Useful POD-Network Resources for Teaching and Learning During the Pandemic
(national organization focused on best practice in teaching and learning in higher education)

Resources curated by Provost Joshua Powers

Specialty Discipline Resources

Music: https://scan-score.com/en/
Math: https://higheredpraxis.substack.com/p/cetl-tip-teaching-math-remotely
Science: https://higheredpraxis.substack.com/p/tip-teaching-science-online
Languages: https://higheredpraxis.substack.com/p/cetl-tip-teaching-languages-remotely

Universal Design Resources

CAST Universal Design Lesson Plans and Related Learning Resources: http://udlexchange.cast.org/home

Active Learning Strategies

In Physically Distanced Classroom: https://cft.vanderbilt.edu/2020/06/active-learning-in-hybrid-and-socially-distanced-classrooms/

Zoom and Active Learning: https://teachingcommons.lakeheadu.ca/zoom-interactivity-active-learning-strategies

Active Learning While Physical Distancing: https://docs.google.com/document/d/15ZtTu2pmQRU_eC3gMccVhwvDR57PDs4uxIMB7B51os8/edit

Arizona State University’s Design for Online Learning Toolkit
Northwestern’s Best Practices for Synchronous Sessions
Stanford Online High School (two decades and more): Effective Best Practices in an Online Classroom
Penn State: Engaging Students Synchronously: (video lesson; text material; slide deck)

Equity & Diversity

Anti-Racist Science Reading List: https://docs.google.com/document/d/1fZEEylpMEXvydMuKGeywiV3CDMXZ2A_FWlTdg3n6ngI/edit
Group Work in a Socially-Distanced or Online Classroom

Group work and active learning may be a major component of your in-person or blended courses. While maintaining the recommended social distance of 6 feet can complicate the ability of students to actively interact in groups to collaborate and share ideas, there are some options below that can allow students to work together and maintain physical distance.

Many of these options require that students bring and utilize a laptop, tablet, or smart phone. Not all students may have a device for participating, so they may need to acquire one before the class starts or during the first week of the class. Make sure students are aware of this in the Syllabus, during the first in-person class meeting, and possibly in an initial email welcoming students to the class.
<table>
<thead>
<tr>
<th>Socially Distanced In-Person Active Learning/Group Work Options</th>
<th>Description</th>
<th>Tools Available or Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virtual In-Person Class Collaboration</strong></td>
<td>While in a physical classroom, the instructor can leverage some online collaboration spaces and tools where students can collaborate and discuss from a distance in pairs or small groups, then share the results of their virtual conversations or work with the rest of the class. The collaboration platforms in the next column will show updates, changes, and additions in real time. <strong><strong>Note that Padlet, Awwapp, and Limnu are not supported by MSU, which requires you to self-support if there are issues and may require purchasing for unlimited use and advanced capabilities beyond the free versions</strong></strong></td>
<td><strong>Google Docs</strong> – A collaborative writing platform. Note that students will need a gmail account to use Google Docs. <strong>Padlet</strong> – A digital bulletin board for compiling comments, text, images, lists, videos etc. <strong>Microsoft Office 365 Document Collaboration and Co-Authoring</strong> All students have access to Microsoft 365 and can obtain a free copy. <strong>Awwapp</strong> – Collaborative whiteboard space for drawing. <strong>Limnu</strong> – Collaborative whiteboard space for drawing.</td>
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<p>| Instead of having students work in groups in class, all or most of the group work and collaboration can be done before and after an | For more information on WebEx and a video demo of it. |</p>
<table>
<thead>
<tr>
<th><strong>Virtual Hybrid/Blended Online Collaboration</strong></th>
<th>in-person class using asynchronous online discussion forums, MS Teams, WebEx, and/or Google Docs. Students can then share the results of the group work and discussions each week during the in-person portion of the course.</th>
<th>For more information on MS Teams and video demo of it. For more information on using Brightspace asynchronous online discussion forums, please watch this training, <a href="#">Maximizing Online Discussions for Asynchronous Online Learning</a>. Google Docs – A collaborative writing platform. Note that students will need a gmail account to use Google Docs.</th>
</tr>
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<tbody>
<tr>
<td><strong>In-Class Student-to-Student Video Conferencing and Chat Tool</strong></td>
<td>Students can also form groups and use their own laptops or mobile devices with WebEx or Microsoft Teams to collaborate and communicate with each other from across the classroom or with students outside of class who are unable to attend, then appoint someone to share the results with the class. Note that this may not work as well with a high number of students as it can overload the WiFi capacity in the room and there can be unpleasant audio feedback when multiple students are using it.</td>
<td>For more information on WebEx and a video demo of it. For more information on MS Teams and video demo of it.</td>
</tr>
</tbody>
</table>
talking or forget to mute their microphones. Also, the use of masks may hinder their voices. Therefore, instead of students engaging in potentially distracting verbal video conference discussions during the group work, they can utilize the chat tools from WebEx or MS Teams to carry out their in-class conversations. This may require setting up pre-assigned student groups at the beginning of the course and helping them set up WebEx meetings or MS Team collaboration spaces for each group.

