



Synchronizing and amending: A conversation analytic account of the “Co-ness” in co-teaching

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ARTICLE INFO

Article history:

Received 29 January 2021

Revised 3 January 2022

Accepted 6 January 2022

Available online 15 January 2022

Keywords:

Co-teaching

Gifted education

Collaboration

Classroom discourse

Conversation analysis

ABSTRACT

Despite extensive interdisciplinary research on co-teaching over the last few decades, the existing body of work still leaves unanswered questions about what teacher collaboration *looks like* and how, *precisely*, co-teaching might enhance student learning or even teacher experience. In the first conversation analytic study to be done on co-teaching for gifted students, I examine one first-grade classroom where two head teachers with equal roles instruct accelerated children. I identify two interactional practices (synchronizing and amending) that co-teachers deploy which underlie and maximize the “co-ness” of their collaborative dynamic. In analyzing and describing these practices in detail, I reveal some of the ways in which co-teachers accomplish collaboration, and I also present evidence for how such collaboration can enhance both learning and teaching in a classroom with young students. Findings contribute to a nascent body of discourse analytic research on co-teaching, provide novel insight on co-teaching in gifted classrooms, and lay the groundwork for some practical suggestions for training materials for co-teachers.

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1. Introduction

Since the inception of the field of conversation analysis, researchers have generally agreed that interaction is a collaborative affair: Sacks (1992) declared that “each part...of a conversation [is] a piece of collaboration” (p. 379); Schegloff et al. (1974) stipulated that “intimate collaboration” (p. 697) is required for turn-taking to work; Schiffrin (1988) claimed conversational orderliness is attributed to the “ways in which speakers and hearers coordinate their joint productions of meaning and actions” (p. 266); and entire bodies of research devoted to phenomena like the *collaborative completion* (see e.g., Lerner, 1987, 1991, 1996, 2004; Ono & Thompson, 1996; Sacks, 1992) have illuminated the myriad layers of collaboration (e.g., syntactic or paralinguistic) at play in the accomplishment of social actions.

While collaboration may be inherent to all interaction, the *degree* of participant collaboration can vary from one interaction type to the next (Sutherland & Strong, 2011). For co-teaching,¹ an instructional paradigm wherein two or more teachers work together in one classroom, collaboration is part and parcel of the approach itself. It is therefore unsurprising that the issue of how co-teachers collaborate effectively is a prominent theme in the decades’ worth

of literature on the subject. Yet, despite the extensive research, the fundamental *essence* of this collaboration—what I term the “co-ness” of co-teaching—remains elusive. What does teacher collaboration really *look like* when it unfolds in the classroom? What is it, *precisely*, about this collaboration that carries the potential to enhance learning for students? These questions remain largely unanswered.

To shed light on the “co-ness” of co-teaching, this study offers an in-depth examination of interaction between two head teachers in one first-grade classroom of gifted students in the U.S. By using conversation analysis to apply a micro-analytic lens to this complex, yet commonplace, type of classroom discourse, I hope to reveal some concrete ways that co-teacher collaboration unfolds *in situ*, and to also illuminate how the “co-ness” of this instructional method might contribute to two key objectives in this context and others like it: creating a high-caliber learning environment in real time, and managing young children’s behavior and attention during instruction.

2. Background

Co-teaching took hold in the U.S. and abroad toward the end of the 20th century, and its popularity has steadily increased since then (Kloo & Zigmund, 2008). Since the rise of co-teaching was driven by the passage of laws aiming to ensure the availability of education for all children (Sweigart & Landrum, 2015), much literature focuses on the pairing of a support teacher with a gen-

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¹ While a number of terms for this arrangement pepper the literature (e.g., *co-teaching*, *team teaching*, *apprenticeship teaching*, etc.), *co-teaching* is found consistently across disciplines.

eral education teacher in an “inclusion” setting to meet the individual needs of a diverse groups of students. Some studies (see e.g., Brownell et al., 2006; Friend & Cook, 2007; Friend et al., 2010; Murawski, 2005; Murawski & Dieker, 2004; Scruggs & Mastropieri, 2017) consider co-teaching between a special education and a content teacher, while others (see e.g., Arkoudis, 2006; Davison, 2006; Honigsfeld & Dove, 2008; Martin-Beltrán & Peercy, 2012) look at co-teaching between an English language support and a content teacher. Although meeting the needs of gifted students has been categorized as a special education matter (Matthews et al., 2007), studies on co-teaching for these students (see e.g., Hughes & Murawski, 2001; Mofield, 2020) are rare and limited to inclusion settings, where a gifted education teacher working alongside a general education teacher can enhance, enrich, and accelerate the curriculum to meet particular needs of gifted students (Mofield & Phelps, 2020) in ways that may not be within the capacity of a general teacher to execute independently. Regardless of the nature of the student needs, the work on co-teaching for student support highlights multiple purported benefits of teacher pairing such as providing more ability-appropriate education, increasing student achievement, and even enhancing teacher experience.

Another body of research examines co-teaching in the teacher training context (see e.g., Bacharach et al., 2010; Gallo-Fox & Scantlebury, 2016; Roth, 2005; Thompson & Schademan, 2019), where pairing a pre-service with an in-service teacher in the classroom is said to contribute to the professional development of the less experienced teacher. Among several other benefits, these studies indicate that co-teaching is advantageous because it reduces novice teachers' responsibility, and gives them hands-on experience without putting them in a “sink-or-swim” situation (Thompson & Schademan, 2019). Moreover, the supervising teacher can monitor the quality of the content being taught and provide support while the novice is teaching (Eick & Ware, 2005). However, to actually benefit from the collaboration, the research suggests that new teachers first need to be trained *how* to collaborate (Burns & Mintzberg, 2019; Strieker et al., 2013).

The interdisciplinary research on co-teaching has been largely top-down in nature, utilizing self-reporting methods such as surveys or interviews to generate descriptions of effective practices (Friend et al., 2015); however, a small body of work employing methods that fall under the umbrella of discourse analysis uses a more bottom-up approach to understanding teacher collaboration. Whether it be through the lens of positioning theory (see e.g., Martin-Jones & Saxena, 1996), systemic functional linguistics (see e.g., Gardner, 2006; Luo, 2013), critical discourse analysis (see e.g., Ashton, 2010, 2014, 2016; Creese, 2002), conversation analysis (CA) (see e.g., Butterfield & Bhatta, 2015; King, 2016, King, 2018; Lee, 2016; Park, 2014), or a loosely defined analysis of classroom discourse (see e.g., Roth et al., 2005), these studies provide a detailed analysis of co-teaching by using recordings of naturally-occurring data to capture and shed light on the nuances of actual classroom interaction. In addition to inclusion and teacher training settings, these studies often examine English as a Foreign or Second Language (EFL or ESL) classrooms where teachers with different language backgrounds are paired to enhance the linguistic and cultural repertoire in the classroom (Barratt & Kontra, 2000; Carless & Walker, 2006). This growing body of research illuminates some interactional practices that may be linked to the larger objectives of implementing co-teaching in the abovementioned contexts. For example, several studies (see e.g., Aline & Hosada, 2006; Butterfield & Bhatta, 2015; King, 2018; Lee, 2016; Wang, 2019) examine how the well-known Initiation-Response-Feedback (IRF) sequence (see e.g., Cazden, 2001; Mehan, 1979a) unfolds in co-taught contexts. The findings suggest that the presence of a second teacher creates unique learning affordances such as the possibility for one co-teacher to participate as a “mock student” in the second turn

of the sequence, enabling them to provide an answer to the other teacher's initiation in a way that models a proper response or, in an EFL context, demonstrates to learners how turn-taking works in English (see e.g., Aline & Hosada, 2006; Lee, 2016). Additionally, participation of both teachers in the third turn of an IRF sequence can help co-manage multiple student contributions and give more robust and individualized feedback to the learners (King, 2018).

