SUPPORTING ONLINE LEARNING IN A TIME OF PANDEMIC

A report from the USC Rossier School of Education for K-12 educators, administrators and leaders

April 2020
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We first got into online teaching—in our own programs—more than a decade ago. Our Master of Arts in Teaching program was a pioneer in online instruction, and many years of experimentation and feedback have informed our pedagogy and technology. I’ve believed in the power—and the inevitability—of online programs for years. More than half of our currently enrolled students are in online programs.

The COVID-19 pandemic has pushed most all of America’s school systems online with little or no preparation, and without the time we have had to inform our practices at USC Rossier. You might see teaching in the current climate referred to as "online learning," but in many cases, "emergency instructional triage" would be more fitting.

Evidence from the Great Recession suggests the lasting damage that society-disrupting events can cause. Children—and the future of our democracy—deserve our best. It’s up to all of us to do our parts to make learning accessible and engaging. Our faculty members have done a great job of pulling together to help make this report happen, so that our expertise can help inform educators and leaders in need. I hope you find it helpful.

Fight On!

Karen Symms Gallagher, PhD
Emery Stoops and Joyce King Stoops Dean
USC Rossier School of Education
SUMMARY

For more than a century, USC Rossier has prepared leaders who are passionate about improving educational equity through practice, research and policy. The new realities due to the COVID-19 pandemic have caused school districts to adapt rapidly, producing new challenges and pressing questions. When we reached out to our alumni community, we learned of the equity concerns that are now top of mind; the pandemic has further exposed the ways in which class, race, ability and other identity-related inequities affect schooling.

We are pleased to provide this resource which seeks to address many of the major concerns of K-12 teachers and administrators. Bringing together the expertise of faculty who have decades of experience teaching in virtual learning environments, as well as deep knowledge of teacher education pedagogy and educational psychology, this report provides practical recommendations that we hope will serve as a guide during this difficult and complex time.

ABOUT

EDITORS
Ross Brenneman, Director of Media Relations, Office of Communications
Deborah Karpman, Assistant Dean for Research, Office of Research

CONTRIBUTORS
Jade Agua
Associate Director, USC Race and Equity Center
Sharla Berry PhD ’17
Assistant Professor, Cal Lutheran University
Nasser Cortez
Assistant Professor of Clinical Education
Jen Crawford
Associate Professor of Clinical Education
Stephanie Dewing
Assistant Professor of Clinical Education
Kimberly Ferrario
Associate (Teaching) Professor of Education
Robert A. Filback
Professor of Clinical Education
Angela Hasan
Associate Professor of Clinical Education
Corinne Hyde
Associate (Teaching) Professor of Education
Akilah Lyons-Moore
Assistant Professor of Clinical Education
Emmy Min
Associate Professor of Clinical Education
Ekaterina Moore
Assistant (Teaching) Professor of Clinical Education
Eugenia Mora-Flores
Professor of Clinical Education
Jennifer Park
Lecturer
John Pascarella
Associate Professor of Clinical Education
Erika Patall
Associate Professor of Education and Psychology
Sumun L. Pendakur
Chief Learning Officer, USC Race and Equity Center
Artineh Samkian
Associate Professor of Clinical Education
QUESTION 1

What are key lessons for engaging students in online instruction? What strategies might lead to the most success in keeping students engaged?

"Moderation! A misconception is that teachers need to engage students in online instruction for the same duration as a regular school day. This can lead to either too much time in front of an electronic device for live sessions or too many practice tasks and assignments causing student to sit and complete work for hours. Remember that a school day is filled with interactions with peers and their environment. These create opportunities to reflect and explore. We want to avoid making online instruction feel like hours of busywork."

— Eugenia Mora-Flores

“It’s critical to recognize that students are now in their home settings with varying levels of technology, time and support.”

— Corinne Hyde

Recommendations for educators:

1. Checking in matters. Offer short phone or videoconference meetings to regularly check in with students and parents.

2. Offer face-to-face opportunities. Video chats/video conferencing are a great way to help students feel connected. Asynchronous communication (a filmed lecture) does not provide students with the same level of engagement and interaction as synchronous (live teleconferencing) communication.

