

Supporting students in an online environment

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Face-to-face teaching does not directly translate into the online setting. There are different norms and practices; therefore, adjustments need to be made. Students come to the online environment with expectations that can impact how readily they engage. For example, it is normal for the online environment to have smaller chunks of information which are linked together to make a larger meaningful whole. When a student goes online, they have a clear purpose in mind, even if this is to catch up socially. In the online environment, students can simply stop paying attention if their needs are not met and can get very emotional if online media is too challenging to use or understand. **Educators need to present their teaching in a way that aligns with online norms while also maintaining the integrity of the educational experience.**

This paper has been written in the context of educational programs rapidly transitioning online during the COVID-19 pandemic. However, the information presented here is relevant to supporting students in an online environment generally. In this context, it needs to be remembered that educators are often attempting to transfer classroom content online, which is quite different to producing an intentional and planned online course. As such, the paper will focus on some of the basics of this situation, and will provide guidance for educators about how to support student learning online.

The paper will discuss:

- key online teaching practices
- language and communication adjustments to make within the online setting
- student access and digital capacity
- technological considerations for educators
- social and personal circumstances that can affect engagement

A basic resources list will be provided at the end of the paper.

Teaching Practices

Particular aspects of good practice found in face-to-face teaching become essential in online teaching. More than ever, at the start of each lesson and teaching activity, students must be told very clearly what the educator intends for them to learn and how this fits into the wider curriculum (it might even help to provide a detailed student-friendly outline of the curriculum in a separate document with key dates and assignments). The practice of stating what to expect helps to focus, motivate, and engage the student. At the end of the class, the educator needs to briefly summarise what was learnt and ask about any points that require clarification. Essentially, **online learning requires more unpacking of content into digestible pieces**, i.e. scaffolding, which is evident in the teaching materials and explanations.

Related to this point is that online learning does not involve a transfer of all the practices used in a face-to-face setting. For example, educators often find they can cover *less* content



in live online classes, and therefore need students to do more preparatory work beforehand. It is essential to keep this in mind when designing lessons. Furthermore, an online topic cannot simply be a collection of readings put onto a webpage (itself made worse when there are no titles, sequencing, or explanation of each reading's essential role in the curriculum), nor can students be left by themselves to learn. There needs to be consistent interaction in online classes, written forums, and online chats, with a clearly structured outline of how the pieces fit together (resources + activities + learning interactions + assessment). **Make regular contact with the student**, particularly referring to the readings and preparatory activities. Check in with students regularly to establish that they understand what is given to them. These will all increase your 'teacher presence'. It will also make better use of online class time for informed discussion of materials.

Finally, **the points made in the language and technology sections of this paper should be embedded** into your teaching practice.

Language and Communication

The online environment often creates a bottleneck in live communication for larger groups: only one person should ideally talk at any one time, there are fewer cues for turn-taking, and quick side-conversations are difficult. Smaller break-out groups can allow these side-conversations, as do live-typing in a chat/message area. The online environment, however, allows a wider dissemination of information via asynchronous communication, with the most familiar to students being the one-way communication of videos or written documents.

Non-verbals – such as gesture, facial expression, tone of voice, and visual appearance – require a great deal of attention in the online environment, partly because people can stare unselfconsciously at the speaker without encountering a returned interrogative stare.

Students need visual information when listening to a speaker, as many people unconsciously lip read, watch the speaker's face for cues of how to interpret the message, and connect with the emotions of the speaker. There is nowhere else to gaze and still remain engaged, other than paying attention to the speaker, the slides, or looking up and down while taking notes. A smiling enthusiastic and knowledgeable speaker gains attention and connection with the student, so this is a prerequisite for good online teaching.

Supporting student learning in an online environment means that educators need to perform non-verbally in a manner that is not expected of them in person. Also note that this gaze is also what makes students feel uncomfortable when it is their time to be on camera to talk, so the educators might need to reassure them, or ask them to speak in smaller online breakout groups.

