Making Virtual Co-Teaching Work in a Covid-19 Environment

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Abstract

Due to the Covid-19 pandemic, teachers must rely on technology to reach and teach their students who no longer sit in school classrooms. In so doing, chasms in the quality of engagement have become evident based on students' ability, ethnicity, and home language. We propose that co-teaching between a mentor teacher and a teacher candidate could mediate opportunities for two adults to equitably instruct all students in structured and productive ways within virtual educational environments. This article describes implementation of co-teaching experiences between teacher candidates and mentor teachers through virtual instruction by using video-based conferencing tools (e.g., Zoom). We describe six co-teaching models and explain how they can support the needs of diverse learners in virtual educational environments.

Disquisition

In the fall semester of 2019, our teacher-education programs (Special Education Department and School of Teacher Education) held our an-

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nual mentor-teacher workshop to share information about our programs' expectations for our teacher candidates and to provide relevant coaching tips. For the first time, our workshop focused on promoting co-teaching between teacher candidates and their mentor teachers, as we attempted to foster the notion that classroom spaces can be places where two or more teachers can coordinate their efforts to engage all students in rigorous instruction (Cook & Friend, 1995). We also shared that educators at St. Cloud University (Bacharach et al., 2010) advocate that co-teaching between mentor teachers and teacher candidates would not only engage more students in the classroom, but also provide opportunities for coordinated teaching and planning between teacher candidates and their mentor teachers. To conclude the workshop, we asked participants whether they wanted more information about co-teaching. Nearly all of the 35 mentor teachers indicated little desire to learn more about the topic. "Well," we thought, "either we did a bang-up job (they learned everything that they needed) or most were not interested in co-teaching." We suspected that our mentor teachers felt that they "did not need to fix something that is not broken" because they were already providing quality instruction to their students, as well as sharing their expertise with our teacher candidates.

Indeed, the mentor teachers with whom we work are extremely effective classroom teachers. In addition to engaging their own students in the classroom, they often go above and beyond with their support of teacher candidates. They share packets of lesson plans, recommend useful teaching tips, and provide glowing letters of recommendation. They are experienced classroom teachers who are able to model effective teaching methods to their apprentices. It is likely that they were not in need of co-teaching because they felt confident in their abilities to control their classrooms.

Once Covid-19 began to infect Americans across the country, and various cities, counties, and school districts imposed social-distance restrictions that shut down schools, teachers and teacher candidates were abruptly no longer in control. Within our teacher education programs, a sense of uncertainty and vulnerability impacted our professional and personal lives. Our colleagues were not sure how to provide the safest (let alone the best) education for our teacher candidates. This lack of certainty was also evident in teacher candidates who weighed the cost of continuing to be in the classroom versus protecting themselves. Some of our teacher candidates didn't continue their clinical practice after March, having already completed California requirements for clinical practice (i.e., 500+ hours) as well as the edTPA. Other teacher candidates volunteered to continue student teaching in order to gain experience

with online instruction. Mentor teachers were similarly divided. Some were so overwhelmed with adapting their classroom-based instruction to the online environment that having a teacher candidate seemed an impossible burden. Others gladly accepted the extra pair of hands and technical assistance from a teacher candidate that supported their move from in-class instruction to the virtual space. Ultimately, these few mentor-teacher and teacher-candidate pairs collaborated to find useful online instructional tools, while dividing their time to reach out to students who were now learning from home. As a result, these pairs found the move to online instruction manageable. Nearly overnight, teachers who mere months ago expressed no interest in co-teaching in the fall semester, now found themselves benefiting from co-teaching in the shift to virtual instruction during the Covid-19 pandemic.