Although these findings demonstrate the efficacy of using analysis of recorded naturally-occurring data to peer into the inner-workings of teacher collaboration, the number of studies remains small and limited in context. Thus, the present study will make a few important contributions. First, it adds to the nascent body of discourse analytic research on co-teaching by using the underutilized research method of CA. Second, it focuses on the generally neglected topic of co-teaching for gifted students and, to my knowledge, provides the first CA study of this context. Third, it extends upon what only a few studies (see e.g., King, 2016, 2018; Wang, 2019; Wassell, 2005) have done by looking at a teacher pair with equal roles. This is significant because how participants orient to the specific context and their roles within it is procedurally consequential in institutional settings (Drew & Sorjonen, 2011; Schegloff, 1992). So, we would expect there to be distinctions in the interaction between co-teachers with distinct roles and co-teachers with equivalent roles with respect to the practices like turn-taking, turn design, and sequence organization that are typically analyzed in institutional settings (Drew & Heritage, 1992).

3. Data and Method

The data come from nine hours of video recordings of a first-grade classroom in an independent K-8 school for gifted children in the Northeastern U.S. The school boasts a curriculum and teaching methodology that cater to high-achieving learners. Part of this methodology includes a co-teaching model, so that each grade classroom has two head teachers. While the teachers in any classroom may differ in terms of educational background, strengths, or years of teaching, their roles in the classroom are considered equal.

The co-teachers are Mr. Ronaldo² (Mr. R) and Ms. Benevetti (Ms. B). At the time of the recordings, Mr. R was in his 25th year of teaching, and Ms. B was in her ninth year, and they were two-thirds of the way through their third year teaching together. Prior to their current partnership, both teachers had spent a considerable amount of time co-teaching in past classrooms and schools. Mr. R and Ms. B's approach to co-planning was thorough—they discussed and prepared lesson plans before the school day began, while their students were in specialized classes with other teachers, and even over the phone during evenings and weekends. Their planning typically delineated which teacher would take the lead during an activity; however, both teachers were familiar enough with the content that the non-leading teacher could and would step in for any reason. Thus, while the extracts selected to best highlight the practices at hand for this paper include more moments when Mr. R is leading, Ms. B facilitates several activities in the larger data set, and there is an overall ebb and flow of leading that reflects an equal-role collaboration. The students are 16 first-graders (10 boys and 6 girls), although one or more students was absent on each of the three recording dates. While no demographic data about students were shared with me, school administration did provide some details informally about the rigorous admissions process for the school, during which a number of assessments measuring each child's academic potential are done.

The learning environment and participation dynamic in this classroom deserve mention. Both teachers put great effort into

² All participant names are pseudonyms.

structuring activities in streamlined ways. They also consistently and explicitly reminded students to observe classroom etiquette—students were to remain in a designated place for activities, and they were to participate properly, which meant listening quietly while others were speaking, and raising their hands to be called on before speaking themselves. Yet, in some ways, this classroom was unlike other, more teacher-centered, contexts. For example, students spent little time at their desks which, incidentally, were arranged in a “U” shape with many students facing each other, not the front of the room. When not at their desks, students typically sat on the rug with one or both teachers sitting among them. Regarding participation, as long as they bid to speak by first raising their hands, students were encouraged to initiate questions or comments, even while a teacher was speaking. Additionally, open-ended teacher prompts promoting discussion were just as prevalent as known-information questions (Mehan, 1979b). In sum, interaction in this classroom was student-centered and, while organized and relatively orderly, not overly structured. In these ways, classroom discourse here resembled that previously described in other gifted contexts, namely that it was more *dialogic* than in mainstream classrooms, as evidenced by certain distinct discursive patterns such as more frequent student initiations and more balanced amounts of student talk and teacher talk (Netz, 2014).

I recorded over three days with two GoPro™ cameras in the classroom: one “looked down” on the rug area at the front of the classroom where most lessons took place; the other I repositioned depending on the activity in order to capture as much interaction as possible. I also set up a Zoom™ recorder to capture the audio of the interaction. Since the research focus was on how the teachers work *together*, I did not record activities where the teachers were working with separate groups of students or with children individually at their desks.

I used the video- and audio-recordings to produce detailed multimodal transcripts following Jefferson’s (2004) system, with a slight adaptation to represent non-verbal materials. After transcribing the entire data set, I identified all moments of “co-teacher collaboration,” which I defined loosely as a time when both teachers were contributing to the same action during whole-group activities. This resulted in a collection of 156 instances, which included collaboration types ranging from closely coordinated moments where the teachers collaborated within the same turn of teacher talk, to moments when they each held separate, yet respectively coordinated, exchanges with students, to events spanning longer sequences like collaborative story-telling. In light of my aim to understand how co-teachers navigate each other effectively in interaction, I decided to focus first on moments where the two teachers were operating in close sequential proximity to co-construct relatively short sequences. This resulted in 67 instances: 17 of same-turn collaboration; and 50 of adjacent- or near-adjacent-turn collaboration. I analyzed these instances according to the principles and method of CA. I chose this approach not only because the line-by-line method of CA analysis provides the kind of detailed representation of what co-teacher interaction *looks like* that is still rare in the literature, but also because the underlying principle of *unmotivated looking* (Psathas, 1995) at the heart of CA allowed me to objectively consider how co-teacher collaboration works and how it might contribute to the overall classroom objectives.

4. Findings

In the following, I explore how Mr. R and Ms. B manage the task of teaching together in their first-grade classroom. The analysis reveals two phenomena—*synchronizing* and *amending*—that appear to both underlie and maximize the “co-ness” of these teachers’ collaborative dynamic. As I will demonstrate, both practices

entail one teacher supplementing the other teacher’s contribution, either within the same turn (synchronizing), or in a subsequent turn (amending), in a manner that ultimately facilitates the ongoing action-in-progress. By focusing on the intricacies of these two practices, I show how two teachers can jointly shape the interaction in ways that attend to the quality of the pedagogy and the maintaining of order in their classroom.

4.1. Synchronizing

This first section will describe a practice wherein co-teachers display a striking amount of coordination such that the nonverbal action of one teacher synchronizes with the verbal action of the other, a phenomenon that occurred 17 times throughout the data set. Two instances will be presented to illustrate the relative configurations of the verbal and nonverbal components found in the data: adjacent in [Extract 1](#), and concurrent in [Extract 2](#).

The first instance comes from the beginning of a math lesson on arrays, objects organized in rows and columns, which the class has been studying in the context of learning multiplication. During their planning period, the co-teachers have decided that Mr. R would lead the lesson. When the extract starts, Mr. R is easing into the topic with an anecdote about how a few students have discovered that some pictures on the outside of their classroom door are arranged in an array. Since the door is closed while he is speaking, the pictures in question are out of view for all participants. The phenomenon at hand will center around Ms. B opening the door in line 21 to reveal the pictures that her co-teacher is referencing. In the transcripts for this section, arrowed lines denote the verbal (\rightarrow_v) and the nonverbal (\rightarrow_{nv}) components of the synchronized action.

