Inclusive Online Learning Guidelines



Background to the inclusive online learning guidelines

Online and blended learning models are becoming an increasingly important aspect of the Australian education system as more Universities are using technological resources to redefine the traditional classroom model.

The shift to virtual learning provides opportunities to create a more equitable and inclusive learning environment. Research has shown that inclusive online instruction can break down traditional barriers to University access, participation, and opportunity (<u>Dodo-Balu, 2018</u>). More information on Universal Design for Learning (UDL) is available in the appendices.

The <u>Science Classroom Inclusivity Guidelines</u> were released in 2019. These include five themes (diverse course content; personal pronouns; accessibility awareness; inclusive language; making assumptions) focused on face-to-face instruction. This document refines and extends these guidelines to include online and blended learning environments. There are several ways educators can make courses more accessible and inclusive. Some of these changes can be made easily while others require changes in skills and equipment - but they don't all have to be implemented at once.

Research suggests that the implementation of UDL fosters an inclusive classroom environment and accessibility of course materials and that this leads to positive student outcomes such as increased course satisfaction, engagement, and attitude (Alzawei, Serenelli, & Lundqvist, 2016). UDL is argued to reduce educational barriers for all students including students from diverse cultural and socio-economic backgrounds, mature-aged students, international students, and students with a disability (UNSW Teaching). Creating an equitable classroom environment for all students to thrive regardless of background or identity.

When possible, the principles of UDL should be incorporated into both the course and teaching design. By creating an inclusive and equitable classroom, students will not face unnecessary barriers that could impact their academic goals and performance.

Next, we provide tips on how to create a more equitable, diverse, and inclusive virtual classroom based on the principles of UDL.

The top guidelines are:

- 1. Communicate for Inclusion
- 2. Increase Digital Accessibility
- 3. Create Inclusive Digital Spaces



Communicate for Inclusion

Research has indicated that effective communication can positively impact student engagement, retention, and sense of community (Betts, 2009).

Effective communication is essential for setting expectations in any learning activity, but can also be used to demonstrate how your course is inclusive and values diversity. This can include messaging about particular issues, as well as the format, style, and consistency of communication.

Communicate Early

Communicate with students early to set class values and expectations, mitigate concerns, and share wellbeing resources. Aim to regularly check in with students regarding their needs and course content to foster a sense of community and inclusion. When communicating with students chose a consistent form of contact for a particular type of information (i.e., email, Moodle announcements, discussion boards). The convenor should also clearly indicate preferred methods of communication and provide an estimate of how long it will take to reply.

Communication Format

Consider the need for a range of communication methods – such as video for assignment tips, announcements for reminders, or linking essential information to course pages.

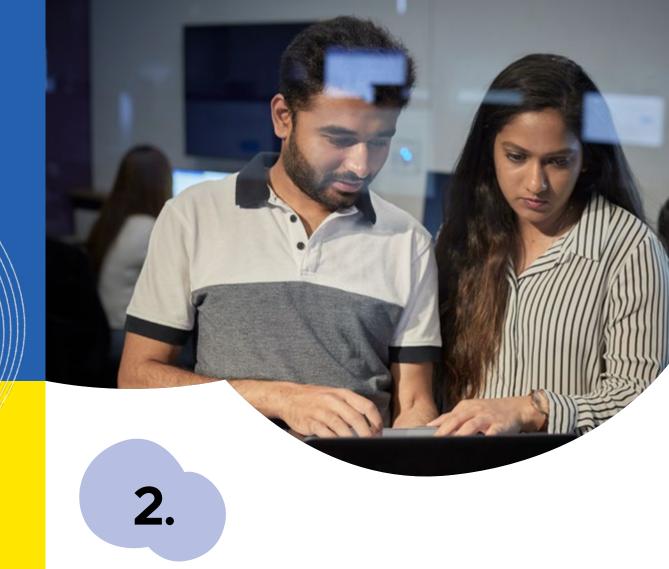
Communication Review

Consider performing a communication review to audit and plan how communication will occur with students. Think about the best forms of media to effectively relay the desired information. Below, we provide examples of how to use various communication methods to convey specific information to students. Academics will have their own preferences for using these methods. However, it may be useful to consider adopting a consistent approach across a program or School.

Communicate Inclusion

We also suggest inviting students to share with you any challenges they may have with online learning at the beginning of the term. If you're comfortable doing so, we also suggest introducing yourself and including your pronouns in your email signature or course profile to establish an inclusive and safe space. Convenors can also enable students to provide their pronouns and preferred names privately via email or a confidential survey. To help with this, there's a checklist for "Welcome Emails" in the appendix. It is important to note that not all students will feel comfortable disclosing this information.