If an at-risk student or one in isolation from quarantine is unable to attend class, they can join a virtual in-class collaboration and/or in-class video conferencing session from home.

| In-Person Non-Technology Options | Some rooms may be equipped with multiple white boards that can be used as a way for students to make individual contributions to a group product, where each student comes up to write an idea for their group one at a time. Flip charts positioned in the room. | Room equipped with multiple whiteboards or request moveable whiteboards |
and sticky notes can also be used in this way. Students can write down ideas and thoughts on sticky notes and post them to a space for their group on a white board and then one member can photograph them with their phone and send to the group to have and discuss. Small portable whiteboards could also allow students to complete individual work that they can hold up for their group members to see across the 6 feet of physical distance.

- Require students purchase individual portable whiteboards
- Flip charts or easels for writing on or posting notes to
- Large or small sticky notes

Tips and Strategies to Help Support These Options:

- Ease your students into the use of these options with low-stakes practice opportunities at the beginning of the course.
- Be ready with a backup plan or activity that does not involve the technology in case there are issues.
- Check in with your students periodically with in-class polling, surveying, or informal conversations to see how it is going and whether you can make changes to support the use of these options.

Space Arrangements

If the classroom has moveable furniture, arranging students in a half circle formation can allow for collaboration while maintaining physical distancing. When possible, you can also take students to an alternative outside space to spread out and collaborate or an in-door area with more space.

Additional Resource:

[Active Learning in Hybrid and Physically Distanced Classrooms](#) by Derek Bruff, Director, Vanderbilt Center for Teaching
Other ideas:

Some ideas for the F2F, social-distanced classroom:

- Use polling software. Plickrs is a low-tech alternative and is what my husband uses in case not all students have a device.
- Use brainstorming tools (SMART Notebook has a Shout It Out interaction that allows users to submit text or graphics to a communal whiteboard). We’ve recently looked into Aww Boards.
- Conduct breakout groups using collaborative tools such as Google Docs. Rather than speak, groups of students would interact via chat, on a document, etc. Thanks to Tom Tobin for that idea.
- Incorporate physical movement -- Stand if you agree. Stay standing if you also agree.... Movement by itself doesn't constitute active learning, but the importance of getting blood flowing rather than sitting for extended periods is well documented.
- Provide individual white boards (or ask students to bring their own). They can solve problems and/or write answers down and hold them up. Sanitation would have to be considered.
- Group students so that each group has proximity to a shared space on the wall. Students can approach the wall one at a time to add write on poster paper, a white board, or add a Post-It note. One student can take a picture of the completed work and share with everyone in the group.
- Similar to using polling tools, ask students in a group to share cell numbers. Groups can "discuss" answers and then share the agreed upon solution with the class at large. (For all activities requiring sharing out, I would ask the loudest speaker in each group to take that role on.)
- If the set-up is amenable, pair students up. If there is more than 6 ft distance between pairs of students (or maybe even quads), students may be able to have some conversation.
- Use the fish bowl concept. One group of students can role play or mime a solution (from a safe distance) as others watch, interpret, critique, etc.
- Create activities that allow students to interact by passing a sheet of paper or index card around the room/group. I would be comfortable doing this with students if there were hand sanitizer for each to use as they left the classroom.