The instance begins with Mr. R relaying the anecdote (lines 01–04) but then abandoning his telling to ask the students involved to report what they have noticed themselves (line 06). At the same time that Mr. R is eliciting student recollections, Ms. B is at the far side of the room getting snacks from a bin. Despite being engaged in a side-activity, when her co-teacher references and orients to the classroom door with his gaze and pointing gesture in line 02

Extract 1 Adjacent Synchronizing.

01	Mr. R:	then <u>he</u> :: a:nd (.) Sydney and Aliso:n (.)
02		noticed <u>on</u> our [door gazes at and points at door-with=
03	Ms. B:	[glances back across room at door, stands
04	Mr. R:	=the pictures =>on the other< si:de-
05	SS:	several students gaze at door
06	Mr. R	[what did you notice about=
07	Ms. B:	[walks to rug
08	Mr. R:	=the way they [were or[dered.]
09	ISI:	gazing at door-[>in an<[array.]
10	MON:	[array.]
11	Mr. R:	pointing-[>it’s< an <u>array</u> . (.) gazes at door
12	Ms. B:	[crosses back end of rug, puts snack on desk
13	Mr. R:	[right? it’s [a- (.)
14	Ms. B:	[crosses right hand side of rug
15	THE:	[WHY::-gazing at door
16	Mr. R:	gazes at Theo
17		[gazes at door-it’s a- (.)
18	Ms. B	[steps over Rico
19	Mr. R \rightarrow_v	[>see if you can figure out what [kind of <u>array</u> it is.<
20	Ms. B:	[finishes crossing rug [reaches for doorknob
21	\rightarrow_{nv}	[opens door, it hand underlines group of pictures
22	SS:	[gaze at door
23		(0.5)
24	TOD:	raises hand, gazes at door
		((17 lines skipped))
42	ALL:	[>there are<] actually: gazes at door
43		there’s one array and next to it there’s a <u>second</u> array.

Extract 2
Concurrent Synchronizing.

01	ALL:	<i>gazing at notebook, reading-</i> Stephen Gray (.) was born in
02		seventeen twenty? [.HH ↓nine °in England.°]=
03	Ms. B:	[types 'born in 17']
04	Mr. R:	= <i>[gasps, loud whisper-oh, gazes at board now let's]=</i>
05	Ms. B:	[types '29 in England' in bottom rt cell]
06	Mr. R:	= <i>[think about this for a second. points to board-(0.2)</i>
07	Ms. B:	[looks at board
08	Mr. R:	[you:r (.) person- (.) >look up at the [board for a second,<=
09	Ms. B:	[hits 'enter' to create 2 nd line in row in Grey column
10	SS:	[several SS look at board [more SS look at board
11	Mr. R: → _v	= <i>[passed awa:y (0.2)] in sixteen >oh< three.</i>
12	Ms. B: → _{nv}	[re-positions table centimeters under '1603']
13	THE:	<i>gazing at board-that's two hundred and tw- [and [(.) two hundred=</i>
14	Ms. B:	[gazes at Theo
15	Mr. R:	[gazes at Theo
16	THE:	=years. <i>gazes at Mr. R-before.</i>
17	Mr. R:	<i>gazes at board OU;R person was BO:RN in seventeen</i>
18		twenty nine. <i>gazes forward (0.2) gazes at board</i>



Fig. 1. Gazing and pointing at door lines 02–03.

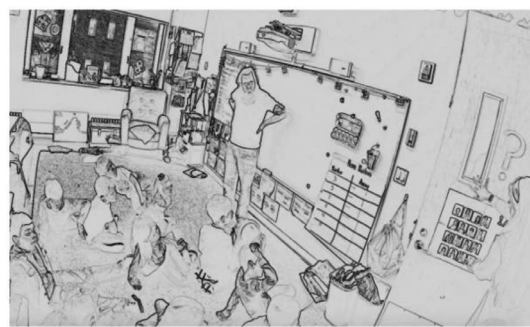


Fig. 2. Underlining group pictures line 21.

(see Figure 1), Ms. B glances back at this same space (line 03), indicating that she is attending to Mr. R's talk.

As the interaction continues, and students Isidoro and Montgomery respond to Mr. R's elicitation by reporting that the pictures on the door were organized *in an array* (lines 09–10), Ms. B leaves the bin and heads toward the rug (line 07), then crosses the room and deposits the snacks on a desk (line 12). While his co-teacher is on the move, Mr. R gives positive feedback (line 11) to Isidoro and Montgomery by repeating their response (Hellerman, 2003) *it's an array*, and he appears to be going on to give more specifics (line 13) with his turn-initial *it's a-*, when another student, Theo, wonders loudly *why* this is so (line 15). Mr. R gazes at Theo and does a recycled turn-initial *it's a-*, again seemingly about to describe the array. However, perhaps to better respond to Theo's inquiry, or perhaps to dig deeper into this example he appears to be using to scaffold (Wood et al., 1976) the upcoming math activity, Mr. R instead asks the students *what kind of array* is on the door (line 19). As Mr. R is shifting from describing into inquiring about the array, Ms. B finishes crossing the rug and reaches the door (line 20) and, precisely after Mr. R completes the initiation move of an IRF sequence asking students to identify the kind of array there, Ms. B opens the door (line 21) to reveal and then manually underline the objects in question—a collection of class photos comprised of one four-by-four group of the 16 first-graders and one one-by-two group of the two co-teachers (see Figure 2).

The collaborative phenomenon that culminates in lines 19–21 provides the first example of co-teacher *synchronizing*, a practice wherein the verbal and nonverbal actions of the two teachers converge in a display of multimodal coordination that results in meaning-making surpassing what the teachers' actions do independently. Temporally, this is an example of *adjacent synchroniz-*

ing, since Ms. B's nonverbal door-opening move takes place after Mr. R's corresponding inquiry about the pictures on the door, in an adjacent turn. Prior to this moment, however, multiple cues on the part of both teachers launch the practice and arguably set the stage for the synchronized action to happen. Beyond Mr. R's talk that makes the door and pictures on it the main topic, his gaze and pointing (line 02) establish this space as an object of mutual orientation (Goodwin, 1986). On her part, Ms. B's glance (line 03) followed by her multi-second journey across the rug toward the door (lines 07–20) provide a long and public gearing-up that Mr. R can see unfolding. In fact, the cut-offs, pausing, and gaze to the door (lines 13 and 17) that precede Mr. R's eventual inquiry suggest that he may be delaying the delivery of his challenge to the students in anticipation of her opening of the door. Further evidence that Mr. R is projecting his co-teacher's action-to-come lies in the construction of his inquiry *see if you can figure out what kind of array it is*—the TCU-initial *see if* presuming that the students will be able to actually see the pictures, while the question itself requires that they be able to count the objects in the array to identify what kind it is. Notably, Ms. B's action makes the pictures visible just before the students would be expected to provide a response in the second turn of the IRF sequence.

The co-teachers' synchronized efforts seem successful in encouraging students to guess the kind of array on the door. In the omitted lines right after the practice occurs, multiple students gaze at the door, one boy raises his hand in a bid to respond, and two others call out mathematical sentences *three and three* and *three by four*. These initial guesses are not correct; however, one student soon points out that there are actually *two* arrays on the door (lines 42–43) and goes on to describe the smaller array accurately as a *one by two*.



Fig. 3. Gilbert's death date on whiteboard.