3. Create community, not just a classroom. Students’ social-emotional well-being is important and seeing their friends and teachers helps them have a sense of community even when they are physically apart. Greet participants by name as they enter your online classroom. Check in and chat with those who come in early. Encourage and allow for social interaction to connect on a personal level.

4. Time works differently online. After taking care of social-emotional needs, provide instruction in short, high-energy bursts that are interspersed with student interaction, via polling, discussions or other online tools.

... continued ...
QUESTION 1

What are key lessons for engaging students in online instruction? What strategies might lead to the most success in keeping students engaged?

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5. **Create opportunities for "water cooler" talk.** Use a portion of class time to allow students to share personal updates.

6. **Variation is your friend.** Mixing up assigned tasks with videos, exploratory activities, readings, group discussions and skill development can help engage students and make the online learning experience fun.

7. **Flip your classroom.** Many classes incorporate in-class presentations by students—often it’s a final presentation during the last class of the term. But a series of presentations can become tedious, even more so in the virtual classroom. Have students film and post their presentations in advance. You can have students view each others' presentations ahead of class, and reserve more substantive discussion, questions and critiques for the class meeting.

8. **Take a break.** Important for all online learning experiences is that kids are provided plenty of opportunities to take breaks; they need to be physical and move. For young children, play and exploration and reading with their caregivers is key. Resources like www.gonoodle.com can help with providing families with tools/resources to support physical activity (e.g. exercise, yoga, etc). These can help keep students active.

9. **We’re all in this together.** Instructing through a computer might still not feel natural. However, keep in mind that many students are also going through a period of adjustment. You’re navigating this new experience together. Sympathizing with each others' challenges will make the transition easier for everyone.

**MORE:** See [Appendix II (Page 19)](#) for in-depth tips to one of the most popular online instructional platforms, Zoom, and [Appendix III (Page 23)](#) for a supplement from the USC Race and Equity Center with tips for managing security and unwanted intrusions in online classes.


Engaging students who have one foot out the door as seniors is always a challenge. But, the challenge is magnified in this time of crisis. For some students who are graduating and feel less pressure to engage, some of the activities for school may seem meaningless as they watch the world in chaos and/or experience the personal ramifications of the crisis in their families.

I would encourage and challenge educators to critically evaluate the meaningfulness of the educational activities they ask students to engage in online or on their own. Now is probably the time more than ever to take an autonomy-supportive orientation toward educating students. Educators might try to look at the curriculum through the eyes of students.

- What will students see as meaningful and what might they see as pointless?
- Are the activities students could perceive as pointless really necessary?
- Can teachers provide rationales to explain how the educational activities they ask students to engage in are important to students' personal goals, if the value is not already apparent?
- Can teachers revamp materials and activities to better align with student interests in this moment, provide choices about what to learn or work on or solicit student opinions as they decide how to proceed with instruction and learning activities?

A combination of flexibility within a clear structure and emotional support will also be key right now. As priorities come into focus, attempts to control and coerce students into learning tasks through pressure, commands, threats, deadlines, rewards and punishments are likely to fail and could have serious mental health consequences.

Teachers who reach students (by email, text, Google Classroom, etc.) and communicate that they are taking an approach to teaching that is attempting to actively consider what students really need psychologically are likely to have the greatest success drawing students back into learning.

—Erika Patall
“Though parents can serve as wonderful teachers for their children, we cannot expect parents to take on the level of teaching and learning that their children may need. The diversity of family situations at home can make the role of a parent-as-teacher-at-home a challenge.”
—Eugenia Mora-Flores

“Unless the parents can truly access their child’s work, I do not think it is right to have parents function as teachers. It is extraordinarily difficult to do it all.”
—Akilah Lyons-Moore

Recommendations for educators:

1. **Guides, not just work packets.** Work packets, if comprised of pages upon pages of worksheets, are not generally a very effective way of learning. But teachers can send home guides for caregiver-guided learning. These guides can include things like nature walks, cooking, playing games, reading together, solving puzzles and other activities that get young people’s brains working without requiring them to sit at a desk for hours. If caregivers are able, then they can participate in these types of activities with kids, and explain concepts as they work together. Example: While cooking, families could talk about measurement, food groups or the history or cultural origin of foods.