Increase Digital Accessibility

A number of factors can contribute to making course materials accessible and useable for students with different needs, learning styles, equipment, and preferences. These can include, for example, the format of materials (e.g. text versus audio material), web hosting, and resolution.

Aim to make all course materials accessible to students across a range of needs by implementing reasonable adjustments, such as providing video transcripts, Alt text images, ScreenTips, and documents that are compatible with different devices and software.

The <u>Disability Discrimination Act 1992</u> mandates institutions to ensure that individuals with disabilities have equal access to information and services. The <u>Web Content Accessibility Guidelines</u> (WCAG) outline a range of recommendations and guidelines to ensure that digital spaces and materials are equitable and more user-friendly in general. By providing accessible materials, you create an inclusive and welcoming digital environment for every student and eliminate unnecessary barriers to student success.

Below are some tips on how to make your Learning Management Systems (LMS) and digital course content more accessible through visual aids, video considerations, compatibility, and by supporting digital literacy.

Visual Presentation

- When using images, provide an Alt text image description. Alt text, short for "alternative text", describes an image for someone who is unable to view it. This is useful for people who have visual impairments or use <u>screen readers</u> devices which read out the alternative text associated with an image. If an image is decorative, either label it "decorative image" or use an empty Alt attribute (Alt = "") which allows screen readers to skip over non-essential images (Web Accessibility Tutorials). Use of Alt text for all non-text content is consistent with WCAG guidelines.
- When converting documents into a PDF format ensure to includes tags. Tags
 improve accessibility by providing a clear reading structure which allows assistive
 technology, such as screen readers, to provide information in the correct order
 (Creating Accessible PDFs).
- Similar to Alt text, <u>ScreenTip</u> enables a user to provide a descriptive text of a link
 which increases the accessibility of digital materials and helps foster an inclusive
 digital space. When writing a screen tip consider indicating if the link opens to a new
 window or replaces the previous page. This enables people who use screen readers
 to know if they have navigated away from the previous page.
- Consider colour contrast ratios when designing your course. Certain colour combinations and ratios can make it challenging to distinguish between different elements on the screen
- <u>WebAim</u> and <u>Contrast Checker</u> offers a free contrast checker that can be used to test the contrast elements of your LMS. You can explore the colours used on your Moodle site, and change them by going to "Edit Settings" and then scrolling down to "Course Format" and changing toggle foreground and background.



Video and Audio Considerations

- When hosting virtual class events, consider using a platform that offers automatic
 live captions such as Microsoft Teams. This function needs to be enabled for
 Teams Live events. At the beginning of the event, instruct students on how to enable
 captions utilising the chat function through your virtual platform. If possible, include
 a transcript of the event when distributing the recording.
- When hosting an online lecture ensure your whole face and especially your mouth is visible in the screen for lipreading. It also helps to not be silhouetted against a bright background which can create a dark shadow around your face.
- When possible, use headphones with a microphone so that speech quality is good

 this is also important if automatic captions/transcription is being used.
- Consider hosting videos on platforms that enable users to turn on captions. Also provide video resources that enable users to choose this feature. Many news-based video archives provide transcripts along with their video content.
- Podcasts or other audio-based material should be provided along with a transcript if possible.

Compatibility

- Readings are an essential component of any course. However, some online readings may not be compatible with devices, and software, such as screen readers. This could create a barrier for students who are unable to access materials. To promote inclusivity, strive to verify the accessibility of course materials (Pearson & Koppi, 2002).
- Acrobat Pro is available to all UNSW staff, and can check, fix, and report on the
 accessibility of PDFs. When providing students with materials in PDF format consider
 using the Acrobat Pro accessibility check feature to ensure the accessibility of the
 document. Where possible also include Word Documents and PowerPoint files
 which are more compatible for screen readers compared to PDFs.

Textbook and Course Reading Access

- Full time students spend an average of \$602 per year on textbooks (<u>Universities Australia</u>, 2012). Financial barriers can negatively impact a student's educational journey, particularly students from low SES backgrounds (<u>Universities Australia</u>, 2017).
- Fortunately, there are several ways to make course reading material more accessible. These include making course readings available through the UNSW library platform Leganto. Leganto can organize, store and present course readings to students online, and can comprise elements of e-books, book chapters, journal articles, reports, and weblinks. Using Leganto also helps to ensure that Copyright responsibilities are observed. Notes and annotations to the entries can be made (e.g., to inform students which parts of an entry to read or which entries are essential reading) and the reading list can be "rolled over" from year to year and/or shared between courses. The Open Textbook Library provides texts to students online for free, and may include texts relevant to your course.