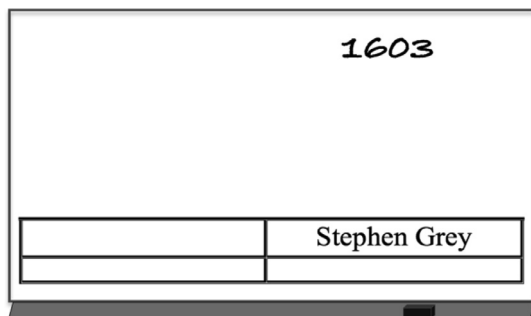


Fig. 4. Projected table on whiteboard.

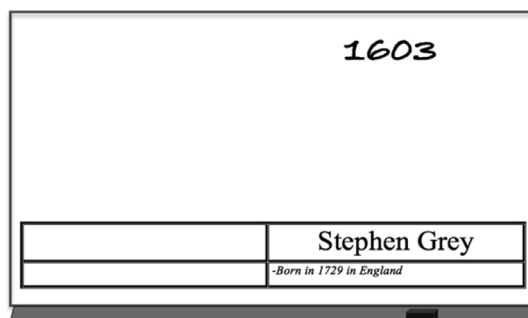


Fig. 5. Alison's sentence lines 03–05.

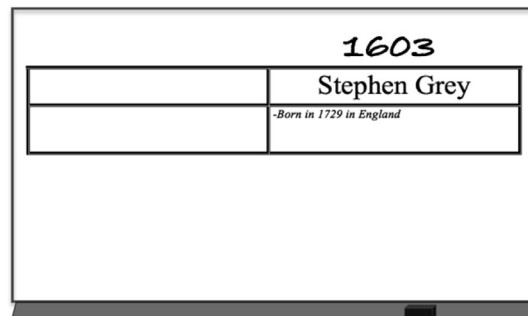


Fig. 6. Repositioned table line 12.

Whereas the verbal and nonverbal components of the practice in [Extract 1](#) unfold one after the other, in the next example of synchronizing, they occur simultaneously. [Extract 2](#) comes from a “Technology” activity. Two days prior, each teacher led a group of students in reading and taking notes about an inventor who worked with electricity. The day prior, Ms. B's students used their notes to co-construct and share with Mr. R's group the history of William Gilbert, whose work was among the first on magnetism and electric charge. Today, Mr. R's group will share about Stephen Gray, who experimented with electricity in the subsequent century. Mr. R starts the activity by eliciting student recollections about Gilbert from the previous lesson, and students report that he died in 1603, prompting Mr. R to write this date on the whiteboard (see [Figure 3](#)).

Mr. R then reviews the activity format—each child, one after the other, will read one sentence from his or her notes on Gray, the objective being to chronologically piece together the main life events discussed in the reading. While Mr. R gives the instructions, Ms. B sets up the laptop and turns on the overhead projector to display her laptop screen onto the whiteboard. The projected image features a two-columned, two-rowed table, which already has Stephen Gray³ typed into the top right cell (see [Figure 4](#)).

The extract begins just after Mr. R calls on Alison, who starts the activity in line 01 by reading her sentence aloud. Of particular interest here is how Ms. B will re-situate the projected table in line 12 so that Gray's date of birth is positioned right underneath Gilbert's handwritten 1603 date of death on the whiteboard, her nonverbal action coinciding with Mr. R's verbal contrast of these two life events.

As the extract begins, note that the co-teachers provide *joint feedback* (King, 2018) over lines 03–05 to Alison's contribution (lines 01–02), with Ms. B accepting the response as satisfactory by typing her words (Margutti & Drew, 2014) into the table (see [Figure 5](#)), and Mr. R producing a gasp and a surprise token (Wilkinson &

Kitzinger, 2006) that treats the child's remark as noteworthy and exciting.

In line 04, the combined effect of Mr. R's gasped “oh” turn-beginning alongside the loud-whisper delivery of his *now let's think about this for a second* somewhat dramatically calls everyone's attention to the student talk that just happened, which alters the initial course of action (i.e., that the next child in his group would read his sentence). Mr. R then draws attention to the board, where his handwritten 1603 and Ms. B's projected digital table are both publicly available. His gaze and pointing at the space in lines 04 and 06 as he delivers his utterance provides a multimodal directive followed by all but three children, as well as his co-teacher. As Mr. R continues in line 08, a couple of features of his talk arguably project that he is heading towards making a contrast between the two historic figures: first, while the just-completed student contribution is about Gray, Mr. R's turn-initial *your person* references Ms. B's group and their inventor, who is Gilbert; second, the stress on the pronoun *your* and stress and lengthening on the phrasal verb *passed away* in the first phrase of his utterance also foreshadow a contrastive structure (see e.g., Barth-Weingarten, 2009; Ford, 2000), which is eventually realized via his exaggerated stress on the pronoun and the verb in line 17 *our person was born in seventeen twenty nine*.

Meanwhile, despite having hit “enter” on the laptop keyboard (line 09) to create a new line in the cell in the Stephen Gray column, suggesting that she is readying to type the next child's contribution on this inventor, just after Mr. R shifts gears and explicitly calls attention to the board, Ms. B appears to alter her own course of action as well: precisely when Mr. R reaches the verb phrase *passed away*, Ms. B drags the projected table with Gray's date of birth upward (line 12) within the whiteboard space until it is positioned only centimeters underneath the handwritten 1603 date of death (see [Figure 6](#)) to visually facilitate the contrast that Mr. R is about to launch between the two inventors.

Distinct from the adjacent synchronizing in [Extract 1](#), this example of *concurrent synchronizing* shows how one teacher can non-verbally synchronize with the other's talk *as it happens*, a seem-

³ Ms. B typed the name as ‘Grey,’ but it is actually spelled ‘Gray.’

ingly more impressive feat of collaboration between two interlocutors, but one that is, again, facilitated by the verbal and nonverbal cues that both teachers perform to initiate the practice. Nonverbally, each teacher does work to establish and reestablish the whiteboard and its content as objects of mutual orientation prior to the synchronized action: Mr. R writes 1603 there; Ms. B projects the digital table there and then transcribes Alison's talk *born in 1729 in England* in it; and Mr. R gazes and points there as he reacts to Alison's turn. Verbally, Mr. R's directive to look at the board and the prosodic cues that he deploys as he highlights Gilbert's date of death could signal to Ms. B that he is about to contrast the two life events, enabling her to juxtapose the materials on the board in order to facilitate Mr. R's talk *precisely as it unfolds*.

Just after the concurrent synchronizing takes place, Theo grabs the floor to share his calculation of time, *two hundred years before* (lines 13 & 16), between the dates. While it is an inaccurate figure, this unsolicited contribution demonstrates the student's understanding, as a result of the co-teachers' collaborative work, of the type of project he is being invited to contribute to, i.e., to contemplate the amount of time between when Gilbert died and Gray lived.

As shown, synchronizing entails one teacher producing nonverbal actions that facilitate the other teacher's verbal actions. This coordinated practice is initiated via publicly available cues performed by both teachers, which act like building blocks for the synchronized moment, and it can unfold in either an adjacent or concurrent configuration of the verbal and nonverbal components. Understanding such synchronizing sheds light on one element of the "co-ness" of co-teaching. In [Extract 1](#), Ms. B's opening of the door renders Mr. R's preceding inquiry *see if you can figure out what kind of array it is* more answerable by offering a visual to the students for the "it." Moreover, since there are actually two arrays on the door, yet Mr. R's inquiry *what kind of array* references a singular entity, Ms. B's contribution might also have prevented some confusion. In [Extract 2](#), Ms. B's physical juxtaposition of the semiotic resources related to the two life events on the board embodies her co-teacher's verbal contrast of these events *as it unfolds*, which could help students process Mr. R's talk in real time and support reflection about the abstract concept of time between two points in history.