As schools rely on online instruction during the pandemic, we hope that teachers will recognize co-teaching as a viable and valuable opportunity to meet emerging and challenging issues associated with online instruction. For many teachers, distance learning will remain the primary instructional method for the foreseeable future. In this virtual space, mentor teachers and teacher candidates will continue to struggle to meet the instructional needs of students who are learning from home. As they struggle, they may ask themselves the following questions: How does a teacher manage 20 to 40 young children during a video-conferencing call and keep them interested and engaged in each lesson? How does a mentor teacher support a teacher candidate who also works from home? We believe the answers to these questions can be found in co-teaching.

Dispatch

In this section, we propose ways that each of the co-teaching models of Friend and Cook (1995) and Bacharach et al. (2010) can address the learning needs of students as well as meet the needs of teacher candidates in an online environment.

One-Teach/One-Observe. The purpose of One-Teach/One-Observe is to have a classroom teacher take the lead and teach while the teacher candidate either observes students or classroom instruction until they develop the competency to be the lead instructor (Bacharach et al, 2010). This approach can be adapted to the virtual classroom by having the mentor teacher teach via Zoom or some other video-conferencing platform, while the teacher candidate observes students (e.g., noticing which students leave the session, play video games, or are distracted). The observing teacher uses these observations to inform future lessons

or decisions about engaging specific students, and the teacher candidate can be supported when the mentor teacher makes time to observe the candidate teach a lesson. Additionally, using a video-conferencing platform (e.g., Zoom) to video record lessons allows both teachers to examine recorded instructional behaviors that need reinforcement or refinement (Barnhart & van Es, 2015).

One-Teach/One-Assist. To foster students' equitable access and engagement during face-to-face instruction, one teacher teaches while the other teacher assists students who are struggling or distracted during the lesson. In a virtual space, ensuring equitable participation can be an even greater challenge because students are learning from a myriad of home environments. Moreover, when students do login, some may elect to keep their cameras off. Teacher candidates may find it difficult when working alone to use multiple gallery pages to monitor students on Zoom, to notice when a "blue" hand (a Zoom feature) or an actual hand is raised, or to assist students in unmuting or muting themselves at the right time during a discussion. Monitoring the chat to ensure a positive learning environment can also be a struggle when teaching alone. The challenge of managing and monitoring all these aspects in Zoom can be mitigated with the One-Teach/One-Assist model, in which the assisting teacher help foster a more equitable system of participation during synchronous instruction (by re-engaging or re-directing) without interrupting instruction. Teacher candidates may adopt the role of the assistant initially, but over time, they can take the lead while the mentor teacher monitors the other features of video conferencing. In this way, teachers and teacher candidates balance responsibilities while bolstering student participation.

Station Teaching. Station Teaching occurs when two adults in the classroom implement a variety of learning activities simultaneously during one lesson. In this model, the class is split into three groups and one teacher works with one group, the other teacher works with another group, and the third group works independently. For example, when Station Teaching a math lesson, the mentor teacher may facilitate a math activity at one station that allows students to use actual or virtual manipulatives to solve problems, another station may have the teacher candidate facilitate the same math lesson in which students illustrate the problem, and a third station may have students working independently to review math problems. In the virtual space, the same class structure can be achieved using breakout rooms. The mentor teacher, depending on the independence of each group of students, can float in and out of breakout rooms as needed, to monitor both the students and the teacher

candidate. Extensive co-planning between the mentor teacher and the teacher candidate can further ensure that students are getting high-quality teaching at all stations.

Parallel Teaching. In this model, students are divided into two groups and each group is led by a co-teacher who covers the same information. In a physical classroom, this can get noisy and cramped, but a virtual space diminishes these challenges. With extensive co-planning, the teacher candidate enters the breakout room fully prepared to teach and each teacher can be with a smaller group of students in a breakout room. The mentor teacher can momentarily join other breakout rooms (provided students are engaged in independent work) to monitor or support the teacher candidate, if necessary. These virtual lessons can be taught simultaneously within breakout rooms or consecutively, so that the teacher candidate can teach a small group of students after observing the mentor teach the same lesson. Both sessions can be recorded for the teachers to review and reflect upon later.