Virtual assessments provide both unique opportunities and challenges for course convenors, such as ensuring academic integrity. While locked-down browser technologies reduce these concerns, they also pose an accessibility challenge. Locked-down browser software can disable the use of assistive technologies, disadvantaging students who rely on these resources (Kennesaw State University, 2020). When possible, provide accommodations for students who use assistive technology. Also consider providing student access to the assessment platform in advance so they can test the compatibility of their assistive technology.

When creating virtual assessments, be mindful of the accessibility challenges associated with specific question types. For example, hotspot and drag and drop questions can pose challenges for students who are visually impaired. When possible, create alternative question types for students who may have difficulties with specific question types.

Supporting Digital Literacy

Learning management systems (LMS) are becoming an essential component of course design. Students are expected to navigate systems, such as Moodle, to access course information, materials, and evaluations. However, these systems can be challenging to navigate for students with a range of needs. We suggest demonstrating at the beginning of the course how to use your LMS and clearly indicate where students can access announcements, assignments, evaluations, and any other essential materials. The <u>UNSW Science Moodle course shell</u> includes a Moodle orientation under the user tour toggle.

Consider using a consistent LMS design and layout in all offered courses by importing either sections or the entire <u>UNSW Science Moodle course shell</u> developed by the UNSW Science Education Team. Research suggests that course design heavily influences students' participation and success in a course (<u>Anthony, 2012</u>). Courses should therefore aim to have consistent LMS design and layout to support students and reduce the time needed to learn and navigate different systems and designs (<u>Pearson & Koppi, 2002</u>).

Developing digital literacy is an increasingly important skill for university graduates (Eshet-Alkalai, 2004). When asking students to use or produce digital resources for assessment (e.g., creating videos, blogs, web entries), consider providing tools to assist students to become familiar with producing such resources (e.g., resources on how to edit a video; examples of appropriate and inappropriate responses), in the same way that guidance for writing a report or essay would be provided. Consider the possibility of enabling choice in the format of digital assessment materials (e.g., video, audio presentation, podcast).

Privacy

Mandating the use of webcams can infringe on a students' right to privacy. Students may be concerned with the security of the network and prefer not to turn on their cameras. In other cases, webcams could reveal personal details such as socioeconomic status, home environments, and other sensitive information students would not want to disclose to classmates. The use of virtual backgrounds may mitigate some of these concerns (Fontaine, 2020). When possible, communicate to students that they are welcome to use virtual backgrounds. The UNSW Brand Hub also offers a variety of UNSW virtual backgrounds available to download. However, remain flexible if students feel uncomfortable having their camera on.

Engagement Opportunities

Students without consistent and stable internet access may not have the bandwidth required to support turning on their video during class. Mandatory video policies could therefore pose unnecessary barriers for some students and negatively impact their course experience. The broadest piece of advice we can offer is to incorporate engagement opportunities that are not dependent on webcam use such as polls, quizzes, and chat functions.

Students with dexterity or coordination difficulties may need extra time to take part in polls, put questions in the chat, or unmute themselves to contribute to discussion. When possible, ensure there is ample time for students to participate in engagement opportunities.





Create Inclusive Digital Spaces

Encouraging interaction in virtual classrooms is something we all want to achieve. Making interactions in online spaces inclusive is another important way to make sure we create a great experience for everyone.

Names and Pronouns

- Allowing students to provide their pronouns and preferred names contributes to a
 welcoming and inclusive classroom environment. More details on this can be found
 in the <u>UNSW Student Gender Affirmation Guidelines</u>. Indicating your own preferred
 name and pronouns signals that you welcome and encourage others to do so as well.
 They may not indicate their pronouns but communicating that they can signals
 values of inclusion for everyone, regardless of how they identify.
- There are lots of ways to do this, including in your welcome messages at the start
 of the course, in your staff profile, on email signatures, and video conferencing
 applications such as <u>Zoom</u>.

