Coteaching in Content Area Classrooms: Lessons and Guiding Questions for Administrators

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Abstract

Secondary school administrators increasingly include students with disabilities in general education classrooms with coteaching models. Theoretically, coteaching enables two educators to attend to the learning needs of students with disabilities while exposing them to grade-level content area instruction. However, our study on teachers' perceptions of coteaching found that teachers often viewed their schools' leadership decisions as adversely affecting their ability coteach effectively. The purpose of this article is to provide administrators with an overview of common coteaching models, summarize findings from our study on teachers' perceptions of how their schools' leadership influenced their coteaching practices, and provide a set of guiding questions to consider when seeking to support coteaching.

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Increasingly, secondary students with disabilities (SWDs) receive instruction in the general education setting (Aud et al., 2012; Kaldenberg, Watt, & Therrien, 2015; McLeskey & Waldron, 2011). State and local education agency administrators have been encouraged to do this for several reasons. First, regulations from the Individuals with Disabilities Education Improvement Act (2004) require schools to maximize time SWDs spend in the general education setting and require Individualized Education Program teams to clearly justify the rationale for placing SWDs in more restrictive educational settings. Additionally, recommendations from the developers of the Common Core State Standards recommend that SWDs meet the same rigorous academic achievement standards as their typically achieving peers (National Governors Association Center for Best Practices, Council of Chief State School Officers, n.d.). Finally, scholars and advocacy groups contend that inclusion of SWDs in general education settings represents a civil right and that inclusion improves students' ability to empathize with, understand and respect student differences (Kennedy & Ihle, 2012; Theorharis, 2007). Approximately 62% of SWDs spend 80% or more of their school day in the general education setting, an increase of 29% in the past two decades (McFarland et al., 2017). Secondary school administrators have had to manage staffing arrangements, service delivery models, and school schedules to accommodate this shift.

The provision of special education services within general education classrooms is often referred to as *inclusion*. The hope is that inclusion will ensure that SWDs will receive quality instruction as well as the educational supports and services they need to succeed in the general education classroom or curriculum (York, Doyle, & Kronberg, 1992). However, despite increases in SWDs participation within inclusive settings, achievement scores for SWDs continue to lag behind those of their typical peers without disabilities. In 2015, 92% of eighth grade SWDs performed at or below a basic reading level and 68% of eighth grade SWDs performed below a basic math achievement level (National Center for Education Statistics, 2015). These data suggest that the placement of SWDs into general education settings alone is not sufficient to improve their academic achievement. Though its merits have been debated over time (D. Fuchs & Fuchs, 1994), a common method school districts have adopted to attend to students learning needs within inclusive settings is coteaching.

Overview of Coteaching

The coteaching model generally includes a special education teacher (SET) and a general education content area teacher (CAT) who work together to provide instruction to students with and without disabilities in the general education setting (Friend & Cook, 2007). Theoretically, the CAT serves as the content area expert and the SET serves as the intervention expert in the classroom. This way, both teachers can offer their instructional expertise to differentiate and attend to the learning needs of all students. SWDs get exposure to grade-level content area instruction, while their teachers provide differentiation that would not be possible with one teacher alone (e.g., Murawski & Swanson, 2001; Scruggs, Mastropieri, & McDuffie, 2007).

Coteaching Practices. Recommendations for coteaching include a variety of practices that specify unique roles for both the CAT and the SET. These practices include (a) one teach, one observe; (b) one teach, one assist; (c) parallel teaching; (d) station teaching; (e) alternative teaching; and (f) team teaching (Friend, 2008; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Each practice has a specific purpose and is only useful when applied to meaningful lessons designed and planned by both teachers. The following are examples of how each model might be used in practice—as described by L. Cook and Friend (1995).

One teach, one observe. In the one teach, one observe model, one teacher guides classroom instruction and the other collects data for a specific purpose. For example, the CAT could lead the whole class in a laboratory activity, and the SET could collect data to identify the function of a student's off-task behavior to create behavior support plan. This model allows the SET to utilize his or her expertise in individually designed instruction to collect meaningful data for an explicit purpose. It should be emphasized that in this model the SET should not simply observe the class passively, but actively collect data for a specific purpose.

One teach, one assist. In the one teach, one assist model, one teacher leads instruction and the other circulates the room to provide academic and behavioral support to students. Though either teacher can lead instruction in this model, a common misperception is that the CAT should always lead instruction and the SET should support. This situation may not adequately utilize the specific expertise of the SET. However, there are several situations where it may be more appropriate for the SET to lead instruction. For example, the SET in a social studies class could teach a summarizing strategy for a primary source, the CAT could help individual students correct summaries.

Parallel teaching. Parallel teaching refers to dividing students in a classroom into two groups to which the SET and the CAT deliver the same instruction simultaneously. This model effectively reduces class size so that all students have more opportunities to respond and participate in instruction. This model might be especially useful when reviewing concepts learned over the course of a unit to maximize student's active participation in review activities. Though parallel teaching has the potential to increase student engagement and participation in class activities, this model does not necessarily incorporate differentiation.

Station teaching. In the station teaching model, students rotate through different instructional activities led by the CAT and the SET. They also might work at some stations independently. This model allows for targeted small group instruction. For example, in a science class, the CAT might read and annotate an article about climate change with a small group of students while the SET reviews vocabulary terms associated with climate change with another group. A third group might work independently to analyze and answer questions regarding climate change data. Students would rotate

through each of the three stations to participate in all instructional activities in groups with heterogeneous ability levels. Though it requires advanced planning, this model creates opportunities for differentiation across small groups of students.