4.2. Amending

The analysis of synchronizing reveals that "co-ness" in co-teacher interaction can stem from two teachers contributing in an intricately coordinated way to the same turn of teacher talk. Another source of "co-ness" is *amending*, which entails one teacher building upon the other teacher's talk from an earlier turn. More specifically, the analysis revealed 19 instances of the incoming teacher using amending to make *ex post facto* adjustments to what their co-teacher had previously said. While the 19 cases of amending occurred in different sequential contexts, including directives, instructions-giving, and longer content explanations, I will report here on three of eight instances of the practice in question-answer sequences, since this sequence type is considered central to classroom discourse (see e.g., [Cazden, 2001](#); [Mehan, 1979a](#)). Three examples will be presented with respect to the nature of the action that the second teacher's contribution achieves within the overall sequence: completing unfinished business ([Extract 3](#)); unpacking a term ([Extract 4](#)); and revising a question ([Extract 5](#)).

[Extract 3](#) happens toward the beginning of "Morning Meeting," an activity at the day's start when the class sits together on the rug, greets each other, reviews the agenda, and often discusses a topic picked by the teachers. Just before the extract, a student has read the agenda on the board aloud. The extract begins with Mr. R shifting into the topic of doing greetings in the Māori culture, an

Extract 3

Completing Unfinished Business.

01	Mr. R:	<i>gazing at board</i> >alright.<-gazes forward
02		(.)
03	→	>who remembers< (.) ↓the: <na:me of thee::>
04		indigenous ↓group (.) that <i>lives</i> (0.2)
05	IVA:	<i>gazes left</i> Māori?
06	??:	°↓Māori.°
07	Mr. R:	[<i>head bob</i> (°>↑raise your< <i>raises lt hand</i> -↑↑ha:nd°)]
08	ERI:	[<i>gazes at Mr. R-Māori,</i>]
09	SIE:	<i>raises hand</i>
10	??:	ma-
11	Mr. R:	>[↓what [are they [called?< Ivan?=>
12	IVA:	[<i>raises arm</i>
13	MAR:	[<i>raises arm, gazes at Mr. R</i>
14	ERI:	[<i>gazing at Mr. R, raises arm, lifts body</i>
15	ALL:	[<i>lying back, raises hand</i>
16	IVA:	=[<Māori.>- <i>gazes left</i>]
17	MON?:	[<i>gazes at Mr. R-Māori.</i>] <i>gazes down</i>
18	ISI:	<i>raises arm</i>
19	Mr. R:	the <u>Māori</u> .
20	ERI:	<i>leans left, stretches hand behind back</i>
21	Ms. B:	<i>gazes at Mr. R</i>
22		and >↓ where do they < gazes at Todd -↑ live?
23		<i>gazes forward</i> -(0.2)
24	SIE:	°New [Zealand.°
((10 lines skipped))		
35	Mr. R:	>Erica.[=what do you think.<
36	ERI:	<i>lowers hand</i> New Zealand
37	IVA:	()-shakes head
38	Mr. R:	<i>nods</i> New Zealand.

indigenous group in New Zealand that the class has been studying. The focus occurs in line 22, when Ms. B asks a question that harkens back to the inquiry from lines 03-04 in the preceding exchange initiated by her co-teacher. In the transcripts for this section, **bolded** lines denote the amending practice, and arrowed lines the talk that the amending turn builds upon.

Mr. R's boundary-marking "alright" (line 01) moves the interaction out of the agenda-reading into an invitation for student bids (line 03-04) to report on what they have learned so far. Mr. R builds his inquiry slowly, his talk peppered with lengthened syllables and pauses as he progresses. While the first portion of Mr. R's question *who remembers the name* specifies that he is looking for a name, the clause *that lives* projects that he is also inquiring about a place. Before his TCU is complete, Mr. R pauses for 0.2 seconds, and Ivan grabs the floor (line 05) to call out the group's name, *Māori*, which another student echoes (line 06). Although Mr. R acknowledges these contributions with a slight head bob (line 07), his embodied directive *raise your hand* highlights an offense in the prior talk—that student responses were unauthorized since they called out without first raising their hand to be nominated. Over the next several lines, multiple students heed this reminder and bid nonverbally for a turn (lines 09, 12-15), and Mr. R quickly calls upon Ivan shortly after the child's hand is in the air. This nomination includes a reformulated inquiry *what are they called* (line 11) that solely seeks a name for the indigenous group. Ivan repeats the name *Māori* (line 16), which Mr. R then verbally affirms through repetition (line 19).

Shortly after the exchange about the group's name ends, Ms. B gazes at her co-teacher in an apparent check-in (line 21) before taking the floor to produce an inquiry of her own: *and where do they live?* (line 22). Her *and*-initial start connects her question to prior talk ([Heritage & Sorjonen, 1994](#)), while her use of the pronoun *they* indexes the just-identified Māori. Her inquiry launches the first instance of *amending*, which uses a post-expansion to elicit the detail about where the Māori live—a piece of information that Mr. R was initially eliciting (in addition to the name of the group) but did not pursue further. This example of amending

Extract 4

Unpacking a Term.

01	Mr. R:	<i>draws vertical line-so: (.) if <we're going to have an</i>
02		<i>a↓rray,> writes 'array' on board-(3.0)</i>
03		<i>glances at marker, turns toward SS-↑what has to be true</i>
04		<i>°about it.°-gazes down</i>
05	ISI:	<i>[raises arm]</i>
06	RIC:	<i>[raises arm]</i>
07	Mr. R:	<i>[what has to be true about a: (.)</i>
08		<i>[both hands beat gesture-[real array.-gazes down</i>
09	IVA:	<i>[lies down on rug</i>
10	LYD:	<i>[lies down on rug</i>
11	MON:	<i>raises arm</i>
12	Mr. R:	<i>[>let's all sit up] [plea:se, (0.2) Ivan sit up please.=</i>
13	SYD:	<i>[taps Lydia to sit up</i>
14	Ms. B:	<i>[(Lydia [syl syl]) gazes right, shakes head, 'no' face</i>
15	SIE:	<i>[raises hand</i>
16	Ms. B:	<i>°Lydia [and Ivan sit up.°</i>
17	LYD:	<i>[sits up</i>
18	Mr. R:	<i>Sienna.</i>
19	Ms. B:	<i>gazes at Sienna</i>
20	SIE:	<i>lowers arm-the amount of it is equal.</i>
21	IVA:	<i>sits up</i>
22	Ms. B:	<i>[gazes at Arrays poster across room</i>
23	Mr. R:	<i>nods-[so in palm out toward board-each gazes at Sienna (.)</i>
24	Ms. B:	<i>[gazes 'Array' at board</i>
25	Mr. R: →	<i>beat gesture-[ro:w (0.5)</i>
26		<i>has to be:- (.) there beat gesture-[has to be an equal=</i>
27	Ms. B:	<i>[gazes at Mr. R</i>
28	Mr. R:	<i>=[number of dots, (.)</i>
29	Ms. B:	<i>[raises hand</i>
30	ISI:	<i>raises hand</i>
31	Mr. R:	<i>palm out toward Ms. B-°↓yes.°</i>
32	Ms. B:	<i>gazing at Mr. R, fingers spread, turns hand-what are the ro:ws</i>
33		<i>essentially. (.) lowers hand, beat gestures-what are the rows.-gazes right</i>
34		<i>(0.5)</i>
35	MON:	<i>raises hand, gazes at Ms. B</i>
36	Ms. B:	<i>gazes, points at Montgomery</i>
37	MON:	<i>up, (0.5) lowers hand and down, head in hands-side to side.</i>
38	Ms. B:	<i>gazes at Mr. R-ri:ght? lifts lt arm, framing gesture-and so when we're</i>
39		<i>thinking about beat gestures-each row we're thinking</i>
40		<i>about (.) .hh the amount in ea:ch-beat gestures (1.8)</i>
41		<i>gazes at Sydney, gazes at Montgomery, gazes at Sienna</i>
42	MON:	<i>gazes at Ms. B, gazes at board-°um:,°</i>
43	Ms. B:	<i>each raised hand, beat-group ri:ght?</i>