2. **Encourage students to read and read widely.** All genres and content areas. Have them write about their thinking and their ideas, so they will continue to build their literacy skills.

3. **Talk is very important.** Children should be encouraged to talk and discuss ideas, issues, current events—anything that engages them in discourse with their families. These skills are paramount to ongoing academic success.

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QUESTION 2

How do we teach students who don’t have reliable internet access? Is there something better than a work packet? What eases the burden on parents?

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4. **Students need to be active.** Playing, exercising, moving, these are critical and do not require the internet. Asking students to engage in problem-solving tasks where they can continue to use their creative skills will further support their return to school in the near future.

5. **A day at a time.** Teachers can create a calendar providing daily recommendations that can be done at home without the internet that include the aforementioned key areas.

6. **Get creative.** Consider the creation of a portfolio or other authentic assessment that is worked on over time, with weekly support provided by the teacher.
QUESTION 3

How might districts, schools and teachers re-consider grading practices? What are alternatives to traditional grading and how do they work?

“This is not the time to hold students or teachers to strict numerical grades. We are dealing with massive inequity in resources, and students’ grades should not suffer for that.”
—Corinne Hyde

“Without direct teacher instruction and feedback it is difficult to determine if the child truly learned and struggled or their challenges were a result of an outside factor.”
—Eugenia Mora-Flores

Recommendations for teachers and principals:

1. **If there’s reason to believe inequity exists, grading practices must change.** This is a situation where not all students and teachers were prepared. It is not the normal delivery of instruction; there are gaps in the teaching and learning experience for all. Reviewing work for feedback and overall learning is key in these times.

2. **Consider portfolio-style assessment.** Portfolio assessments can offer students choices about what work they would like to represent their learning. Students can then reflect, in writing or on video, about what they’ve learned. Teachers are well-educated professionals, and they should be trusted to look at these assessments of student work to determine if students have made sufficient progress.

3. **If grades can’t go, create flexibility.** It may be necessary to allow students an opportunity to revise for a higher grade. Give points for engagement—especially useful in areas where access to technology and the Internet is not an issue—and provide a descriptive rubric for high and low engagement.

ADDITIONAL RESOURCES

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<th>Six Tips for Going Gradeless</th>
<th>What’s the Right Call?</th>
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<td>In this video from Education Week, teacher and author Starr Sackstein offers quick tips for teachers who want to stop marking student progress with letters.</td>
<td>The Salem City, Va., district is using grades for now, but lets students petition at year’s end. This Education Week article explores how different districts are evaluating grading.</td>
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<td>Watch: rsoe.in/CVDgradeless</td>
<td>Read: rsoe.in/CVDcall</td>
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What is good feedback and how can you adapt it to remote learning?

I would suggest that specific and timely feedback for each student is most productive for learning purposes, even though “global feedback” for the whole class might be more feasible for teachers who are reading and responding to a lot of remote learning assignments. Be sure to include something each student did well and an area of growth.

One tip is to schedule it in: I put grading/providing feedback on my calendar and review the same kind of assignment in a given chunk of time. This is helpful because my mind (as an instructor) is focused on the assignment and the expectations/learning objectives, and I can provide more detailed feedback. This sometimes also allows me to see concepts or areas that several students misunderstood, which then determines whether I re-teach the content or clarify.

If there are smaller assignments that are scaffolds for later, larger assignments, consider employing a global feedback approach by sending a message to the whole class or a short video of the main areas for improvement. Use this approach sparingly, however, because individualized feedback is key to learning.

—Artineh Samkian
QUESTION 4

How should schools and teachers address learning for students with special needs? How can we ensure that individualized education plans (IEPs) are being met effectively?

“Students benefit from having information presented in multiple formats and from repetition of instructions. Students have individualized needs that are better met through live session interactions.”

—Nasser Cortez

Recommendations for teachers, counselors and administrators:

1. **Do a needs assessment.** Have teachers support students with IEPs by asking them and their parents important questions: “What are your expectations for speech, occupational therapy and other services? How can we (teachers) better serve you?” Most parents have a limited bandwidth, so while some parents might welcome a spate of resources, others might prefer to keep it simple (sharing ideas for incorporating learning into normal, daily activities; doing a weekly videoconference check-in). Ask what is needed.