Alternative teaching. The alternative teaching model allows teachers to provide instruction designed to address the specific needs of groups of students. One teacher leads instruction for the majority of students, while the other teacher offers support to a small group. For example, the CAT and SET could use a brief formative assessment to identify students who need remediation on specific skills related to lesson content. Based on the results of this assessment, the SET could offer specialized instruction to a small group while the CAT offers instruction to the larger group.

Team teaching. In this model, both teachers lead instruction together for the whole class. This model allows both teachers to participate in whole class instruction. Together, teachers might model the completion of a graphic organizer on the board for all students. The team teaching model may highlight the instructional strengths of both teachers. However, it does not necessarily provide opportunities for differentiation across student ability levels and requires both teachers to have a high level of content area knowledge for the unit being taught. As suggested, each model has a specific purpose and is only useful when applied to meaningful lessons designed by both teachers.

Additional Elements of Successful Coteaching

The models themselves are not enough to ensure quality coteaching practices. Research has identified additional elements necessary for effective coteaching (e.g., Hourcade & Bauwens, 2002; Murawski, 2006). For example, (a) cooperative presence—both CAT and SET are physically present in the cotaught classrooms; (b) cooperative planning—both teachers contribute to the planning process and meet regularly to design lessons together; (c) cooperative presenting—both teachers actively participate in the classroom instruction; (d) cooperative processing—both teachers have knowledge of content for monitoring and evaluating student responsiveness to the instruction; and (e) cooperative problem solving—both teachers are responsible for classroom management and setting arrangements (Hourcade & Bauwens, 2002). Administrators play an essential role in ensuring that these elements characterize coteaching in their schools.

Research on Coteaching

Limited data are available regarding how coteaching is viewed by teachers and on its effectiveness in enhancing student outcomes. Research has suggested that teachers perceive benefits to coteaching including collaboration between general and SETs, an increased ability to provide support to all students and the increased availability of peer models of appropriate behavior (B. G. Cook, McDuffie-Landrum, Oshita, & Cook, 2011). Teachers have reported feeling both that they themselves benefitted

professionally and that their students benefitted from coteaching (Scruggs et al., 2007). Teachers' perceptions also indicate that quality coteaching is not possible without administrative support (e.g., Thompson, 2001).

Despite relatively positive teacher perceptions, student achievement data are less positive. For example, Murawski and Swanson (2001) conducted a meta-analysis on the effects of coteaching on student outcomes. Of 89 identified studies on coteaching, only 6 could be analyzed for effects and the average effect size was only 0.40. Another recent study compared the effects of a math intervention delivered in inclusive cotaught settings with the same intervention delivered in a resource room setting (Bottge, Cohen, & Choi, 2018). Researchers showed that though scores were higher for SWDs in inclusive classrooms at both pretest and posttest, the posttest difference was much smaller than at pretest. Results indicated that the intervention improved performance of SWDs in resource rooms more than those served in inclusive settings. Another group of researchers reanalyzed data from fourth-grade students performing at or below the 10th percentile in math across three randomized control trials (L. S. Fuchs et al., 2015). Students receiving pull-out instruction performed better than their peers receiving inclusive instruction in fractions. Together, these results indicate that coteaching in inclusive settings may not be the most effective service model for SWDs needing individualized instruction.

In addition, numerous studies have highlighted the challenges of implementing high-quality coteaching practices and instruction (Murawski, 2006; Scruggs et al., 2007; Solis, Vaughn, Swanson, & McCulley, 2012). For example, research indicates that coteachers most frequently adhere to the one teach, one assist model of coteaching (see Bryant Davis, Dieker, Pearl, & Kirkpatrick, 2012; Scruggs et al., 2007; Wexler et al., 2018). Within this model, the SET often takes on a subordinate or passive role in the cotaught classroom and frequently functions similarly to a paraprofessional or teacher's aide (e.g., Buckley, 2005; Zigmond & Matta, 2004; Wexler et al., 2018). This widely used coteaching model diminishes SETs' capacity to effectively teach and underserves the SWDs coteaching is designed to target.

Furthermore, teachers are often given little professional development (PD) or specific expectations with respect to coteaching (Friend et al., 2010). SETs' responsibilities are often stretched across content areas and coteachers and both CATs and SETs frequently lack shared time outside of instruction, or coplanning time (Scruggs et al., 2007). These challenges threaten the effectiveness of coteaching as an effective instructional model (Murawski, 2006; Murawski & Swanson, 2001; Scruggs et al., 2007).

Research on the Administrator's Role in Coteaching

Research on administration and special education has consistently found that school administrators play a pivotal role in supporting and retaining SETs (Gersten, Keating, Yofanoff, & Harnis, 2001). Research has also shown that administrators are essential to supporting *quality* coteaching environments and practices (Scruggs et al., 2007; Thompson, 2001). A metasynthesis of qualitative research on coteaching identified

several categories of administrative support that made a difference in teachers' ability to deliver quality cotaught instruction (Scruggs et al., 2007). This metasynthesis suggested that teachers' perceived needs from administration included volunteerism, planning time, compatibility, and training. In other words, teachers thought it was important that both the general and special educators volunteered to coteach, that they were offered sufficient time to plan together, that they were offered specific training in how to coteach, and that coteaching pairs needed some semblance of compatibility to be effective together. These sentiments have been echoed in other research in that educators have frequently cited the need for sufficient coplanning time and PD to support quality coteaching instruction (Magiera et al., 2006; Scruggs et al., 2007).