has characteristics that are similar to the practice of *joint initiation* (King, 2018), wherein co-teachers collaborate within an IRF sequence to address students' inadequate or incorrect second-turn responses. Here, however, the collaborative work attends not to incorrect or inadequate student responses, but to some unfinished business in the earlier initiation. In the omitted lines, several children bid to respond, but Ms. B enters into a private, schismmed conversation (Egbert, 1997) with Ivan, who is next to her, bending down to hear the child's mostly inaudible utterance that appears to offer details about where the Māori live. Mr. R then picks back up where he left off by nominating Erica (line 35), who provides the correct response of *New Zealand* (line 36).

The next instance comes from a familiar lesson on arrays. The class has spent several minutes noticing arrays around the room. Just prior to the extract, Mr. R explicates the connection between arrays and multiplication by giving the example of using an array of windows on a building outside to figure out how many windows there are in total. The focus starts at line 32, when Ms. B interjects with an inquiry that seeks clarification of particular items in Mr. R's prior talk.

While writing the word "Array" on the board, Mr. R poses a question to students over the course of lines 01-04: *so if we're going to have an array, what has to be true about it?*—an inquiry he repeats with *real array* (line 08) without calling on any volunteers. He resumes the elicitation, after addressing two students' body misconduct in collaboration with Ms. B and another student

(lines 12-17), by calling on Sienna, who offers *the amount of it is equal* (line 20). Mr. R's nod (line 23) provides immediate positive feedback, and the *so*-initial design of his utterance suggests that he will summarize the upshot of Sienna's preceding turn (Raymond, 2004). Indeed, the use of *equal number* in Mr. R's utterance does reiterate the main idea in Sienna's contribution; however, he also reformulates her response over lines 23-28 by translating the imprecise language of *it* and *amount* into the more precise language of *rows* and *equal number of dots*.

At exactly the same time that Mr. R launches his reformulation of the student turn, Ms. B, who has been gazing at Sienna during her answering, shifts her gaze to look across the room at a poster displaying array figures (line 22). She glances at the "Array" on the board (line 24) and then at Mr. R (line 27) before raising her hand (line 29) just as Mr. R is concluding his turn. After being called on by her co-teacher, Ms. B does a repeated inquiry over lines 32-33 that she first addresses to Mr. R *what are the rows essentially*, and then to the students as she shifts her gaze to those on her right, repeating *what are the rows*. Ms. B's inquiry suspends the project of listing true things about arrays, and launches an instance of amending that shifts everyone's focus back onto Mr. R's prior talk to shine a spotlight on the term *row* that he introduced in line 25, but did not define. Montgomery's response demonstrates that he is onboard with this new project as he describes array rows as *up and down* and *side to side* (line 37), which does the first bit of unpacking of the novel term. Ms. B provides immediate posi-

Extract 5
Revising a Question.

01	Ms. B:	→	>so what's one <i>gazes at Mr. R</i> -↑thing
02			you would< lea:rn from <u>this</u> situation
03			>that you would<try an- if you were given
04			<u>another</u> problem that you ↓felt [(0.8)
05	MON:		[<i>gazes at Ms. B</i>
06	Ms. B:		<u>stuck</u> with.
07	MON:		>↑I would< do the [same ↑thing.=
08	Ms. B:		[<i>gazes at Montgomery</i>
09			=points at <i>Montgomery</i> ->everybody<
10			[<i>gazes forward, 'think' gesture-think.</i>]
11	RIC:		[<i>crawls forward, kneels</i>]
12	Ms. B:	→	[what's one <i>moves right</i> -thing=
13	RIC:		[<i>gazes at Mr. R, mouths</i> -(syl syl)
14	Ms. B:		=you've learned from <i>holds Rico's arm</i> -this situa↑tion,
15			<i>cradles Rico</i> -(1.5)
16	RIC:		<i>gazes at Ms. B</i> -()
17	Ms. B:		>that you would< <i>shakes head</i> -try:-
18			to <i>Rico</i> -°↑no: I <i>taps Rico's knee</i> -need you to be
19			thinking about this question right ↓now.°
20		→	<i>gazes right</i> ->↑ <u>one</u> <i>scrunches face</i> -↑thing that< you=
21	MON:		[<i>leans back</i> -°↑I have <u>two</u> things.°
22	Ms. B:		=I would try >from< [<u>this</u> <i>gazes at Sydney</i> -situation? (.)
23	RIC:		[<i>sits on bottom, leans against Ms. B</i>
24	Ms. B:		from <u>this</u> problem, >that you could<
25			<i>gazes forward</i> -try: with a <u>different</u> ↓problem.
26			(.)
27			if you felt <u>stuck</u> .
28			(2.2)
29	MON:		<i>lying on back</i> -(1 <i>kicks legs</i> -alrea[dy syl syl syl syl])
30	Mr. R:		[<i>hands out</i> -> <u>what's something</u>]
31			that< you [<u>did that tilts head-worked</u>.
32	Ms. B:		[<i>gazes at Mr. R</i>
33			(1.2)
34	MON:		°↑I know.°
35	Mr. R:		that <i>gazes at Montgomery</i> [<u>helped you solve the ↑problem</u>.
36	MON:		[<i>gazing at Mr. R, raises hand</i>
			((six lines skipped))
43	Ms. B:		<i>gazes at Mr. R</i> >or [<u>scrunches face-even if you didn't get=</u>
44	Mr. R:		[<i>gazes at Ms. B</i>
45	Ms. B:		=to the so↑lution (.) that helped you
46			[<u>keep trying. [what's one thing that [<u>helped you</u>.°</u>
47	Mr. R:		[<i>wipes face</i> [big nods
48	ETH:		[<i>raises arm, gazes at Ms. B</i>
49	Ms. B:		<i>gazes at Ethan</i> -Ethan?
50	ETH:		<i>lowers arm</i> -try: different answers?
51			(0.2)
52	Ms. B:		<i>gazes at Mr. R</i>
53	Mr. R:		<i>slight nod</i>
54	Ms. B:		so (.) <u>try</u> <i>gazes at Ethan</i> -different ↑ways?
55	ETH:		<i>nods</i>
56	Ms. B:		to get the answer?

tive feedback for Montgomery with her *right?* (line 38), and the *and so*-initial design of her subsequent TCU projects that she might be headed into a summary of this just-completed response; however, the rest of her turn actually pivots back into doing amending to further unpack parts of the earlier exchange between Mr. R and Sienna. Specifically, Ms. B's utterance *and so when we're thinking about each row, we're thinking about the amount in each- each group, right?* (lines 38–43) defines *rows* as a subset of *groups*, and points out that both *groups* and *rows* are what is being enumerated in arrays, an idea mentioned by Sienna's (*amount*) and Mr. R's (*number*). Overall, amending enables Ms. B to highlight and further elucidate key concepts that did not get much explication during Mr. R's exchange, while keeping within the project that her co-teacher started of providing accurate language for Sienna's imprecise response. That Ms. B chooses to spend more time on the concepts of rows, groups, and enumeration is pedagogically valuable—arrays are typically talked about in terms of rows (side to side) and columns (up and down), which can be thought about as two different sets of groups. Ms. B's participation brings to the forefront the

fact that arrays are organized in *two* directions, which contributes to the objective of teaching that one can multiply a row by a column to get a multiplication product.