2. **Remember that needs change.** Teams may want to consider IEP amendments to update accommodations, goals and methods of service delivery. The reason for amendments is that needs change. For example: A child that previously did not require mental-health services and supports may need them now.

3. **Learn the “how.”** The Early Childhood Technical Assistance Center offers guidance for tele-intervention, distance learning and communicating with families. And each teleconferencing system has different capabilities that can help provide accommodations for distance learning: Zoom, for example, has a closed captioning function to type in key ideas and private chat features allow teachers to communicate with students privately and accommodate their needs. Use visuals (screen share images/short video clips), hand gestures, facial expressions and realia whenever possible.

4. **Be seen.** Regular face-to-face sessions, along with video chats/recordings, allow students to ask clarifying questions. If using a platform that allows for recording, take advantage—a video recording could be rewound for repetition of information. Teleconferencing software can be used for some whole-group sessions, and some “office hours” geared more toward small group, individualized support.

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QUESTION 4

How should schools and teachers address learning for students with special needs? How can we ensure that IEPs are being effectively met?

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5. **Be there for parents.** Live sessions and/or video recordings can also be used to support families by providing strategies, resources, trainings, etc. for supporting their children.

6. **Be thorough.** Even if students have access to appropriate tools, technology, etc., they may lack the skills needed to access and use those tools effectively. They would benefit from explicit instruction on how to use those resources appropriately.

7. **Establish office hours.** Using teleconferencing systems, office hours can be used for 1:1 service provision, small group interventions/sessions, counseling services, clubs and cultural activities.

8. **Bring in community help.** Each district has different resources, but find ways that service providers, therapists, consultants and family advocates can collaborate with districts/schools/teachers on the educational and social-emotional needs of students with IEPs.

9. **Evaluate document protocols.** Consider and clarify options around services like DocuSign for getting documents signed off on.
“The opportunity for our students to continue learning from their mentors as they move to online instruction will provide a valuable learning experience.”
—Eugenia Mora-Flores

“Many of the same things we know about good teaching and learning continue to apply. Teachers will still need to develop strong relationships with students, and teaching will still be most effective when it takes into account how learners’ brains work and learners’ cultures.”
—Corinne Hyde

“One month from now, you might find yourself looking back, either wondering how your student-teacher could have been more involved or realizing how valuable he or she has been in supporting your students’ learning through this crisis.”
—John Pascarella

Recommendations for teacher-education programs and teacher candidates:

1. **Keep learning.** Encourage candidates to keep working with their master teachers. They can work together to plan online lessons, teach together during live sessions, review student work together and analyze it for strengths and weaknesses to plan for next steps.

2. **Don’t ignore the moment.** Teacher-education programs should think about how each of their courses can include conversations about how the content of class exists in an online learning space. For example: A class on reading instruction can think about how you would move guided reading online. Candidates can discuss how to work with small groups and provide differentiated reading experiences through their learning management system.

3. **Stay current.** MAT faculty should make a habit of finding out from candidates what new technologies exist that program leaders may not be familiar with. Necessity is the mother of invention, and in a time of crisis, any platform can have pedagogical value.

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QUESTION 5

What should student teachers be doing at this moment? What should districts and program leaders be doing to make sure candidates are prepared for first-year teaching?

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Recommendations for district leaders and teachers:

1. **Let your teachers use the expertise of their student teachers.** Candidates often have a lot of technological skills that can be extremely helpful for schools and teachers. Teachers can work with them to shift units, lessons, all related materials and assessment to online platforms. Candidates can host and facilitate or participate with the guiding teacher in online office hours; they also help in making phone calls to students to check in, answer questions and maintain a positive relationship with the students. If district leaders have reservations, perhaps they can consult with local schools of education to find solutions.

2. **Districts, reach out to your local teacher-education programs.** Schools of education can collaborate with districts in delivering an ongoing series of professional development around online learning, so that “emergency teaching” becomes something closer to true online learning.
Let’s say that online instruction is a necessity after this school year. How should districts and teacher-prep programs better prepare for teaching online?