Previous research (e.g., Friend et al., 2010; van Hover, Hicks, & Sayeski, 2012) has identified obstacles associated with adequate coplanning time, appropriate training and support, as well as heavy workload, in cotaught classrooms. This research suggests that administrators be involved in the coteaching process to help overcome these obstacles. Despite evidence that administrative support is essential to retaining SETs and providing quality instruction in cotaught classrooms, there has been limited guidance provided to administrators on their role in supporting coteaching practices.

Rationale and Purpose

Despite limited evidence for the effectiveness of coteaching to impact student outcomes (e.g., Bottge et al., 2018; L. S. Fuchs et al., 2015; Murawski & Swanson, 2001), the widespread use of coteaching models persists. As long as coteaching continues to be implemented on a broad scale, teacher perceptions of its effectiveness and the obstacles they believe impact their practice are important for administrators to consider. Since administrative support is essential to providing quality cotaught instruction, teacher perceptions offer insight to how best to support teachers and thereby impact successful coteaching models.

Given the number of SWDs in middle school who continue to struggle with reading, the widespread use of coteaching models in secondary schools, the essential role of administrators in overcoming obstacles teachers face when implementing quality coteaching, and the lack of guidance for administrators to address those obstacles, it is critical we understand how teachers perceptions of factors affecting their practice relate to ways administrators could better support teachers' delivery of quality coteaching. The purpose of this article is to offer guidance to administrators seeking to support quality coteaching by translating results from a qualitative study of middle school coteaching into practical, actionable advice for administrators. Though the qualitative study was designed to answer several research questions regarding teacher perceptions of coteaching in general, this article focuses on one research question:

   Research Question 1: What factors influence teachers' views of their coteaching practices?

The remainder of the article presents the method and findings of a recent qualitative study of coteachers' perceptions of their teaching roles and practices. We present these findings in the form of lessons learned from currently practicing coteachers with specific respect to the administrator's role in supporting quality coteaching. School administrators can learn valuable lessons from teachers on teachers' perceptions of what works in the cotaught classroom. These lessons can be used to enhance PD and school policies to improve organizational and instructional practice. Second, we provide some guiding questions for administrators to consider throughout the school year when facilitating effective planning and implementation of coteaching practices at the secondary level.

An Examination of Teachers' Perceptions of Coteaching

Our study was designed as a part of a pilot research project that developed training for coteachers interested in integrating differentiated literacy instruction into cotaught classrooms. The qualitative portion of this study was part of this larger multisite collaborative research project (Wexler et al., 2018; Bray et al., 2018). Data for this part of the study came from preliminary interviews conducted with coteaching pairs. Specifically, interviews explored teachers' perceptions of their own coteaching roles and practices, as well as their provision of literacy instruction in cotaught classrooms.

Setting, Participants, and Data Sources

This study took place in 21 classrooms across nine middle schools and five states in the Mid-Atlantic, Northeast, and Southeast regions of the country. Student populations and settings varied across schools. The study included 42 teachers in 21 coteaching pairs. Coteaching pairs consisted of one general education CAT and one SET. Indeed, 16 of the pairs taught English Language Arts (ELA) and 4 taught science. Though this set was a sample of convenience, participating teachers were nominated by their principals as representative of quality coteaching.

Each coteaching pair participated in a single interview at the onset of PD. Interviews included questions related to coteaching roles, provision of literacy instruction, coplanning practices, and the teachers' perceptions of the effectiveness of those practices. The interview also contained questions about the supports teachers provided to struggling readers and SWDs in their classrooms, and the influence of school leadership decisions on their coteaching practices and instruction. Interviews lasted approximately 1 hour.

Two educational researchers and two doctoral students analyzed the transcribed interviews using the qualitative software program, Dedoose (Version 7.0.23). Analysis included multiple readings of the interviews, iterative coding, and within and between interview analysis (Miles & Huberman, 1994). Coding interviews allowed researchers to determine how coteachers participated in the interviews (e.g., number of words

spoken by each teacher), and to identify broader themes with respect to coteaching and the influence of leadership decisions.

Some questions we asked with respect to school leadership included, "Tell me about the role school leadership plays in coteaching. How does leadership support you? Are there ways in which your school's leadership could better support you in coteaching? Tell me about those." Our research team sorted teachers' responses into broad categories and summarized themes as factors that influenced coteaching roles and practices. We also categorized teachers' comments as either positive or negative to assess their perceptions of administrative decisions and actions.

Lessons Learned From Coteachers

This section organizes the findings of our study into lessons learned from the coteachers. Since all of the coteaching pairs in our study stated that their school's leadership had an impact on their coteaching roles and practices, we encourage administrators to consider these lessons learned in light of the structures and resources available in their own buildings designed to support coteaching. In this section, we identify administrative decisions that teachers described as having an impact on their coteaching practices.

Lesson 1: Involve Teachers in Decision Making

Interviews revealed that many teachers felt powerless in the face of administrative decisions that directly affected their ability to coteach effectively. Two thirds of the interviewed coteaching pairs ($n = 14$) indicated that they were placed together. They indicated that they had little to no influence on whom they were paired with. Teachers felt that pairing decisions were made haphazardly and without their input. This sentiment is exemplified by the following quote in which a pair of coteachers discusses how they received their coteaching assignments:

   SET: We don't even hear about it [decisions made about coteaching pairs].
   CAT: I wouldn't even know how they made—how they decided, okay.
   SET: On the last day of school traditionally, [on] the last day of school at 2:00, they send out a paper that says what the teams are and who is on them, because it's 2:00 on the last day of school and they don't want to deal with people saying I don't want to do this. You get there and you're like, oh good. I'm still in room 217. I'm still with . . .
   CAT: and doing block, or what? Then they're like 2:00. Day is over. See you later. Bye-bye.
   Another pair mirrored this idea in the following excerpt.
   SET: Yeah, it's usually at the end of the year, "You're with him" ok, they wait until the last day so we can't say anything or change it . . .