Similar to the unauthorized responses in [Extract 3](#), this amending event also unfolds after a student conduct violation—an issue of body behavior this time—that occurs while Mr. R is still formulating his inquiry. His decision to immediately address this misconduct inserts some distance between the inquiry and the response components of the ongoing exchange, which could complicate the job of doing an effective third turn after Sienna's contribution. Ms. B's eventual participation, therefore, might also be said to subtly “clean up” after her colleague's prior efforts. In light of this, her “mock student” approach to gaining the floor is not insignificant. Not only does raising her hand and waiting to be nominated by Mr. R implicitly model proper turn-taking behavior to the students, which the data indicate is a consistent point of contention in this classroom, but this tactic also enables her to seamlessly interject in a helpful yet non-intrusive way at a moment when Mr. R is leading the lesson.

The final example of amending comes from a discussion following a math activity also about arrays. Earlier, the students were given a word problem that asked them to design boxes of different colored candies according to a number of parameters (e.g., there are 36 candies, two candies of the same color cannot be next to each other, and so on). The students spent over an hour on the problem, and several of them had to try repeatedly, sometimes realizing in frustration partway through the drawing process that their plan would not work. Everyone has turned in their drawings and the class has moved to the rug and is sitting in a circle. The extract begins with Ms. B asking students to reflect on their experience doing this challenging problem. After Ms. B spends the better part of lines 01–27 to produce an inquiry that gets disrupted by turn-taking violations and body misconduct on the part of two different children, the amending event starts when Mr. R grabs the floor at line 30 to ask a question that reformulates his co-teacher's preceding inquiry.

Ms. B's initiation (lines 01–06) invites students to identify *one thing they would learn* from the activity to try with a future problem that made them *feel stuck*. Without a nomination, Montgomery calls out (line 07) that he *would do the same thing*. Rather than giving him the floor to expound, Ms. B gazes and points at Montgomery and does an embodied *everybody think*, tapping her finger on the side of her forehead as she speaks. This multimodal directive not only instructs all of the children to reflect and not yet bid, it also implicitly highlights the unauthorized, and perhaps inadequate, nature of Montgomery's response. In line 12, Ms. B begins a re-initiation of her question—another hint that Montgomery's response was problematic (Zemel & Koschmann, 2011)—that changes the verb tense to ask what students have actually *learned*; however, while her turn is still ongoing, Ms. B's attention is diverted to Rico, who has crawled out of his circle spot to say something to Mr. R (line 13). Ms. B attempts to both finish her turn and manage Rico's misconduct nonverbally by taking his arm and cradling him (lines 14–15), but eventually she suspends her inquiry (line 18) to tell Rico *no, I need you to be thinking about this question right now* while tapping his knee, which finally gets him to sit quietly (line 23).

Despite attending to Rico, Ms. B finally gets through her inquiry turn in line 27, but a 2.2 second gap of silence ensues (line 28), which suggests that even the revised question might be too difficult for students. When none of his classmates take the opportunity, Montgomery calls out *again* sans nomination (line 29), this time lying back, kicking his legs, and producing what might be a protest about having already provided an answer that was not acknowledged. The child is partway through his unruly and unauthorized turn when Mr. R jumps in at line 30 and launches an instance of amending with his own question: *what's something you did that worked*. The *something* in this inquiry loosely recycles the *one thing* that Ms. B was trying to elicit earlier, but Mr. R reformulates his co-teacher's inquiry in a couple of ways that add specificity: first, he shifts the question away from the hypothetical toward the actual; and second, he asks students about solutions (what *worked*) rather than about difficulty (being *stuck*). Montgomery bids again (line 34), yet neither teacher nominates him. Instead, Mr. R continues his own inquiry turn with an increment *that helped you solve the problem* (line 35), further emphasizing that he is asking about specific *solutions*. Despite Mr. R's apparent attempt to provide a more answerable question, the only engagement from students other than Montgomery takes place in the skipped lines, when Sydney raises her hand, but then lowers it again when Montgomery resumes calling out, this time waving his hand in the air. Instead of nominating anyone, Ms. B retakes the floor to do her own amending turn (line 43), her *or*-initial utterance functioning as an increment to Mr. R's just-completed

inquiry, yet adapting the question a bit more—students need not have solved the candy-box problem to respond; they can report on something that *helped* them keep trying. This second adjustment amends Mr. R's amendment in a couple of important ways: it expands the group of students who would be eligible to respond, since some children struggled to solve the problem; and it also brings back the idea of persevering despite being stuck. Finally, Ms. B calls on Ethan (line 49), who has properly raised his arm to bid, and he responds that he would *try different answers*. Ethan receives immediate positive feedback from each teacher as Mr. R nods (line 53) and Ms. B produces a reformulation *so try different ways to get the answer* that summarizes and also reformulates the response by shifting it slightly from being about the product to being about the process.

This instance provides remarkable insight into the “co-ness” that can emerge in classroom interaction as a result of amending. First, the practice lays the foundation for a collaborative inquiry that spans *multiple* turns on the part of *both* teachers—Mr. R does amending to build upon and reformulate Ms. B's question, and then Ms. B does amending to build upon and refine Mr. R's question in a way that also recycles part of her own original elicitation. As a whole, the coordinated enterprise takes an initial question that is potentially difficult to answer and reshapes it into a more concrete and inclusive inquiry, which moves the sequence forward. Importantly, this demonstrates that co-teachers can attend to, and also help each other out with, the need to recalibrate an inquiry after problematic student responses disrupt progressivity. While this also occurs in single-teacher contexts (see e.g., Zemel & Koschmann, 2011), here, *two* minds figure out how to navigate the challenge instead of just one. Second, amending enables Mr. R to temporarily relieve his co-teacher of speaking duties after her somewhat messy turn, and interject in a way that avoids interrupting and maintains the project of eliciting student experiences that Ms. B began. Third, amending in this instance has Mr. R building upon not only what Ms. B has been *doing* in the interaction, but also what she has *not* been doing. Throughout her long inquiry turn, whenever Montgomery produces an unauthorized response or bid, Ms. B does not nominate him and keeps the inquiry open instead. When Mr. R steps in, he continues this pattern of non-nomination by amending her inquiry instead of calling on Montgomery. In fact, Mr. R launches his question partway through one of Montgomery's more flagrant unauthorized contributions, which suggests that the teacher might even be intentionally interrupting the child's turn. Ms. B's subsequent amending move continues the non-nomination trend despite more of Montgomery's fervent attempts to participate. Thus, this instance shows both teachers using amending in a way that demonstrates their collective stance towards how they *treat* student responses of a certain nature. This establishes a layer of collaborative classroom management that implicitly reinforces turn-taking etiquette expectations without much disruption to the flow of the main pedagogical project.

