Deep Collective Learning in Virtual Environments

by Douglas Fisher, Nancy Frey, and John Almarode authors of Student Learning Communities: A Springboard for Academic and Social-Emotional Development

As discussed in our book, student learning communities (SLCs) are a way to recalibrate “group work” to transcend the format’s traditional limitations and realize its optimal outcomes. It’s a model dependent on active involvement, requiring each member of a learning team to contribute skills and insights in a way that allows all members to learn deeply and collectively. And at a time when many of our schools and classrooms are engaged in some form of hybrid or fully virtual learning, it’s more important than ever to ensure that opportunities for students to truly learn from one another are not lost. Even in situations where breakout rooms are not permitted or feasible, we can still utilize available technology to create opportunities for individual students to contribute skills and understandings to a collaborative learning experience. Virtual learning need not prevent our students from learning in community and experiencing being “smarter together” than they would be as individuals.

There is no question that the physical separation of students from their peers has left many feeling isolated and has taken a toll on them (and us). We believe that prioritizing ways for students to interact meaningfully can mitigate some of these effects. And while the setting may be different when collective learning is conducted in a physically distanced classroom space or an online learning platform, the principles of how people learn deeply together remain the same. For teachers, it’s a matter of adjusting the application of these principles to fit the new circumstances.
The Consistent Principles of Learning Communities

Collective learning—leveraging shared wisdom to promote the growth of the group as a group and as individuals—is not new to us as teachers or new to our classrooms. Many of us have experienced it in our own professional learning communities (PLCs) and pursued it with our students through learning tasks like laboratories, Jigsaws, and think-pair-share, to name just a few. Our interest in engaging in PLCs and implementing tasks that involve student collaboration is fueled by recognition that learning with peers and colleagues can be more effective than learning in isolation. Why would we, as teachers, and professionals—not want to pool our collective expertise and work collaboratively to advance our skills and improve our students’ learning? Why would we not want to offer the same experiences to our students?

Of course, the transition to predominantly hybrid or virtual environments has added another level of complexity to the design, development, and implementation of collective learning experiences. Efforts to purposefully and intentionally design peer interactions that support deep collective learning must be reconceptualized to operate through the learning management system (LMS). It may feel a little daunting, but it is absolutely doable, because successful collaborative learning arrangements depend not on a specific environment (e.g., face-to-face, hybrid, or virtual), platform, or technology, but on clear principles. When these principles are present, they support the development of social, emotional, and academic skills. When they are missing, the end result is “collaboration for the sake of collaboration” in any environment. In other words, a round table, a breakout room, or a collective document does not an SLC make. Certain conditions must be present, and our purpose in this document is to support the integration of these principles into your virtual learning environment. It is important to remember that an SLC is achieved by design and through effort, not luck.

Principle #1: Design experiences and tasks that invigorate learning through academic discourse.

All collaborative learning tasks should be set up to give students opportunities to engage in academic discourse around the targeted skills, knowledge, and understandings. These tasks should also provide students an opportunity to learn and practice social and emotional skills.

Completing the task in a virtual learning environment involves using available tools and technologies (e.g., breakout rooms, shared documents,
Flipgrid, or MindMeister) in ways that allow students to participate in critical
dialogue around the ideas involved. Consider adding periodic group check-ins
so that students must interact intermittently. This might be accomplished
through the chat function of the LMS, by using a video discussion tool, or
through a collaborative online document.

We want them to use those tools and technologies to communicate, treat
their peers with respect, strive to understand one another’s perspectives,
develop healthy relationships, persevere through challenge, and solidify a
sense of self.

**Principle #2: Attend to academic, social, and emotional learning
that enable supportive conditions.**

SLCs thrive when members recognize that their individual success is inex-
tricably linked to the success of every other member of the group. In other
words, students in an SLC grasp that every member’s contribution is neces-
sary, and that the success of one depends on the success of all.

Virtual SLCs must foster an atmosphere of cooperation, collaboration,
and enthusiasm for learning. Students can host discussions using LMS fea-
tures that allow you to assign them to their own chat rooms, contribute to col-
laborative online documents, and respond to one another using video tools.

As we strive to provide high-quality learning experiences at a distance
while paying close attention to the standards of learning, setting aside time on
the front end to build a sense of community online results in greater produc-
tivity, not less, and it leads to higher goal attainment in the end. Intuitively we
know that cooperation, community, and positive peer relationships support
long-term success.