Though some staffing and scheduling limitations are inevitable, involving teachers in the process of creating coteaching pairs and/or giving teachers some choice as to whether to coteach may improve evidence-based instruction in classrooms. This is

because literature on coteaching suggests that when content area and SETs have a role in pairing and other coteaching decisions, they will take more active roles in service delivery (Murawski, 2006; Scruggs et al., 2007). Thus, if teachers have some agency in whom they are paired with it may contribute to a more positive coteaching relationship. In fact, research has emphasized the importance of developing and maintaining the coteaching relationship between teachers (e.g., Keefe & Moore, 2004; Mastropieri et al., 2005).

Lesson 2: Identify and Support Teachers' Strengths

The majority of the interviewed coteaching pairs (i.e., 18 of 21) reported that the SET had multiple coteaching responsibilities with multiple CATs. In addition, most pairs indicated that SETs taught across multiple subject areas (e.g., math, science, social studies, ELA). The number of CATs the SET taught with varied across pairs. For example, some SETs cotaught with one CAT, while others taught as many as four CATs. The teachers perceived several difficulties associated with this arrangement. This sentiment is exemplified in the following quote from a SET.

> SET: Yeah. I would feel the same way. For me, I find it's a challenge because I do the same in a math class. In some ways, it'd be nice if I was just doing English, like a focus on one subject. I find sometimes it's challenging switching gears. This year it's been better because I have English, and then I have math in the afternoon. Last year I had English-math-English-math, and it was like you're changing gears and then resource. This year's a little easier, but it's still difficult to change gears like that.

Traditionally, CATs in secondary grades generally specialize in one content area. This allows them to focus on the most effective means of instruction within their content area. Theoretically, in cotaught settings, the CAT serves as the content area expert so the SET can focus on teaching critical reading skills necessary for accessing instructional content (Villa, Thousand, & Nevin, 2008). SETs have expertise to offer all cotaught classrooms in the form of instructional accommodations and modifications necessary to individualize instruction. However, SETs need at least some content knowledge in each subject they are teaching in order to meaningfully contribute to instruction and appropriately plan interventions for struggling learners (Scruggs et al., 2007).

Limiting the number of content area subjects that SETs teach across may improve their ability to participate in cotaught instruction. Since SETs' expertise most frequently lies in accommodation and intensive instruction, they often need to learn new content knowledge to most effectively contribute to cotaught content area classes at the secondary level. Although it might not always be possible to limit coteaching partnerships to one CAT and one subject per SET, limiting SET coteaching responsibilities has the potential to improve both instruction and morale.

In addition to giving teachers agency in whom they are paired with, administrators interested in supporting positive coteaching arrangements should work with teachers

to identify unique strengths and apply those strengths to appropriate teaching schedules. Research suggests that when SETs have strong content knowledge, and CATs understand differentiated instruction and specific learning strategies, their coteaching instruction will be enhanced (Murawski & Swanson, 2001; Weiss & Lloyd, 2002). Meanwhile, a lack of training or PD on content and evidence-based strategies may impede the efficiency of collaboration, limit coteaching roles, and reduce teachers' confidence in coteaching models (Silverman, 2007). SETs who are spread thinly across multiple content areas have limited ability to specialize and target their unique experiences, knowledge, and expertise to effective instructional strategies.

Lesson 3: Facilitate Coplanning

Previous research has identified sufficient coplanning time as an essential part of supporting coteaching in school environments (Scruggs et al., 2007). Our study supports this sentiment. Nearly, all of the coteaching pairs described limited to no coplanning time. Only one coteaching pair indicated that they had sufficient planning time. This pair also indicated that they planned together outside of the workday in addition to time allotted during the school day.

Several teachers reported that this lack of planning time shaped their roles in the classroom. The CAT took the lead instructional role in the classroom because she or he planned the bulk of the lessons. The following quote demonstrates the lack of coplanning time many teachers discussed and how that influenced their coteaching roles.

> SET: I'll walk in and just say, "What's going on?" He'll say, "This is what's going on." I'll say, "Okay, let's go do it." I will say that one of the disappointing things about what we have here at [Middle School] is that we just have absolutely no time, I think, to collaborate as much as we'd like to, particularly in this area, so that we can sit down and have a well thought out co-taught class. What you're gonna see primarily—depending on the day, but primarily a one lead, one support. Him being the lead and me being the support.

Teachers also indicated that SET responsibilities outside of the cotaught classroom (e.g., multiple coteachers across multiple subjects, Individualized Education Program meetings) influenced the lack of coplanning time. This is exemplified in the following excerpt.

> SET: So, I mean, part of it is, goes back to the planning, right? You say, ultimately, we're going to sit down every week, I'm going to be part of the planning every unit, and I'm going to know what's going on in every lesson. But when you've got that going on with three different teachers, plus you have your own stuff, plus you have your IEP caseload, which for me is 18 kids right now, there isn't time to plan. You know, I don't always know what's going on. So because [CAT] has this one class that she's teaching all day long and she's planning . . . [CAT] is much more familiar with what the content is gonna be than I am . . .