As shown, amending can be useful in a few ways. Its versatility allows a teacher to expand upon seemingly any component from their colleague's earlier exchange, and its backward-pointing design makes it a resourceful way to attend to any issue in the prior talk. In addition, amending enables co-teachers to “come to each other's rescue” when the job of dealing with student misconduct during content-delivery results in one teacher's talk being less than clear and effective: in [Extract 3](#), Ms. B uses amending to ensure that the detail about the Maōri's homeland comes out in the interaction after Mr. R has just dealt with students forgetting to raise their hands; in [Extract 4](#), amending allows Ms. B to add specifying details to her co-teacher's talk and provide further accurate content language for Sienna after Mr. R side-steps out of the ex-

change to get students to sit up properly; and in [Extract 5](#), Mr. R's amending revises Ms. B's challenging question that gets additionally complicated by her attending to turn-taking and body misconduct while formulating it.

5. Discussion

With this study, I endeavored to make the “co-ness” of co-teaching visible through an in-depth examination of actual interaction between two teachers with the same role in the same classroom. I described two collaborative practices that co-teachers employ that enable them to jointly carry out exchanges with students: synchronizing, wherein one co-teacher silently participates in the other's ongoing turn to add a visual dimension to the latter's talk-in-progress; and amending, wherein one co-teacher contributes retroactively to the other's completed turn to address lingering concerns. Each practice provides a mechanism for one teacher to seamlessly and unobtrusively join the sequence that the other teacher has already set in motion, allowing the incoming teacher to facilitate the other's talk in ways that support sequential progressivity and student participation. While distinct in their compositional features, both synchronizing and amending require that each co-teacher carefully attend to what their colleague is doing (or not doing) in the sequence. This is evident in how the teachers orient to and utilize certain interactional resources to accomplish the coordinated action in either practice: in synchronizing, the initiating cues that precede the synchronized moment act like signals between the teachers that enable them to jointly execute a multimodal turn almost as if they are one person; and in amending, one teacher notices some insufficiency in talk that came before, and then uses that talk as a building block to deliver a next turn that facilitates the ongoing action.

This study demonstrates the efficacy of using CA to reveal what teacher collaboration looks like, and to also uncover concrete examples of purported benefits for teaching and learning that the literature attributes to co-teaching. These teachers' deployment of the amending practice, for example, confirms claims that co-teachers can clarify each other's presentation ([Cook & Friend, 1995](#)) and monitor the quality of each other's content delivery and provide support when needed ([Eick & Ware, 2005](#)); the findings extend the prior work by delineating *how* such support is delivered from one co-teacher to the other on a sequential level in real time. Similarly, this study corroborates the assertion that collaboration can enhance teacher experience by reducing the amount of responsibility that falls on either teacher ([Thompson & Schademan, 2019](#)), as amending lets the non-leading teacher relieve their colleague of speaking duties when the job of delivering pedagogical content at the same time as doing classroom management gets messy or chaotic; the findings further our understanding of how this works by revealing some of the delicate interactional work that accompanies this action of stepping in to help.

This study also validates the ideas that teacher collaboration can enrich student experience and provide more ability-appropriate education, as *both* synchronizing and amending are mechanisms whereby co-teachers render each other's talk clearer and more accessible, and therefore better designed to support critical thinking and learning. Whereas this particular finding contributes to the general work on co-teaching, it also provides germinal insight into the underexplored topic of co-teaching for gifted students. On the one hand, synchronizing and amending are tools for co-teachers to collaboratively shape the interaction to make advanced content more digestible and engaging for young, gifted minds. Of course, solo gifted education teachers could also present advanced material, employing multimodal talk or amending their own prior utterances to achieve something similar to what syn-

chronizing and amending do; however, it could be arguably more challenging for one person to manage such coordination effectively in real time. On the other hand, the “co-ness” afforded by these practices, especially that visible in the amending instances, may help contend with some potential side-effects of the student-centered dynamic that is endemic to some gifted classrooms—at least those with younger students. Beyond encouraging their accelerated first-graders to think and talk about sophisticated, complex, often abstract topics, the data show that Mr. R and Ms. B must also constantly address things like students' turn-taking and body misconduct. It is possible that the prioritization of creating a less rigidly structured learning environment where emphasis is placed on dialogic interaction may, at times, mean that young students lose sight of classroom etiquette expectations. The amending practice in particular allows the co-teachers to ensure that the quality and progressivity of the academic talk remain intact, as the second teacher is a ready resource to unobtrusively help divide and conquer these ongoing competing demands, lending merit to the notion that co-teaching might be preferable to a single-teacher approach for younger gifted students in a student-centered environment. However, further research and, especially, more CA studies are needed to paint a better picture of how, *exactly*, teacher collaboration benefits this particular educational context. For example, it will be imperative to look further into whether the presence and simultaneous participation of the second teacher could be a distraction for learners in any way.

One theme throughout the existing literature is that co-teaching is a *relationship*; in fact, multiple authors (see e.g., [Howard & Potts, 2009](#); [Murawski, 2009](#)) draw an intriguing parallel between this professional partnership and a marriage, which emphasizes the importance of the interpersonal dynamic between the two individuals. While framing co-teaching this way can certainly be enlightening for novice collaborators, the research suggests that teachers need to be trained *how* to collaborate, and anecdotes depicting “successful” or “effective” co-teaching relationships can be difficult to translate into practical “how to” teacher training materials. The practices identified here, however, provide critical insight into how to accomplish *doing being in a successful co-teacher relationship*. On one level, part of the “co-ness” stems from how both practices enable one teacher to facilitate an action that the other initiates. This puts into black and white something that co-teachers can do during instruction to “help each other out” on an interactional level. On another level, both practices require each teacher to maintain a certain level of attentiveness and other-awareness with respect to what their partner is doing (or not doing) with their participation, which indicates that another key to an effective co-teaching relationship is keen observation of and orientation to what one's collaborator is doing on the *micro-level*. Such an understanding of the “co-ness” of co-teaching could inform useful interactive activities that help teachers develop an effective and collaborative dynamic.

Acknowledgements

First and foremost, I would like to thank Professor Hansun Waring at Teachers College, Columbia University, for her dedicated guidance and for being a superb academic and human role model. I would also like to thank the LANSI Bunch for their keen insight in seminar data sessions and their support in all things. Thank you as well to the larger LANSI Working Group for the phenomenal feedback on Saturdays. Some of my deepest gratitude goes to Ms. B and Mr. R, the wonderful co-teachers in this study, as well as their brilliant first-graders, for welcoming me into their classroom. Finally, this project wouldn't have been possible without support on the home front from Mimi, Ravi, and especially Clementine.

Appendix A. CA transcription conventions (adapted from Jefferson 2004)

.	(period) falling intonation.
?	(question mark) rising intonation.
,	(comma) continuing intonation.
-	(hyphen) abrupt cut-off.
::	(colon(s)) prolonging of sound.
<u>word</u>	(underlining) stress.
<u>word</u>	The more underlining, the greater the stress.
WORD	(all caps) loud speech.
°word°	(degree symbols) quiet speech.
↑word	(upward arrow) raised pitch.
↓word	(downward arrow) lowered pitch.
>word<	(more than and less than) quicker speech.
<word>	(less than & more than) slowed speech.
<	(less than) jump start or rushed start.
.hh	(h's preceded by dot) inhalation.
[]	(lined-up brackets) beginning and ending of simultaneous or overlapping speech.
=	(equal sign) latch or contiguous utterances of the same speaker.
(2.4)	(number in parentheses) length of a silence in 10ths of a second.
(.)	(period in parentheses) micro-pause, 0.2 second or less.
()	(empty parentheses) non-transcribable segment of talk.
\$word\$	(dollar or pound signs) smiley voice.
word-	(italicized word with hyphen) nonverbal conduct occurring simultaneously with speech.
word	(italicized word) nonverbal conduct.

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