

Best Practices for Online Instruction in the Wake of COVID-19

As schools across the country move to some form of online learning for students in response to COVID-19, there is great diversity in how schools are implementing their online programs. As a resource, IDRA has compiled this listing of researched-based strategies for K-12 educators.

Set Up Educator Collaborations



Issues with implementing online classes can be shored up by having teachers form groups and collaboratively develop the most effective ways to teach their students material online. Additionally, campus leaders and technology specialists should be on-call for teachers developing courses to help work through any technical issues and further software and process knowledge (Oliver, et al., 2010). Teachers generally prefer on-site support for technology use as opposed to phone-based assistance, so in the context of social distancing requirements, online videoconferencing may provide the best alternative for in-person support.

Encourage Student Collaboration



Online courses produce the best outcomes when educators encourage students to work together on understanding the content and resulting assignments (Hanover Research, 2015). Collaborative assignments encourage further development of critical thinking and problem-solving skills. Additionally, sessions where large groups of students can speak and interact, either via chat or in a blended classroom setting, tend to work better for young learners (Oliver, et al., 2010).

Focus on Active Learning



Even the most dynamic lecture can be less appealing in an online setting. Engaging students who are not in a room together should include a mix of short discussions, small group chats and projects, video and audio clips, and hands-on exercises with the text (Kerr, 2011; Johnson, 2012; O'Malley, 2017). Base content delivery on data-driven models that engage learners (Lin & Zheng, 2017).

Use Multimedia for Young Learners



Students who are not yet strong readers, or who may have difficulty navigating online classrooms designed for high school and college students, benefit from lessons that incorporate video and audio content (Oliver, et al., 2010).

Break Lessons into Bite-size Chunks



Long lectures are not the best way to engage with students, especially online. Avoid pages and pages of text or an hour-long video lecture. Work to break

down the information in 10-minute chunks that allow students to work with the material they have learned in smaller, active segments. Suggestions for “chunking” lessons also include designing lessons with ample white space, breaking up texts with photographs and examples, and incorporating color in any visual text sections (Oliver, et al., 2010; O'Malley, 2017). Courses that are visually appealing are more engaging for students (Hanover Research, 2015).

Maintain Continued Teacher Presence



It is vitally important that educators are mentally present for their students – not by simply responding to questions students post online, but by actively communicating with students (O'Malley, 2017; Beasley & Beck, 2017). Instructors should be aware of student progress as they complete assignments and continue to facilitate discussions and checks to make sure that learners are actively engaged (Kerr, 2011; Hanover Research, 2015).

Provide Individualized Education



If students are struggling or have special needs that cannot be met through a normal lesson, educators should take care to engage these students and deliver content in a way that best suits their needs (Hanover Research, 2015). Successful educators analyze available data, use appropriate assessments for their students, and change instruction to suit unique needs (DiPietro, et al., 2008; Beasley & Beck, 2017).

Build Authentic Family Engagement



Online courses can make it difficult to gauge motivation and any potential issues a student may have with coursework. Educators should have a genuine relationship with their students' families and guardians to keep up motivation and ensure that students work through and complete assignments (Johnson, 2012).

Set Clear Communication Policies



Educators and students should stay in touch, and the policies around responding to student or parent communications should be understood by all parties. For example, teachers can (Kerr, 2011; Hanover, 2015):

- Answer student emails within 24 hours;
- Initiate phone calls with each student at least once a month;
- Have weekly progress checks for each student;
- Actively facilitate student discussions;
- Call parents or guardians at least once a month; and

- Meet with mentors or supervisors at least once a month (in-person or by video if not feasible).

Additionally, educators should have more than one way of communicating with their students.

Hold High Student Expectations



A teacher's expectations for student participation should not lessen with the change in format. Teachers should actively monitor student progress and make reminders and check-ins to ensure that students are working with the material and are turning in assignments (Hanover Research, 2015). Educators should make sure that their expectations for student assignments and deadlines are clearly posted and understood. Additionally, teachers should help their students become proficient using online tools so that they may further develop their knowledge of technological tools as well as classroom content (Kerr, 2011).

Establish Patterns for Course Activities



Educators should plan for a general cycle of lectures and assignments. Creating patterns can help both students and instructors establish a sense of time and routine, which are certainly more difficult to keep up in an online setting (Hanover Research, 2015). The routine includes a timely process for grading assignments and providing feedback to students.

Teachers should also be flexible with their time: though they are not giving traditional lessons in person, educator must practice other ways to cultivate student learning. A unique quality of online teaching is that educators can devote more time to communicating with students and giving them feedback rather than just delivering content (DiPietro et al., 2008). A potentially helpful strategy to help students understand how to work on and deliver assignments is to provide models and examples (Kerr, 2011).

Manage a Daily Routine



In virtual settings, there are no tardy bells or passing periods so teachers can create their own schedule for logging in at certain times every day to check in with their students, reviewing course discussions, monitoring

assignment progress and addressing student questions or assignments (DiPietro, et al., 2008).

Conduct Flexible Assessments



Tests and quizzes are not the best way to gauge student learning. Instructors should be creative in how they assess progress and use that data to modify teaching strategies going forward (DiPietro, et al., 2008).

Build Genuine Relationships with Students



Educators should structure communication with students, but discussion does not always have to be about content material. Particularly in a stressful time such as during the COVID-19 public health crisis, students show greater investment in online courses if they have genuine interactions with their educators (Lin & Zheng, 2017).

Create Hands-on Experiments



Although educators have made great strides in providing online content to students in numerous subject areas, hands-on science experiments pose unique challenges for distance learners. Some best practices to help students experience science content outside of a classroom setting include (Mawn, et al., 2011):

- **Kitchen Chemistry Experiments:** Projects using chemicals and tools most students already have increase students' appreciation of the relevance of chemistry to their own lives.
- **Community-Based Field Activities:** Allow students to interview members of their community by phone and do experiential research in their home or online into relevant fields affecting their communities.
- **Hands-On Activities:** Science activities can include having students build in their own homes, such as one experiment where students built a rubber-band propelled LEGO car that could travel more than 10 feet consistently. In that lesson, the schools delivered or mailed supplies to students ahead of time.

References

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