Though school schedules, especially at the secondary level, can be a complex puzzle, arranging time for coteachers to meet and plan lessons is essential to supporting

effective coteaching. Facilitating coplanning may also involve more than providing time to teachers. Providing explicit lesson plan models that incorporate different coteaching models and evidence-based literacy practices may help teachers better understand expectations for coteaching and coplanning effective lessons. In fact, research has shown that educators may need guidance on what effective coplanning looks like and what it means to plan together (Walther-Thomas, Bryant, & Land, 1996).

Lesson 4: Provide Explicit Guidance for Coteacher Roles

Much like the findings of previous research, coteaching pairs in our study predominately prescribed to a one teach, one assist model of coteaching. The CAT generally served as the instructional leader, guiding instruction and the content of lessons and the SET generally helped students, assisted the teacher or modified materials. This is exemplified in the following excerpt from a coteaching pair.

> CAT: I'm responsible for all of the curriculum and content at grade level for all the classes. I do some modification. I do a lot of small group and hands-on learning so that each of the different learning styles in the classroom, not just the children with disabilities are able to grasp the concepts. Then SET?
> SET: The CAT does the curriculum, and I preteach and reteach the curriculum according to what she does. We work on modifications together, and again, small group as well. I help other kids in the classroom as well as just the special ed kids, kids who need extra help, some extra help.

Often teachers described the SET's role as subordinate to that of the CAT. Another interview excerpt describes how the CAT leads instruction and the SET provides "quiet support."

> SET: The CAT does a lot of direct instruction and carries the role of like moving the classroom forward keeping the class on pace, and then when I am present in the classroom, I am more like a quiet coach. So, circulating through the room, making sure students who need to be working on separate tasks are doing those separate tasks and making sure that they have something to do. And then also providing like quiet support to the students who, like, may struggle to access the content that is being given to the other students.

This is consistent with previous research that has found that one teach, one assist is the most common coteaching model teachers use (Scruggs et al., 2007). As discussed, SETs in our study frequently felt that they could not contribute to classroom instruction in a meaningful way as an instructional leader. Several factors including a lack of coplanning time, scheduling that spread SETs thinly across content areas and CATs, and unclear expectations for coteaching roles contributed to the limited role SETs were able to play in the cotaught classroom.

An excerpt from an interview with one coteaching pair describes the lack of guidance teachers felt they received from their school administrators when beginning to coteach.

SET: I think on their [administrators'] end, I think what it is, is that they probably figure like, you're a teacher, you're a teacher—you both intrinsically understand what it means to be a teacher and that, what expectations you have for your students as well as for your profession.

CAT: Yeah.

SET: If putting two of you together, it shouldn't be that difficult to lead a bunch of kids to the road towards success.

Interviewer: Right.

SET: But in actuality, I mean, it's a lot more than just throwing people together and saying, "Go teach." There's a lot of other things involved with that.

Aligning with our findings, research suggests that teachers may benefit from explicit guidance on coteaching roles beyond the basic coteaching models (Walther-Thomas et al., 1996). Instead, it may be useful to delineate when each type of coteaching model could be useful and to provide examples of lesson plans within a specific unit that could utilize both the CAT and the SET as instructional experts. In addition, we recommend that administrators develop expectations for where and from whom struggling students receive support. For example, does remediation occur inside or outside of the cotaught classroom, and who will provide that support?

One example of a coteaching model designed to explicitly outline expectations for each teacher's instructional role is Project CALI (Content Area Literacy Instruction), a newly developed PD model to structure literacy instruction in cotaught classrooms (Wexler et al., 2018). In this model, coteachers learn to implement evidence-based literacy strategies for adolescent students, collect and analyze data to target students who require specialized supports, and to provide that support through differentiated classroom activities. Explicit guidance this area may improve teacher understanding of and adherence to expectations for coteaching roles and responsibilities.

Lesson 5: Provide Explicit Professional Development

Because this study was part of a larger project to create PD for content area coteachers, we asked teachers to describe the literacy and coteaching PD they had received in the past 2 years. Many teachers described trainings they had received as a part of graduate training from outside institutions. Some patterns emerged when teachers discussed PD offered by their school districts. Since many of the interviewed pairs taught ELA, about half of the pairs mentioned having literacy training in the past 2 years ($n = 10$). Several pairs explicitly stated that they had not received any PD in literacy strategies from their district ($n = 6$), but nearly half stated that they had not received any PD in coteaching ($n = 10$). This is exemplified in the following quotes from CATs.

CAT (a): I have not had any co-teaching PD. I had maybe—I want to say maybe eight years ago, they sent me to something in the summer, but I have not had anything since. I had PD on lots of other stuff, but not on co-teaching.

CAT (b): Way, way back when, when they first started with an inclusion model, I had some training. That would have been in like 2002, 2001.

About half of the teacher pairs indicated a desire for specific training with respect to coteaching ($n = 10$). Teachers wanted explicit instruction on how to best utilize both teachers in the classroom and which models were most appropriate for teaching specific lessons. This is exemplified in an excerpt from a SET.

SET: Yeah, I understand and I know the various co-teaching models just being a special ed teacher. I mean, what's not really helpful to me is just, "Hey, here's some models, stations, co-teaching, parallel teaching." What would be helpful is, "You're doing this content. You're working on this today. Here's your lesson. Here is how it could be broken up with someone else having actually done it." Then, having us look it over and saying, "Okay, this fits in nicely with what we're doing. This doesn't fit in nicely with what we're doing."