**Principle #3: Foster shared agreements of individual and
group success.**

Shared agreements about success are more than simply agreeing that the
task is complete. Low-level compliance expectations do virtually nothing to
build a student’s sense of self, much less their academic prowess. Further, if
the emphasis is solely only on task completion, without proper attention to
group and individual success criteria, students fail to calibrate what success
looks like. Instead, they remain dependent on others, mostly the teacher, to
tell them whether they learned something or not.

Providing virtual SLCs space to figure out their definitions of success
given the task outcomes, set goals and monitor their progress, and continue
to refine norms empowers the learners. For example, post the success criteria in the chat function each time you meet with students in a live function, or on the virtual whiteboard that many LMS feature. Student-led conferences and virtual office hours can further support learners developing definitions of success. It’s hard work for them, but it is well worth the investment.

**Principle #4: Use thoughtful teaming practices to build cognitive, metacognitive, and emotional regulation skills.**

It is our responsibility as teachers to set our learners up for success. We must be strategic and intentional when we construct student teams, thinking carefully about what combinations of students will help individual members grow academically socially within a given collective learning context—hybrid, virtual, synchronous, or asynchronous. This means remixing and reconstituting groups to ensure that members bring out the best in one another.

Virtual learning environments require us to think even more strategically about how we’ll ensure teams are functioning at optimal levels while they are outside physical walls of our classroom and beyond our immediate reach. Because students do not have as many opportunities for informal networking or interacting when working at a distance, flexible grouping is essential in allowing students to work with many classmates over time, build relationships, and broaden their learning experiences. A more intentional and deliberate effort is needed to build the capacity of all students to work with a large network of people. This also includes having a plan in place if a particular group does not work.

**Principle #5: Leverage peer supports to amplify learning.**

Designing a learning environment where peers are supporting peers requires teachers to first create a situation where learners recognize the positive interdependence of the SLC. We can foster this interdependence by ensuring that there are measures in place that hold both individual team members and the collective team accountable. For example, we can provide specific check-in times for the collective team to return to the main room and report on their progress. Similarly, we can move from breakout room to breakout room at regular time intervals to monitor student progress and respond to questions. In turn, this encourages *promotive interaction*, which is the willingness of a team to facilitate contributions through peer-to-peer support. In the end,
learners are more likely to seek help, apply prosocial skills as they use available and appropriate channels for offering support, and use those channels to deliver effective feedback to one another.

**Principle #6: Activate all students’ leadership skills in order to enhance their ability to succeed—alone and together.**

The objective is for individual students to leverage not only their content knowledge, skills, and understandings to support the SLC but their leadership skills as well. In each instance, an individual student can activate the work of the group by leading the rest of the team to engage in critical thinking, creative thinking, communication, and—most important—collaboration. These four skills, plus citizenship, have been identified by Battelle for Kids (2020) as the “5 Cs” that describe the portrait of a graduate best prepared to engage and succeed in a today’s world. These traits are also the leadership skills learners need to succeed alone and as part of an SLC. In considering the inequities that intermittent or fulltime virtual learning environments can amplify, it is crucial that we are intentional about equipping all learners, and especially those who are underserved, with the cognitive and metacognitive tools they need to be successful.

The point is, we know student collaboration can be a springboard to better learning—not just academic learning but social and emotional learning too. And while this exchange has traditionally taken place in a face-to-face classroom, it can just as easily occur in a virtual one, with the addition of some collaborative tools for students to talk to and write with one another.

**Examples of SLCs in Virtual Environments**

Let’s look at specific examples of how to transition face-to-face approaches to deep collective learning into virtual learning environments. Again, the context may be different, but the principles are the same. As we look at these, we invite you to use the template in Figure A to document your journey in applying these principles to your own students’ deep collective learning in a virtual learning environment. Remember: the goal is to be able to ensure these principles guide the collaborative learning of all of your students, all of the time.
FIGURE A

**Transitioning SLCs into a Virtual Learning Environment**

<table>
<thead>
<tr>
<th>SLC Principle</th>
<th>What this looks like in face-to-face environments</th>
<th>How to adapt it for virtual learning environments</th>
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**Think, Pair, Square**

In a physical classroom, students are provided time to think about a prompt from the teacher. This might be a discussion prompt or a reflection question associated with a reading or video. Following the thinking time, students discuss the prompt with a partner and share their ideas. After the allocated time, each pair joins another pair to “square-up” and share their thinking as a group of four.

A key to collaborative learning at a distance is the accountability students have for the task. Here is a way to modifying a think, pair, square task to ensure accountability.

When assigning outside reading, add the requirement that students identify five key terms within the text that will serve to summarize that reading. If the reading is assigned while logged into class, this is something they can do in the “main room” as you watch and respond to questions that arise. Then move students into breakout rooms with two students per room (unless there is an odd number of students and one room needs three students). The students should go in knowing that they need to negotiate with their partner and agree on five words that they share. Each student shares their words with their partner in the breakout room and they negotiate until they reach consensus on five words.