Longer periods of silence are to be expected online while people think, so a silent student is not necessarily an absent student. We cannot rely on the normal cues for turn-taking, such as a sharp inhalation of breath, a shift in sitting position, a leaning forward, etc. They also may not know when to talk or interject, or how to provide their own input. As an educator, you too will find it just as difficult to get feedback about how well the students understand you. It is helpful if people can see each other's faces, so ask the students to keep their camera on and their audio muted if the internet connection allows. Also, it is okay to comment on how turn-taking is going during a discussion, and encourage students to continue the best they can. The educator can also take measures to reduce silence, by **informing the students in advance how they can talk or type**, allowing the use of the chat box while the educator is talking, or clicking a 'hand-up' button to speak next. **Providing**

a set of questions before class is very useful, as is having a set of prepared prompt questions to ask the students.

Students will find it especially difficult to understand online speech if the audio is not adequately picked up by the microphone, if there is background noise, or if the speaker does not enunciate well enough. As mentioned previously, there is a certain degree of lip-reading involved in listening, so **the educator needs to ensure that their words are pronounced clearly, preferably into a microphone, and look at the camera as much as possible when they speak.**

Another way to support learning in the online environment is to ensure that the students understand the key terminology used in the session. **A comprehensive glossary is useful and should include each key word, a definition, the use of the word in a sentence, and possibly a picture or a link to other multimedia.** Understanding of terminology is essential to student engagement with educational content. In person, a student may have had many incidental opportunities to quickly check the meaning of a term, such as asking the student next to them what a word means, or asking a tutor briefly after class, but the formality and control of an online environment can inhibit such interactions. **Try asking the students if they understand key terms and if it is okay to move onto the next point.** On a related note, one of the reasons why students can be poor at web and database searches is simply because they do not know the key terms, and may not know the related search terms to include or the non-related terms to exclude.

Student Access and Digital Capacity

Many educators assume that because students have grown up in the digital world, they are digitally literate and know how to use the technology needed for their education, and that they can resolve their own digital issues. In reality, while students know how to use social media, they may be uncomfortable with formal digital activities associated with higher education. They may be easily discouraged if they are challenged when accessing online materials, especially if the technology is not as easy to use as the simple sleek social media interfaces. We should not assume that because a student knows how to open their email on their mobile phone, they also know how to use the desktop version. As well, they may not be able to troubleshoot issues with the technology by themselves, therefore **students need access to a technology support service.**

The devices that students use can also be a barrier to engaging in the online environment. Students might previously have had the option of using a public or university computer, but this is now out of the question. As a result, students might be attempting to write their assignments on their mobile phones or tablets because these are cheaper than buying a laptop. Students might have a cheap phone and its microphone fails on some online platforms, or they might find that Android devices tend to work better than iOS devices across educational platforms. If an educator chooses to use iOS apps (which is limited to one manufacturer's products), these will rarely be compatible with the wide range of cheaper Android devices that students will use. The web browser used by the student might also be a barrier to access, since some forms of learning management system work better in particular browsers than others, and the student might not be aware of this. Internet speed can also pose a barrier to online learning. As mentioned previously, most students would not anticipate that fast internet and a large monthly data allowance would be essential to doing their course. They might also be sharing an internet connection with other household



occupants who live-stream at the same time, or be in an area with patchy internet connection. **Educators need to address such barriers to access, and simply asking students about these issues can help.**

Students might experience a lack of access due to security issues and paywalls. Be careful to ensure that students can access their readings online and that these are not held behind a paywalled subscription, or that students need to be located on campus to access certain software, databases, or online materials. Staff may have access to journals that students cannot access themselves, so we need to **ensure that accessible online readings are made available**, and that students can request free access to items if they encounter paywall barriers.

Finally, there needs to be a dedicated section on both the individual topic webpages and on the education provider's main website which provides **highly visible links to student help and support, including a single point of contact (e.g. email address) for students to connect with**. Students also need to see a direct link to the student learning support service on the main website and topic pages (or to a student learning support officer), and they need to be contacted regularly about this support being available.

