

Addressing the Digital Divide: Resources, Suggestions and Assignments for Students With Limited Access to Technology

Over the past few weeks, faculty, staff, and students have been provided with technological tools and resources as universities and colleges shift courses entirely online. We have also been contemplating strategies for addressing the needs of students without consistent access to WiFi, computers, or even mobile devices. While acknowledging that no perfect solution exists to address all issues for all students, we are inviting faculty to share resources related to addressing access and their strategies for working around such obstacles. Please feel free to add resources or your own suggestions by adding comments; we will add these into the body of the document periodically.

To start, here are some [national statistics regarding student technology](#) (via Educause). If you are not yet sure what kind of digital access your students have, we encourage you to reach out to them and then use their responses, needs, and experience to inform your course planning, while also recognizing that access-- like so much else right now-- is always subject to change.

Decreasing the Divide

A number of companies are offering free WiFi temporarily, which might alleviate access issues for some students. However, these services are not available in all areas, and many begin charging once the initial free period ends¹. When sharing these resources with your students, we encourage you to read the fine print and, if applicable, inform students that they may want to schedule a cancellation date if they do not want to pay; you might likewise schedule a reminder, so that you can remind students at the end of the semester. Finally, keep in mind that not all students will have the credit cards that allow them to register.

- [FCC agreement](#): Providers will waive late fees, provide open hot-spots and will not disconnect service for lack of payment.
- [Connect2Compete program](#): Limited-time, first two months free of Connect2Compete service, \$9.95/month thereafter
- [Comcast COVID-19 response](#): Offering free WiFi for two months to K-12 and higher education students. All Xfinity hot-spots are free to the public during this time.
- [AT&T COVID-19 response](#): Offering open hot-spots, unlimited data to existing customers, and \$10/month plans to low-income families.
- [Verizon COVID-19 response](#): Offering free international calling to most countries. Customers should call to receive temporary plan upgrades, including data options.
- [Sprint COVID-19 response](#): Offering unlimited data to existing customers and allowing all handsets to enable hot-spots for 60 days at no extra charge.
- [T-Mobile COVID-19 response](#): Offering unlimited data to existing customers, and, coming soon, will allow all handsets to enable hot-spots for 60 days at no extra charge.
- [Charter Free Internet offer for 2 months](#): Offering free Spectrum broadband and Wi-Fi access for 60 days to households with K-12 and/or college students who do not already have a Spectrum broadband subscription and at any service level up to 100 Mbps. To enroll call 1-844-488-8395. Installation fees will be waived for new student households.
- Schools, community centers, churches, and libraries: Many community organizations

¹ Several companies have signed the [Keep Americans Connected Pledge](#) in which they pledge to not cut off service, waive late fees, and open hotspots.

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and government facilities offer open WiFi, and it can often be accessed from the parking lot.²

- [Xfinity WiFi Public Hotspots are now open to everyone on the “xfinitywifi” SSID](#)

Accessing Synchronous Class Sessions

If you are offering synchronous class sessions, check to see if the tool you’re using allows users to call in using their phone.

- [Zoom](#), [Google Hangouts](#), and [Adobe Connect](#) all have mobile apps for students who may have WiFi but do not have consistent access to computers.
 - Zoom allows users to call in using their phone, which allows students who have phones but do not have access to either WiFi or computers to participate in a Zoom session ([Tutorial](#)).³
 - Google Hangouts can support calling in from a cell phone if there is a Google Voice number attached to the Google account. It is a free number that you can set up at <https://voice.google.com/>. Do keep in mind, however, that there is an approval process that can take up to a couple of days.
 - Though perhaps slightly more complicated, Adobe Connect also offers a call-in option, which you can learn more about [here](#).

For any meeting (on any platform), briefly outline ‘rules of engagement’ for the session. You may also want to post them in the platform’s chat feature.