“Just as students find personalized teaching beneficial, faculty need personalized professional development to build online teaching capacity.”
—Sharla Berry

“Online education should be part of mainstream teacher instructional strategies.”
—Angela Hasan

“Effective online learning isn’t as simple as taking whatever you’re doing on ground and doing it over a webcam. There’s a significant knowledge and practice gap among K-12 teachers and higher education faculty in terms of the pedagogy and andragogy of teaching online.”
—Corinne Hyde

Recommendations for district leaders:

1. **Plan for the future.** Districts and teacher-prep programs can both think about the hybrid/blended opportunities that can be part of traditional on-ground teaching. Many teachers were already using online tools such as Google Classroom, or doing live chat sessions with book buddies in other schools. These experiences made the transition to online much easier for these teachers and their students.

2. **Expand professional development opportunities.** District PDs can include practical monthly online instructional strategies training for teachers and student teachers. Schools of education are a good place to start.

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APPENDIX 1

Further reading and resources

PROFESSIONAL

USC Rossier Master of Arts in Teaching Program
USC Rossier offers a range of academic programs that prepare students to start and advance careers as teachers, educational leaders, counselors and scholars.

Website: rossier.usc.edu/programs/masters/

USC Rossier Office of Professional Development
Website: rossier.usc.edu/programs/pd/

ADVICE

Online Teaching Resources
A frequently updated list of resources cultivated by USC Rossier.
Read: rossier.usc.edu/online-teaching-resources

Higher Education Learning Collective
This collective has thousands of members interested in making online teaching and learning more effective. Members share best practices, tech recommendations, tips, fixes and support.
Join: higheredlearningcollective.org

Coronavirus and Schools
News and opinion essays from Education Week
Read: rsoe.in/CVDeducationweek

"What Happens to Student-Teachers Now? A Guide for Teachers."
John Pascarella in Education Week.
Read: rsoe.in/CVDpascarella

"Cultivating Community in Online Programs: Strategies and Tools"
Sharla Berry for the Online Learning Research Center
Read: rsoe.in/CVDberry

A Trauma-Informed Approach to Teaching Through Coronavirus
Teaching Tolerance
Read: rsoe.in/CVDtolerance

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SPECIAL EDUCATION

**Early Childhood Technical Assistance Center**
ECTAC’s Family Guided Routines Based Intervention (FGRBI) and Caregiver Coaching promotes the ability of early intervention providers to coach caregivers to engage their young children in learning as they participate in everyday routines and activities that are meaningful to them.

**More:** rsoe.in/CVDecta

**eLuma**
The Council for Exceptional Children (CEC) and eLuma recently presented a free webinar entitled, “Teaching Special Education Online During COVID-19” (Thursday, March 19, 2020). This webinar was designed to help teachers who are new to online instruction get up to speed as fast as possible.

**Watch:** rsoe.in/CVDeluma

**The IRIS Center**
The IRIS Center at Vanderbilt University is a national center dedicated to improving education outcomes for all children, especially those with disabilities from birth through age 21, through the use of effective evidence-based practices and interventions.

**Visit:** iris.peabody.vanderbilt.edu/

**STEM**
There are a variety of apps that can help with STEM concepts: [Geogebra](https://www.geogebra.org/), [Prodigy](https://www.prodigygame.com/), [Wolfram Demonstrations](https://demonstrations.wolfram.com/) and [Zooniverse](https://www.zooniverse.org/) are some examples.

**MISCELLANEOUS**

**Apps**
Many (free) apps can support different ways of engaging students: [DeltaMath](https://www.deltamath.com/), [Doceri](https://www.doceri.com/), [Flipgrid](https://www.flipgrid.com/) and [Nearpod](https://www.nearpod.com/) are some examples.

**ZoomJam**
The USC Games and Situation Lab has created numerous unique Zoom/teleconferencing-based games.

**Visit:** zoomjam.org/
The following guidelines have been developed by USC Rossier faculty who have been teaching graduate students in synchronous online learning environments for the past 10 years. This perspective on teaching and learning is primarily grounded in sociocultural and constructivist learning theory, where active student participation is central to learning.