School administrators are in a unique position to offer explicit training to school staff on the vision of coteaching they have for their schools. Beyond the models of coteaching presented by Friend and Cook (2007), teachers expressed a desire for guidance on how to best apply those models to specific content units and lessons. Scruggs and Mastropieri (2017) offer specific examples of how to incorporate specific teacher roles into the lesson planning process. Administrators may want to consider examples like this when developing expectations for coteacher roles and responsibilities in the cotaught classroom.

Guiding Questions for Supporting Coteaching

Drawing from the lessons learned from coteachers within our study (Bray et al., 2018), we have developed a list of guiding questions school administrators can use as they approach supporting coteachers in their buildings. We have framed the guiding questions in two main sections: reflecting on current coteaching practices and planning for future implementation. These sections are supported by each lesson learned from practicing coteachers in our study. While these questions are especially useful in the planning stages of a school year (i.e., before developing a master schedule), they are also useful to revisit on a regular basis to better understand how your school is arranging, planning for, and implementing coteaching. To view the complete set of questions, see Table 1.

Though coteaching is a frequently implemented service delivery model, we contend that a complex set of factors contribute to whether coteaching is implemented effectively. These guiding questions provide a starting point for administrators trying to better understand how their school is currently implementing coteaching and how to best support implementation in the future. By thoroughly examining the current state of coteaching in the building you may be better equipped to make and communicate decisions about coteaching processes to your staff. At the very least, by soliciting

Table 1. Guiding Questions for Administrators.

	Reflecting on current practice	Planning for future implementation
Lesson 1: Involve teachers in decision making	Do teachers in your school enjoy the coteaching partnerships they have? What do they like about their coteaching partnerships? What could be improved? What are the characteristics of particularly effective coteaching pairs in your building? Do teachers have a say in whether to coteach and whom they will be paired with? What choices to teachers currently have with respect to their teaching assignments?	Are there ways you could provide teachers with choice in whether to coteach? If not, how will you frame your decisions about who will coteach and why? How will you convince your teachers that coteaching is a good idea? Are there ways to keep especially effective coteaching pairs together in future years? Are there ways you could provide teachers with choice on with whom they will coteach? If not, how will you present coteaching pairing decisions in a convincing way?
Lesson 2: Identify and support teachers' strengths	Do you have any special education teachers (SETs) who are also certified in the content area they coteach? Are SETs currently placed in general education settings where they have at least some content knowledge or expertise? How many content areas is each SET in your building currently teaching? How many different content area teachers (CATs) to SETs in your building currently work with? Are there CATs on staff who have expressed interest or demonstrated need to improve differentiated instruction, classroom management, or coteaching?	Are you able to either place SETs with content experience and knowledge into cotaught classes in those subject areas? If not, are there ways you can improve SET content knowledge in the areas they do coteach by limiting the content areas they are required to coteach? Or by providing SETs time or training to improve their content knowledge? Is there any way to limit the coteaching pairings so that SETs work with as few different coteachers as possible? Provide rationale for the pairings you plan to make. If teachers are not volunteering to coteach, how will you convince them that coteaching as a valuable practice?
Lesson 3: Facilitate coplanning	Does every coteaching pair in your building have coplanning time on a regular basis? How frequently is coplanning time available for coteachers? Does your school support structured coplanning time outside of the regular school day (e.g., after school faculty meetings, planning or professional development [PD] days)? What does current coplanning look like? Have you observed coplanning sessions for any of your coteachers? How is this time currently used?	Is there any way to provide all coteaching pairs with regular coplanning time? If coplanning competes with other obligations for the CAT or SET (e.g., Individualized Education Program meetings, team meetings) is there a way to protect at least one coplanning session per week for purely instructional planning? How would you like coplanning time to be used? Can you provide a lesson plan template that includes roles for both coteachers? (e.g., Scruggs & Mastropieri, 2017)

Table 1. (continued)

	Reflecting on current practice	Planning for future implementation
	What is your school's current lesson plan format? Does the format include explicit roles and activities for both the CAT and SET? Is there an effective coteaching pair in your school with model lesson plans (e.g., that include roles for each coteacher)?	Can you use a deidentified model lesson plan for other coteaching pairs? Do you have coteachers that may be willing to serve as coaches or mentors for other teachers on how to engage effective coplanning and coteaching sessions? How could you facilitate that mentorship?
Lesson 4: Provide explicit guidance for coteachers	What instructional roles to teachers currently take on in the cotaught classroom? Are they teaching an equal amount of content? Are both teachers expected to be in the room for the duration of the cotaught class? Of the coteaching models presented by L. Cook and Friend (1995), what models occur most often in your building? Are there coteaching models happening frequently that you would prefer to see less of?	What instructional roles do you want teachers to take on in the cotaught classroom? What specific practices would you like to see occurring? What are your expectations for teachers' presence in the cotaught classroom? How will you present your vision for the models of coteaching you would like to see most often? How will you support these models? (e.g., will you provide example lesson plans and/or staff trainings?)
Lesson 5: Opportunities for PD	Have your teachers had explicit training on coteaching models and implementation of those models in practice? How do you evaluate and determine the current PD and growth needs of coteachers? Do you provide different support and training opportunities for CATs and SETs? How do you determine what PD to provide and how often?	Can you provide explicit training on the coteaching models you would like to see in your building? If not, is there another special education expert in your building who could provide that training? Or a model coteaching pair who could provide that training or coaching? Can you ask for feedback from your staff about the specific trainings they feel they need with respect to coteaching?

information from teachers in your building or observing the practices currently in place, you may give teachers a sense of involvement and you may be able to improve teacher perceptions and understanding of administrative decisions.