- Ex. Stay muted unless you are speaking, which functions (chat, raising hand, etc.) are available and appropriate to use during the session, how the instructor or host will ‘call on’ individuals, when and how to report tech issues, etc. Some folks remind their students to treat this as though it was a ‘real class’ (meaning we do not call in from bed, outside, or other spaces that could be distracting to the group). Recognizing that some students may only have such spaces to engage from, it is useful to have a brief discussion about how the session will be approached to prevent any mishaps, while also recognizing that some distractions (children needing something, dog barking, etc.) are inevitable.
- Remind students at the beginning and end of a session that it is being recorded and professionalism is expected. This might be more useful in earlier sessions together, but as students get more comfortable with the technology they may ‘slip’ in their professionalism without a reminder.

You should consider recording these sessions and providing written notes or transcriptions (or even your notes). You may even open a shared Google Doc where students can collaborate or take turns adding notes to the document. These types of materials allow some students to download the content to review offline, should they have temporary/periodic access to WiFi.

Accessing Asynchronous Course Material

When designing an asynchronous course, include materials that students might download to review offline, should they have temporary/periodic access to WiFi.

² These resources and descriptions were shared by ODU Cares.

³ With the uptick in users, Zoom is suggesting participants keep their cameras off when they are not speaking to minimize the data usage during a meeting.

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- Compress file sizes when possible, in case students are using data for the download.
[There are many ways to do this.](#)
 - [Compress pdf files](#)
 - [Compress image files](#)
 - [Compress files on a Mac](#)
 - [Zip and Unzip files in Windows 10](#)

Communication

If a student cannot attend synchronous Office Hours, respond consistently to email, or participate in asynchronous communication which is digital in nature (using apps such as Slack, Microsoft Teams, Discord, or GroupMe), you can still provide some means of communication.

Phone Call

You might offer students the ability to contact you via phone. This does not mean you have to give out your personal number.

Here are some options:

- You can create a [Google Voice number](#), then provide that number to students who need the option. Calls to this number are forwarded to telephone numbers that each user selects. They can also be answered on your computer. Voicemails are transcribed automatically (and can be set up to be emailed to your preferred account). You can easily control when you are available in Google Voice through *Settings->Do Not Disturb*. With *Do Not Disturb* on any calls would go directly to voicemail instead of being routed to your phone.
- [Skype offers a similar option.](#)
- You can forward your office phone to your cell phone and ask that students call your office phone or you can ask that students make an appointment with you and provide you their cell phone number, which you can call from your cell phone using *67, so your phone number is not visible.

Low Tech and Analog Assignments

When the access issues cannot be ameliorated by temporary measures (such as the free WiFi options mentioned above), creative and thoughtful assignment design can help. Some of these suggestions may ask you to be flexible or be willing to move outside your comfort zone.

However, for those students who wish to continue learning even when hindered by access issues, offering these alternative means of participating is an invaluable act.

Group Work/ Discussion Opportunities

- Consider allowing groups to propose how they will work together. It might relieve stress to know they can 'just make it work' and loop you in on updates via email (with group members CC'd). Remember the project and course objectives are more important than the method in which they can most easily congregate online at this point.
- Asynchronous group work may be another option. Through Google Drive, students can set up group projects (such as a Google Doc or Google Slides) and leave notes for other

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team members. That way, each person can work on the project when they are available, and everyone can contribute on their timeline.

Submitting Assignments

- Consider allowing students to use pen and paper to complete projects. If they have access to phones, they could take photos of this material and text or email them to you. If they have occasional access to WiFi, they might submit these images to the course platform.⁴ Be sure to note your preferred method and if a back-up method is accepted.
- Consider allowing students to discuss with you course material via phone call. You can create a [Google Voice number](#), [Skype Phone Number](#), or utilize one of the other options above and then provide that number to students who need the option.

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⁴ Even if you suggest that students complete their work on a routine schedule that includes benchmarks throughout the week, it can be useful for students to have one day each week (with a weekend included) in which the assignments from the week are due so they can try to plan weekly access to wifi, devices, or other tools. And even then, be flexible.