**Preparing for your online class sessions:**
1. Share PowerPoints and other class materials before/after class on the course website.
2. Establish a set of class norms—it’s important to have a set of norms for the online learning environment; examples of norms could be:
   - Attend class in a private and quiet space.
   - Camera capability should be functioning.
   - Use headsets or earbuds for better audio quality.
   - Mute your audio unless you want to speak, this reduces background noise.
   - Explain how to indicate you want to speak (raise real hand, raise virtual hand, use chatbox, etc.)
   - Have good lighting on your desk/table in order to be seen on camera.
   - Limit distractions such as movement, pets, background activity.
   - Have appropriate dress for the camera.

**Communicate with your students about holding class online:**
1. Request that everyone has video and audio capabilities in advance.
2. Request that everyone tests their equipment before the scheduled live session.
3. Create a short video using screen capture to show students how to access the live session.
4. Provide contact information for technical support.

**Plan for synchronous (live) class sessions using Zoom:**
1. Technical set-up
   - Consider getting a second monitor/screen, especially if you plan to teach from home and you will be teaching on a laptop.
2. Settings/preferences
   - Use Gallery View on Zoom to see up to 49 students at one time.
   - Mirror Video Displays on Zoom, so you can see your students and see the screen share content
   - Download attendance reports on Zoom: https://rsoe.in/ZoomAttendance.

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Manage student accommodations:
• Use closed captioning function in Zoom to type in key ideas.
• Use private chat feature to communicate with students privately and accommodate needs.
• Partner students with a classmate that could help support them via private chat feature.
• Use visuals (screen share images/short video clips), hand gestures, facial expressions, and realia whenever possible.

TEACHING PEDAGOGY
Strategies for developing a community of learners:
• Greet participants by name as they enter the online classroom. Check-in and chat with those who come in early. Encourage and allow for social interaction to connect on a personal level.
• For the first session(s) online, provide an ice breaker and/or game to play so students become comfortable in the online classroom. For example: Use the whiteboard feature to play Pictionary.
• Before class officially begins, have participants engage with the content by posting a warm-up question or idea to connect with their background knowledge on topics that will be discussed in class. In addition, the class polling feature can be used to “warm-up” on the content. Responses can be written in the chat box, then the instructor can use these written comments as launching points for the initial discussion.
• Encourage and allow for the chat box (and private chat) to be used for students to ask questions, make comments, post links and documents. Validate and acknowledge their contributions. Remember to keep an eye on the chat box.
• End class with an invitation to stay after to talk over individual needs/issues.

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APPENDIX 2

Strategies for instruction in Zoom

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Strategies for active learning:
- The whiteboard feature can be used for whole class brainstorming.
- The whiteboard feature can be used for T-Charts or Venn Diagrams for compare/contrasting ideas and concepts.
- Use the chat box feature for all students to contribute to the class discussion, then ask some students to clarify and elaborate verbally.
- The breakout room feature allows for small group work.
- Use polling feature to ask key questions about course content, draw from their background knowledge, and/or how students are doing/feeling.
- Use the Share Screen feature in Zoom to share any material you have that you have on your screen (e.g. PPT, video, images, files, etc.) with students. When sharing a video, don’t forget to click the audio sharing feature in the left corner before sharing your screen.

Strategies for in-class formative assessment:
- Use the chat function to generate short responses.
- Use the poll feature for a quick assessment.
- Encourage students to use icons (e.g. “yes” and “no” icons).
- Use of real thumbs-up and thumbs-down for responses.
- While students are in break-out groups, instructor can view the collaborative Google Doc or presentation to see what the group has generated together. This informs the instructor of additional scaffolding that may be needed.

Strategies for engaging and inclusive direct instruction:
- Use Share Screen option to show a short video clip to the whole group for an example or model (don’t forget to share the audio).
- Start class with an opening circle where students can share thoughts in the chat or orally.
- Assign students to work with another student in the class and ask the pair to private chat each other before delivering their ideas to the whole class.

