the many variables that could affect co-teaching implementation and outcomes, potentially effective practices may be lost in generalizations.

A third dilemma in co-teaching research concerns rigor. That is, research considered rigorous in terms of the methodology employed is very limited, especially using experimental or quasi-experimental designs. This problem is understandable, given the difficulty of achieving consistent implementation for similar amounts of time with students whose demographic and learning characteristics are similar and who are taught by educators with comparable professional preparation and experiences with co-teaching. Regardless, such data are essential in establishing the efficacy of co-teaching as a means of providing special education services.

In addition to the problems just noted, what is essential is that the impact on students of high-quality co-teaching implemented consistently be determined. Teacher, student, and even parent perceptions of co-teaching outcomes are helpful in that they inform the field concerning priorities and beliefs of the implementers and recipients of co-teaching, but perceptions

do not establish an evidence base. What are needed are outcome data, including academic achievement on high-stakes tests as well as curriculum-based measures, discipline referrals and other behavioral indicators, suspensions, retention and dropout information, attendance information, and other outcome data. A few studies have suggested that well-implemented co-teaching does benefit students (e.g., Rice & Zigmond, 2000; Walther-Thomas, 1997), but these glimmers of positive outcomes must be fortified in order to assert without equivocation whether or not co-teaching positively affects student outcomes. The sustainability of this instructional model is dependent on better quality and more research.

Researchers studying co-teaching are likely to grapple with these challenges for some time to come. They may be assisted in their efforts by the current requirements for school professionals to base their instruction on assessment data. By turning to such local data being gathered in most schools and districts, across school levels and subject areas, and for all students, the impact of co-teaching may gradually be documented. Although these data may lack some of the measures of rigor that would be preferred, they should not be underestimated in the contribution they could make to the knowledge base on this complex topic.

The Importance of Deeper Understandings

As discussed earlier, co-teaching was first implemented for students with disabilities as part of the movement toward inclusion, a trend that was (and still is) based on a deeply held belief that students with disabilities should be considered children who are members of their learning communities—who also happen to need extraordinary support and services to be educated there. It is imperative that in the push to understand co-teaching, prepare professionals to implement it, incorporate it into school reform efforts, and gather data demonstrating its efficacy this more fundamental dimension of it not be forgotten.

Two comments heard from educators illustrate this point. First, in some locales, conversations about co-teaching usually include this sincere question: "Are there some students who are too low for co-teaching?" The question refers to students whose academic achievement level is significantly below that of peers, and it implies that there is a baseline academic entrance criterion that should be applied to participation. This thinking belies the core principles of inclusive schooling, of which co-teaching is a part.

The second comment is more troubling. Teachers and administrators sometimes report that certain teachers say they do not want to work with students with disabilities in a co-taught classroom. This might occur for several reasons, all of which probably indicate a need for supervisory intervention, but one in particular reflects on current school practices. What some teachers know is that if they are assigned to a co-taught class, it is likely that they not only will have several students with disabilities in their group but also will

have a disproportionate number of other students with significant learning and behavior challenges. If teachers' evaluations and possibly merit pay are based on student achievement as measured on high-stakes tests, their concerns are very understandable.

Both of these examples illustrate the necessity of keeping in mind the foundations of inclusive schooling in designing, implementing, and evaluating co-teaching. The data are important, but at the same time, the educational and civil rights of students must be preserved and the moral and ethical dilemmas potentially posed must be addressed.

CONCLUSION

Ultimately, co-teaching stands as a metaphor for the profound transition currently occurring in education, that is, the blurring of traditional boundaries that separated students who experience significant difficulty in learning from their peers and the recognition that two systems—general education and special education—may not work in the best interests of maximizing student achievement and other outcomes. The implications of this transition toward more collaborative and inclusive practices are far-reaching (e.g., Wallace, Anderson, & Bartholomay, 2002). Not only do the already apparent and likely continued changes such as co-teaching affect teachers, they also will have an impact on the contributions of other professionals. For example, speech/language therapists and counselors may find themselves participants in co-teaching. School psychologists will participate in the decision making regarding the appropriateness of this instructional approach for specific students with disabilities. These professionals also may find themselves helping to facilitate the development, implementation, and evaluation of co-teaching programs, especially as these programs complement other school improvement initiatives, including response to intervention (Kratochwill et al., 2007).

Co-teaching is not a panacea for the effective education of students with disabilities, but it holds great promise. It is evidence that schools are increasingly embracing collaboration as a standard of practice in the same way that it is evolving in other disciplines (e.g., Rosen, 2007; Sawyer, 2007). It demonstrates that through collaboration professionals can create innovative options within a single system of education that is more responsive to the diversity of today's learners.

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