We foresee that answers to these questions may require input from additional professionals in your building. Teachers, school counselors and psychologists, instructional assistants, and instructional and special education coaches may have unique contributions to make when making administrative decisions on how to best support coteaching practices. In fact, a key aspect of the lessons learned in our study and the root of addressing these questions in practice is seeking information and feedback from teachers. Teachers in our study had a desire to be heard and involved in the decision-making process. On an even more basic level, teachers wanted to be informed about the reasons behind administrative decisions. Teachers perceived administrative decision making to be haphazard. These guiding questions may offer a way to structure the decision-making process, to incorporate teacher voices when possible, and to present rationale when teacher choices cannot or should not be accommodated.

It is important to make clear that we are not suggesting that only teachers who volunteer to coteach should be assigned to coteaching roles, or that all suggestions from teachers about administrative decisions should be heeded. This is neither feasible nor advisable. However, soliciting feedback from coteachers may give school administrators a better idea of how to approach teachers who are needed for coteaching but may not know why it is important, or how it relates to their overall professional goals. This knowledge empowers administrators to have convincing conversations that may improve teacher buy-in to the coteaching process.

Limitations

A few limitations should be applied to the presented guiding questions and lessons learned. First, the guiding questions compiled here are based on lessons learned in a single study of teacher perceptions of coteaching (Bray et al., 2018). Additional studies that include student outcomes, administrator perceptions of coteaching, or observational data of the teaching practices currently occurring in cotaught classrooms may improve our understanding of coteaching decision making and practices currently happening in schools. Second, the guiding questions presented are not meant as a solution to the complicated and difficult process of implementing effective coteaching, nor are they meant to be used as an evaluation tool. The act of soliciting information from teachers cannot replace sound leadership decisions rooted in scientific evidence. Instead, answers to these guiding questions are meant as an iterative guide to help administrators frame and organize the information needed to make and justify complex decisions.

Though coteaching has become a frequently used practice to support SWDs in the general education setting, it is not a simple or easy process. As one SET in our study put it, " . . . It's a lot more than just throwing people together and saying, Go teach . . . " If you choose to implement coteaching in your building, these questions may help you navigate the difficult processes of assessing the current state of coteaching and planning for future implementation.

Conclusion

Schools use coteaching with increasing frequency to provide supports for SWDs, despite limited evidence of its effectiveness. Regardless, school administrators are frequently asked to implement coteaching, and our data suggest ways they can improve teachers' experience in coteaching pairs. Teachers' experiences and perceptions of coteaching might be improved by incorporating the lessons described herein: (a) involve teachers in decision making, (b) identify and support teachers' strengths, (c) facilitate coplanning, (d) provide explicit guidance for coteaching roles, (e) provide explicit PD.

It is important to note that improving teachers' experiences may not increase student achievement, and there are many reasons to have students receive specialized instruction outside of inclusive cotaught environments. In fact, though improved coteaching might increase achievement outcomes for some SWDs, it frequently lacks the intensity required to improve outcomes for students with the most severe and persistent deficits. Schools must ensure that SWDs have access to individualized instruction that is sufficiently intensive to meet their needs (National Center on Intensive Intervention, n.d.). However, coteaching is doubtlessly here to stay, and we think it is important that coteachers have the greatest chance as successful implementation. We hope that our guiding questions will facilitate that possibility.

Authors' Note

Christopher J. Lemons is also affiliated with Vanderbilt University, Nashville, TN, USA. Opinions expressed herein are those of the authors and do not necessarily represent the position of the U.S. Department of Education, and no official endorsement by it should be inferred.

Declaration of Conflicting Interests

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References

Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, E., . . . Zhang, J. (2012). *The Condition of Education 2012 (NCES 2012-045)*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Bottge, B. A., Cohen, A. S., & Choi, H. (2018). Comparisons of mathematics intervention effects in resource and inclusive classrooms. *Exceptional Children*, *84*, 197-212.

Bray, L. E., Sinclair, A. C., Wei, Y., Clancy, E., Wexler, J., Lemons, C., & Kerns, D. (2018). Teachers' sensemaking of their literacy instruction in co-taught english language arts classrooms. Manuscript in preparation.

Bryant Davis, K. E., Dieker, L., Pearl, C., & Kirkpatrick, R. M. (2012). Planning in the middle: Co-planning between general and special education. *Journal of Educational and Psychological Consultation*, *22*, 208-226.

Buckley, C. (2005). Establishing and maintaining collaborative relationships between regular and special education teachers in middle school social studies inclusive classrooms. In T. E. Scruggs & M. A. Mastropieri (Eds.), *Cognition and learning in diverse settings* (pp. 153-198). Oxford, England: Elsevier.

Cook, B. G., McDuffie-Landrum, K. A., Oshita, L., & Cook, S. C. (2011). Co-teaching for students with disabilities. In J. M. Kauffman & D. P. Hallahan (Eds.), *Handbook of special education* (pp. 187-208). New York, NY: Routledge.

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

Friend, M. (2008). *Co-teach! A manual for creating and sustaining effective classroom partnerships in inclusive schools*. Greensboro, NC: Marilyn Friend, Inc.

Friend, M., & Cook, L. (2007). *Interactions: Collaboration skills for school professionals* (4th ed.). New York, NY: Longman.

Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation*, *20*, 9-27.

Fuchs, D., & Fuchs, L. S. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children*, *60*, 294-309.