After five minutes, move pairs to create groups of four. More specifically, the teacher would go to the students in room 2 and move them to room 1. The students in room 4 would join those in room 3; room 6 students would join those in room 5, and so on. Each pair has five agreed upon words and now negotiates with the other pair to decide on a shared list of five words. Once they have reached consensus, they draft a summary using the five words and are ready to share that in the chat when they return to the main room.

**Numbered Heads Together**

In the physical classroom, this task begins with the teacher assigning a number to the various tables in the room and the students at each table counting off to assign themselves a number from 1 through 4 or 5, depending on the size of the class. Next, the teacher provides a topic for discussion, and the students talk through their ideas. Then, the teacher rolls a die and calls out the number that turns up. If the number is 3, for example, Student 3 at each table is on alert—aware that they might be called on to communicate the collective wisdom of the table. The teacher then rolls the die again, this time to determine
which table’s Student 3 will share that table’s thoughts. Repeated rolls might elicit comments from other tables.

This process can easily be followed online, with students discussing in numbered breakout rooms as they would in a physical classroom. After a pre-determined number of minutes, broadcast to each room the number of the student who has been selected to share. Allow the group to continue to talk for a minute or two more, as they would do in physical classroom. Then bring all students back to the main room and use a random number generator, such as wheelofnames.com, to identify the number of the room that will share first.

A variation on this allows you to re-group students for additional conversations. Using the “rename” feature in Zoom, for example, add a number after each student’s name, like this

- Andrew (1)
- Jolai (2)
- Hunter (3)
- Miko (4)

... and then set up number-specific breakout room with all 1s together, all 2s together, and so on. Having developed a strong sense of their table group—and confidence in their group’s learning ability—individuals invited to share with others with the same number will approach the task with confidence.

Discussion Roundtable

In a physical school setting, this task begins with every student folding a piece of paper such that there are four quadrants with a rhombus in the middle (see Figure B). As they read or view a text on their own, they take notes in the first quadrant. When they talk with their group members, they take notes as their peers talk. Each student then writes their own summary in the rhombus in the middle.
In distance learning, this is accomplished in a very similar way. Ask students do their reading or viewing in the main room or even asynchronously, taking notes in the first quadrant. Then when engaged in synchronous teaching and learning, move them to breakout rooms to work with their group. As each member of the group shares, they will take notes to track what’s being said by whom (putting these remarks in appropriately labelled quadrants) and ask and answer questions about the text or topic. At the end of the task, they will write their own summary in the center. When they return from the breakout room, they can use a camera app or other screen shot to take a photo of their work to share with you, either as a file transferred in the chat or loaded into a shared drive.

**Three Ways to Improve Collaboration in Distance Learning**

Based on many, many observations of collaborative learning in distanced environments, we can offer four strong recommendations:
1. **Set time limits for each group task.** We see high schoolers topping out at about 10 minutes; younger students might benefit from stricter time limits. They can have many opportunities to work with their groups during synchronous instruction, but moving them back to the main room to debrief and check-in after each time-limited task is helpful.

2. **Be clear on the task.** When students understand the task at hand, they are much more likely to actually complete the work. Lack of clarity about the task can create off-task behavior and frustration with students.

3. **Teach them how to seek help.** If students are not sure what they are supposed to do, or if there is something uncomfortable going on in the breakout room (e.g., inappropriate conversations, bullying, plagiarism), they should know how to ask for help. Most systems that have breakout room options have a way of requesting help from the host or teacher. Regularly remind students to use that feature. As the teacher, you should visit the rooms, rotating between them to listen and support students.

4. **Require a product.** Requiring students to produce a product in their breakout session helps to increase both focus and effort. Students should know that they will submit the product—which might be a statement, an opinion, a verdict, a summary, a suggestion, and so on—when they return from the breakout room.

**Conclusion**

There are many ways to ensure that student learning communities continue to grow and develop even when students are working from a distance. As educators, we are trying to build students’ habits. And sometimes, we’ll be doing this from a distance or in blended ways. The format might change, but our purpose does not.

Read more about student learning communities in *Student Learning Communities: A Springboard for Academic and Social-Emotional Development* by Douglas Fisher, Nancy Frey, and John Almarode. This 141-page, 7” x 10” book (Stock #121030; ISBN-13: 978-1-4166-2965-8) is available from ASCD. Copyright © 2021 by ASCD. To order a copy, visit ASCD’s Online Store at [https://shop.ascd.org](https://shop.ascd.org).