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Strategies for instruction in Zoom

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**Strategies for equity:**
Create democratic talk distribution during small group and whole group discussions:
- Assign roles for breakout sessions (note-taker, researcher, spokesperson, etc. ...).
- Use the chat feature as an additional option for students to contribute to the whole and breakout class discussion.
- Encourage students to use the raise-hand icon and call on students in order.
- Use private chat feature to encourage individual student participation, to invite quiet students to participate, and communicate with students privately.

**Breakout strategies (small groups):**
- Create a Google Slides presentation in advance for small groups to have a discussion, then represent their ideas with multimodal tools (images, videos, website links, etc.).
- Create a graphic organizer in a Google Doc that students can use to take notes or represent their ideas during their discussion.
- Have students develop a graphic/visual using Google Docs to represent their discussion.

**Flipped classrooms:**
- Many classes incorporate in-class presentations by students—but a series of presentations can become tedious, even more so in the virtual classroom.
- Flip presentations—students film and post their presentations in advance, and view each others' presentations ahead of class. Reserve more substantive discussion, questions and critiques for the class meeting.
- Assign students to do research on a different topic or read different readings prior to the class and assign them to do a jigsaw activity during the class time (i.e. purposefully forming groups so that each student in the group brings different expertise/content to the group discussion thereby they are learning from each other).
- Another way to make this even more meaningful, and fun, is to create a set of criteria or a rubric to help students evaluate each other’s presentations, then, build a survey in Google Forms allowing students to rate and enter their scores for the presentations they review.
"There is no place that is immune to attack when using technology because technology is porous."
—Sumun L. Pendakur

**Zoombombing** is a form of cyberattack—an intrusion by uninvited parties who use racist, sexist and other bigoted language to upset a class or meeting. It is not “party crashing” or any other term that minimizes the emotional psychological effects of such attacks. These attacks are intended to suppress learning, suppress engagement and create harm against historically marginalized communities. Here are some practices that can help secure your online classroom.

If not already in place, schools should create safety teams consisting of instructional technology experts and educators who can inform and guide a rollout of security procedures. Educators with a mastery of Zoom or whatever teleconferencing technology is being used make especially good guides for other educators.

**Scheduling**
When you schedule the meeting:
- Require a password.
- Mute participants on entry.
- Enable the waiting room.
- Do *not* share Zoom links publicly.
- Have participants arrive 10 to 15 minutes early for approval to enter.
- Record sessions.

**Planning**
Have a co-host who secures the classroom while the teacher can focus on instruction. This is an especially good role for a student teacher. The co-host can:
- Manage the waiting room.
- Monitor participants and, if applicable, the chatbox.
- Silence participants if needed.
- Remove intruders if necessary.

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Managing in the moment
If your classroom is the victim of intrusion, stay calm. Remember that intruders are desperate for attention and to create fear, and they feed off that fear.

- Acknowledge the intrusion and ask students to pause their cameras until the intrusion can be ended so that the intruders can’t see their reactions.
- Speaker View can help identify the intruders, making it easier to remove them.
- Continue teaching, acknowledging the intrusion and noting that what happened was wrong, scary and unacceptable. Tie this to school climate and stated institutional values.
- Afterward, download the attendee report so that your district technology office (or closest approximate) can try and identify the intruders.

Repairing harm
Educators need to acknowledge the harm that cyberattacks can cause.

- After class finishes, download the chat transcript from the interrupted class. In a follow-up message to the class, address specific comments to directly name the harm caused to specific communities. (e.g. If the comments made were specifically targeted toward Asian Americans, note that, etc.)
- If there were concrete actions you were able to take, share them (e.g. “Our district technology office is trying to determine IP addresses so they can be reported to Zoom and/or other authorities.”)
- If your institution has a bias incident reporting protocol, report the incident! Data matters.
- Allow space at the beginning of the next class or meeting to discuss and process the incident that occurred.

Plan now
Districts and schools should have an understanding of what behavior is allowed, expected and tolerated during class—while the most heinous intrusions are often external, students themselves can also be disruptors. Make sure teachers understand what kinds of disruptions to report, and how to do so. Know how you plan to communicate about incidents with parents, and what steps are available to tighten security without sacrificing the features that make your online classroom a fun and engaging space.
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