Fuchs, L. S., Fuchs, D., Compton, D. L., Wehby, J., Schumacher, R. F., Gersten, R., & Jordan, N. C. (2015). Inclusion versus specialized intervention for very-low-performing students: What does access mean in an era of academic challenge? *Exceptional Children*, *81*, 134-157.

Gersten, R., Keating, T., Yofanoff, P., & Harnis, M. K. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children*, *67*, 549-567.

Hourcade, J. J., & Bauwens, J. (2002). *Cooperative teaching: Rebuilding and sharing the schoolhouse*. Austin, TX: PRO-ED.

Individuals with Disabilities Education Improvement Act, 20 U.S.C 1400 et seq. (2004).

Kaldenberg, E. R., Watt, S. J., & Therrien, W. J. (2015). Reading instruction in science for students with learning disabilities: A meta-analysis. *Learning Disability Quarterly*, *38*, 160-173.

Keefe, E. B., & Moore, V. (2004). The challenge of co-teaching in inclusive classrooms at the high school level: What the teachers told us. *American Secondary Education*, *32*, 77-88.

Kennedy, M. J., & Ihle, F. M. (2012). The old man and the sea: Navigating the gulf between special educators and the content area classroom. *Learning Disabilities Research & Practice*, *27*, 44-54.

Lemons, C. J., Vaughn, S., Wexler, J., Kearns, D. M., & Sinclair, A. C. (2018). Envisioning an improved continuum of special education services for students with learning disabilities: Considering intervention intensity. *Learning Disabilities Research & Practice*.

Magiera, K., Lawrence-Brown, D., Bloomquist, K., Foster, C., Figueroa, A., Glatz, K., . . . Rodriguez, P. (2006). On the road to more collaborative teaching: One school's experience. *Teaching Exceptional Children Plus*, 2(5), 6. Retrieved from https://files.eric.ed.gov/fulltext/EJ967105.pdf

Mastropieri, M. A., Scruggs, T. E., Graetz, J. E., Nordland, 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. doi:10.1177/10534512050400050201

McFarland, J., Hussar, B., de Brey, C., Snyder, T., Wang, X., Wilkinson-Flicker, S., . . . Bullock Mann, F. (2017). *The Condition of Education 2017 (NCES 2017-144)*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

McLeskey, J., & Waldron, N. L. (2011). Educational programs for elementary students with learning disabilities: Can they be both effective and inclusive? *Learning Disabilities Research & Practice*, *26*, 48-57.

Miles, M. B., Huberman, A. M., Huberman, M. A., & Huberman, M. (1994). Qualitative data analysis: An expanded sourcebook. Sage.

Murawski, W. W. (2006). Student outcomes in co-taught secondary English classes: How can we improve? *Reading & Writing Quarterly*, *22*, 227-247.

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

National Center for Education Statistics. (2015). *Summary data tables for national and state average scores and achievement level results*. Retrieved from https://www.nationsreportcard.gov/reading_math_2015/files/2015_Results_Appendix_Reading.pdf

National Center on Intensive Intervention. (n.d.). Retrieved from https://intensiveintervention.org/

National Governors Association Center for Best Practices, Council of Chief State School Officers. (n.d.). *Application to students with disabilities*. Retrieved from http://www.corestandards.org/assets/application-to-students-with-disabilities.pdf

Scruggs, T. E., & Mastropieri, M. A. (2017). Making inclusion work with co-teaching. *Teaching Exceptional Children*, *49*, 284-293.

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

Silverman, J. C. (2007). Epistemological beliefs and attitudes toward inclusion in pre-service teachers. *Teacher Education and Special Education*, *30*, 42-51.

Solis, M., Vaughn, S., Swanson, E., & McCulley, L. (2012). Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. *Psychology in the Schools*, *49*, 498-510.

Theorharis, G. (2007). Social justice educational leaders and resistance: Toward a theory of social justice leadership. *Educational Administration Quarterly*, *43*, 221-258.

Thompson, M. G. (2001). *Capturing the phenomena of sustained co-teaching: Perceptions of elementary school teachers* (Doctoral dissertation). Retrieved from Dissertation Abstracts International. (63(02), 560A)

van Hover, S., Hicks, D., & Sayeski, K. (2012). A case study of co-teaching in an inclusive secondary high-stakes World History I classroom. *Theory & Research in Social Education*, *40*, 260-291.

Villa, R. A., Thousand, J. S., & Nevin, A. (2008). *A guide to co-teaching: Practical tips for facilitating student learning*. Thousand Oaks, CA: Corwin Press.

Walther-Thomas, C., Bryant, M., & Land, S. (1996). Planning for effective co-teaching. *Remedial and Special Education*, *17*, 255-264.

Weiss, M. P., & Lloyd, J. W. (2002). Congruence between roles and actions of secondary special educators in co-taught and special education settings. *Journal of Special Education*, *36*, 58-68.

Wexler, J., Kearns, D. M., Lemons, C. J., Mitchell, M., Clancy, E., Davidson, K., Sinclair, A. C., & Wei, Y. (2018). Reading comprehension and co-teaching practices in middle school English Language Arts classrooms. *Exceptional Children*, *84*, 384-402.

York, J., Doyle, M. B., & Kronberg, R. (1992). A curriculum development process for inclusive classrooms. *Focus on Exceptional Children*, *25*(4), 1-16.

Zigmond, N., & Matta, D. W. (2004). Value added of the special education teacher in secondary school co-taught classes. *Advances in Learning and Behavioral Disabilities*, *17*, 55-76.

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