Alternative Teaching. This co-teaching model encourages one teacher to teach a lesson to the majority of the students, while a second teacher pulls a small group for an alternate or modified lesson. One problem with using this model in a face-to-face classroom is that it has the potential to stigmatize students who may be perceived as low performing (Cook & Friend, 1995). In the virtual space, however, separate video conferences in breakout rooms prevent students from knowing about, monitoring, or judging the work their peers are doing.

Team Teaching. Often heralded as the ideal model of co-teaching because there is parity between the two teachers (Scruggs & Mastropieri, 2017), team teaching encourages both teachers to engage equally in a lesson as well as to be equally responsible for the content and students' learning. In an actual classroom, team teachers share the same space and the same responsibilities. In the virtual space, team teaching can be used by both teachers to monitor, support, and engage with students equally. Team teaching becomes especially useful when using online instructional apps (e.g., Jamboard, Peardeck, or Lucidspark) that foster student engagement because teachers and teacher candidates can distribute the responsibilities of managing both the technology and the students' use of the technology.

Supplemental Teaching. Supplemental Teaching, like Team teaching and all other co-teaching models, is designed to increase students' access to a teacher (Bacharach et al., 2010; Cook & Friend, 1995). The goal of this model is to have each teacher work with an individual student

or a small group of students to provide specific needed support. In the physical classroom, this usually means one teacher finds a quiet place in the room to engage with a small group of students, while the other teacher engages the rest of the class. With supplemental teaching, it is possible for such classrooms to become noisy and for some students to feel singled out by the teachers' extra attention. In the virtual classroom, however, breakout rooms provide quieter spaces for students to engage with the teacher (provided their home environment is also quiet) and minimize the fear of being stigmatized (as peers cannot tell what type of instruction is taking place in breakout rooms).

All aforementioned co-teaching models benefit learners by placing another adult in the classroom to observe, assist, and expand access to quality teaching. With online instruction, co-teaching has the potential to offer these same benefits by easing some of the technological challenges teachers frequently encounter. Furthermore, online co-teaching can remedy the challenges to classroom-based parallel, station, or alternative teaching by removing added classroom noise and providing confidentiality in breakout groups (without the stigma associated with overt extra support from a teacher). In order to provide these benefits, co-teaching works best when teachers have opportunities to co-plan and collaborate with each other. Given that teachers have many competing interests that limit ad hoc co-planning sessions, we recommend that co-teachers set regular daily or weekly collaborative meetings. Co-teachers might also use the phone when Zoom fatigue sets in. Finally, teachers may also work collaboratively in the same classroom (sans students), provided that they follow appropriate safety guidelines to protect against Covid-19. While in the same physical or virtual environment, formal and informal conversations can take place organically in between Zoom lessons or during lunch.

Conclusion

As we write this manuscript, large school districts throughout California and the rest of the United States are foregoing reopening school buildings to start the academic year with online instruction. Teacher education programs, as a result, are scrambling to convince wary teachers to serve as mentor teachers and invite novice teacher candidates into their virtual classrooms. Many of these teachers will need to start the academic year with community building activities that must be cultivated virtually. They may be worrying about how to connect with their students who will be learning from home and whether the digital divide will hamper their work with students who struggle with academic

content. Research on technology and equity suggest that such worry is real (Hockly & Dudeney, 2018; Warschauer, Knobel, & Stone, 2004). Issues related to the digital divide have morphed from technology access (e.g., computers and software) to the skills needed to use the technology (Dolan, 2016). Supporting students in using technology to attain their learning goals is an area of professional development for many teachers during this pandemic. Teachers need to know how to use the many software programs and apps to engage their students. From our perspective, they do not need to shoulder this burden on their own. Co-teaching in the virtual world, much like the actual classroom, can help teachers reach and support more students as well as increase engagement of families because there are more teachers to provide quality instruction and to build community for all students. Mentor teachers who open their virtual classrooms to tech-savvy teacher candidates may find a tech savvy partner eager to foster a better education for all students.

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