Technological Considerations for Educators

Educators need to learn how to competently use the online software: there is no avoiding this. While you do not need to be an expert, you need a basic understanding of the capabilities and limitations of the software you will use to teach online. For example, almost all live online meeting software (to run online lectures, tutorials, groups, etc) will have video and audio (which can be switched off by each person participating), and an attendee list (with their audio/video status next to their name). You can use this attendee list to ask specific questions of each student in turn, and put a tick against their name to know you've included everyone. Live group software will have some form of live chat or message box where people can type and read messages sent immediately to the whole group or to particular individuals (depending on your settings). This software may also have features such as 'hands up/down', live polls (where you type in a question and possible answers, and people click on their response), screen sharing (which allows others to see what is on your computer screen, such as your Word, pdf, or Excel document, and even specific webpage tabs that might be open on your web browser), and live telephone dial-in (where the students can hear the discussion by calling into it). You can also usually record your online sessions for later viewing. You need to become familiar with the audio and video mute (on/off), the participant list, the message/chat box, the recording feature, and possibly the live telephone call option (for those with slow internet or other difficulties). It is recommended that you know about the features mentioned above, since these will greatly enhance your ability to teach online. You should also consider running practice sessions with other staff members which will greatly enhance your confidence. Don't forget that there are many online guides and videos to help as well. Understanding how to use the software is essential, since you cannot support students online if you cannot operate the software yourself.

The second point is to **expect technological barriers** in your teaching. This was touched on in the student access section. You may find that you have to switch off the video feed of all the participants except the speaker to stop the software from crashing. Sometimes, you may find the software is working well, but it was set up with the wrong mode (presenter, meeting, workshop), which later restricts what you can and cannot do. Another common issue is with



the web browser you are using, as mentioned earlier, with some browsers working better than others. When designing learning activities, you might need to check compatibility by letting other staff try it out before releasing it to the students. Offer alternative file formats for the same resource, e.g. both a pdf and a Word version, or a PowerPoint and a pdf version of slides. In addition, some of the readings you can access on a staff login may not be available to students, so ensure that access is available. On a related matter, it can help to **have more than one way for students to contact you**, such as an email address in addition to messaging within the learning management system.

The third point is that your content needs to be visually accessible. This does not only relate to students with disabilities who need you to use properly formatted headings and titles, image description, captioning, or other accessibility features. This is very helpful for all students in the online environment. Keep your images small and don't go overboard with the colours and font sizes! **Be very organised and use one consistent template across many topics to help students navigate the content.**

The final point is related to the format of your teaching media. The use of multimedia is strongly encouraged. Images, audio recordings, videos, YouTube content, FAQ sheets, visualisations, tables, etc., can help you present your information in an easily digestible form, but ideally, **these media should have a clearly explained link to specific learning points in your curriculum.** Mixing up your media is attention-grabbing and keeps the mind alert. Introduction videos and assessment videos are an excellent idea. A warning on videos – they should not be more than 5-10 minutes long, and lone ones are best broken into sections. As educators, when you create multimedia content, such as your own videos or talk-overs of PowerPoint, they do not need to be Hollywood productions, but they must have clear audio, reasonable picture quality, and maybe some editing. There is nothing wrong with using a mobile phone to do a short friendly explanatory video where you talk into a headset and write on a whiteboard (remember to give lots of eye contact and show enthusiasm too). If you can be seen and heard clearly, a video is often better than offering yet another textbook reading.

Social and Personal Circumstances

For any student, the loss of routine, face-to-face contact, recreational activities, and choice is challenging, and there is often a sense of grief and loss. The current COVID-19 situation is one of involuntary isolation, but **the education institution can provide a sense of routine and stability in these times.**

Students may currently be experiencing greater levels of isolation, loneliness, fear, and other negative emotions than before. They are likely to miss seeing many of the people they would normally socialise with, and who they might depend on for their emotional health. In addition, students from rural areas, interstate, and overseas may not know anyone locally. **Education providers can structure opportunities for students to engage with each other** socially on forums and chats, or encourage peer support networks to develop. Simple adjustments to lessons will help, such as opening an online class 15 minutes earlier for students to chat with each other, using a 'get to know each other' warm up activity (which also allows the educator to smooth out any technical issues), and giving more time to talk informally with each other and/or the educator after the teaching part of the online session has been completed.



Students may have a serious preoccupation and concern for the vulnerable people they know. They may also fear getting sick themselves, and may not want to leave their homes for any reason, including for exercise, to get food, or to seek medical attention (some international students are also currently on the receiving end of targeted racism, such as being glared at in public, which discourages them from leaving their homes). Students may also fear being infected without knowing it and inadvertently causing others to become sick or die. **Education providers need to provide links to health and counselling support, and use language which shows their concern for each student.** It is important to encourage students to communicate with staff.

Students might also be living in a household not conducive to learning, e.g. have many occupants, is noisy, have no dedicated study space, and so on. They might be experiencing financial stress due to unemployment, and cannot afford the extra educational expenses involved with buying appropriate technology, extra bandwidth, or textbooks that were previously available in the library. Some students may have previously received support from extended family who cannot currently visit or provide help, e.g. older relatives, fly in/fly out spouses, and extended community. Other students may have children to home-school or provide care for, or might be working casually in healthcare provision and so might be working longer and more unpredictable hours than usual. In summary, no two students will have the same circumstances. Educators need to **take the time to ask students about any circumstantial difficulties they might be having**, build these questions into individual discussions, and make individual adjustments if needed, e.g. to assessment deadlines.

As mentioned above, these are not the ideal conditions for learning, and if students are experiencing negative feelings and stress, they need to be directed to health and counselling services and to feel supported by the education provider. The education provider can play a role in offering structure, empathy, and connection – students could benefit from engaging in online peer-to-peer contact and support (i.e. social presence). While education providers are experiencing their own issues, it is useful to remember that **the students often signed up to their courses expecting a face-to-face education experience** and did not factor in the extra monetary and personal cost of undertaking their degree under the current circumstances. The student's personal situation needs to be addressed because it affects attrition, progress, and learning generally, and the ability of the educator to detect issues is reduced when there are no face-to-face cues to rely on.

Summary

This paper has presented a set of practical guidelines designed to help students learn effectively and be supported in the online environment. There is a need to clearly communicate the intention behind each online interaction and to present materials in a predictable orderly manner, with clear explanation of their purpose. Many of the social cues and opportunities that help students make sense of their coursework do not translate well to online learning, so the educator needs to anticipate difficulties and offer structured solutions. The student will benefit from being able to concentrate on their work as a result, rather than being hampered by issues from the way in which they are being taught. As for technological issues associated with online teaching, there are many potential barriers both for the educator and the student which need to be kept in mind, but also many solutions. Finally, there are difficult social and personal circumstances that affect learning and progress, so time needs to be taken to understand these.

Author's Bio

Dr Müller teaches international nursing students at Flinders University. She designs mobile apps, multimedia, and computer games for language learning, and she has many publications in the area of digital learning, student support, and linguistics. Among her recent teaching accolades are the National Excellence Award for Best Practice in International Education in 2018 from the International Education Association of Australia, and a Citation for Outstanding Contribution to Student Learning by the Australian Awards for University Teaching. She is a nationally accredited IPEd editor and is the Chair of the Standing Committee for Professional Development in that organisation. Dr Müller is also a member of the governing Council of Flinders University.

Readings and Links

Learning to Teach Online – A course by UNSW:

<https://ltto.unsw.edu.au/>

Ensuring continuity of learning during enforced absence:

www.jisc.ac.uk/guides/ensuring-continuity-of-learning-during-enforced-absence

Australasian Council on Open, Distance and e-Learning (ACODE):

<https://www.acode.edu.au/>

Community of Inquiry research (especially for teacher presence and social presence):

<https://coi.athabascau.ca>

Universal Design Guidelines:

www.udlguidelines.cast.org/

Web Content Accessibility Guidelines (WCAG) and other tests:

www.guides.service.gov.au/content-guide/accessibility-inclusivity/

www.w3.org/WAI/standards-guidelines/wcag/

www.google.com.au/accessibility/

www.chinafirewalltest.com/

Online counselling sites include:

www.beyondblue.org.au

www.lifeline.org.au

www.suicidecallbackservice.gov.au

Official COVID-19 sites:

www.australia.gov.au/

www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/coronavirus-covid-19-current-situation-and-case-numbers

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