Time Zones

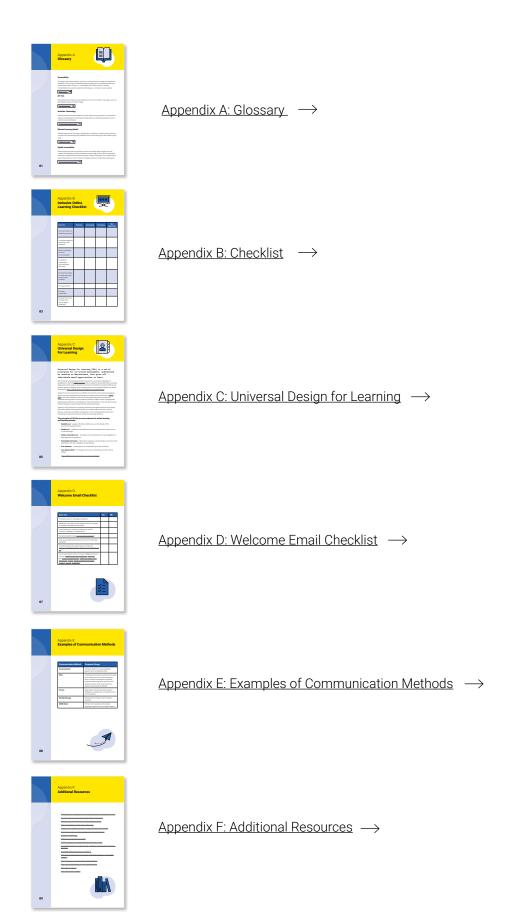
- With the shift to virtual learning, students may not all be in the same time zone.
 Students may not be able to participate in synchronous class lessons and activities due to time zone constraints. Consider adding asynchronous components to the class which would allow students to engage and participate in the course regardless of time zones.
- Clearly state the time zone used for synchronous activities and deadlines.

Culture

- The <u>Science Classroom Inclusivity Guidelines</u> outlined the importance of including a
 variety of cultural perspectives and examples in course materials. Extending this to
 include awareness of cultural events can foster inclusion, sharing of perspectives
 and locate learning in a wider social context. Example strategies include considering
 adding culturally significant dates and holidays to both your personal calendar and
 course calendar (e.g., NAIDOC week, Ramadan, Diwali, Lunar New Year; Yom Kippur).
 Inclusion of relevant awareness initiatives such as Mental Health Month in October
 could also be considered.
- When hosting synchronous events, workshops, or lectures, include an
 <u>Acknowledgement of Country</u> and invite participants to share the land on which they
 live in the chat. The <u>AIATSIS Map of Indigenous Australia</u> is a great resource for staff
 and students who may not know on which land they reside.
- Keep in mind that students may need to leave synchronous activities to observe times of prayer. When possible, be mindful how this may affect course events, deadlines, and assessments.



APPENDICES



REFERENCES

- Dodo-Balu, A. (2018). Fairness and Inclusion: Online Learning as an Enabler of Australian Higher Education Policies Aimed at Student Equity and Social Justice. International Studies in Widening Participation. Retrieved from
- https://www.academia.edu/38301448/Fairness_and_Inclusion_Online_learning_as_a n_enabler_of_Australian_higher_education_policies_aimed_at_student_equity_and_s ocial_justice
- UNSW Teaching (2020). Universal Design for Learning. Retrieved from https://teaching.unsw.edu.au/universal-design-learning-udl
- CAST (2018). Universal Design for Learning Guideline version 2.2. Retrieved from http://udlguidelines.cast.org/more/research-evidence
- Al-Azaei, A., Serenelli, F., Lundqvist, K. (2016). Universal Design for Learning (UDL) A Content Analysis of Peer-Reviewed Journal Papers from 2012 to 2015.
 Research Gate 16(3), pg. 39-56. Retrieved from https://www.researchgate.net/publication/304040341_Universal_Design_for_Learning_UDL_A_Content_Analysis_of_PeerReviewed_Journal_Papers_from_2012_to_2015
- Federal Register of Legislation (2018). Disability Discrimination Act 1992. Retrieved from https://www.legislation.gov.au/Series/C2004A04426
- Web Content Accessibility Guidelines (WCAG) 2.1 (2018). Retrieved from https://www.w3.org/TR/WCAG21/
- Fontaine, Z. (2020). Zoom's Virtual Backgrounds Help Fight Inequality. Medium. Retrieved from https://medium.com/age-of-awareness/zooms-virtual-backgrounds-help-fight-inequality-624da895634e
- Anthony, K.V. (2012). Analyzing the Influences of Course Design and Gender on Online Participation. Online Journal of Distance Learning Administration. 7(3).
- Retrieved from https://eric.ed.gov/?id=EJ990669
- Pearson, E.J., & Koppi, T. (2002). Inclusion and Online Learning Opportunities: Designing for Accessibility. ALT-J, 10:2, 17-28. Retrieved from https://www.tandfonline.com/doi/pdf/10.1080/0968776020100203
- Bexley, E., Daroesman, S., Arkoudis, S., & James, R. (2013). University Student Finances in 2012. Universities Australia. Retrieved from
- https://www.universitiesaustralia.edu.au/wp-content/uploads/2019/06/Final-report-University-student-finances-in-2012.pdf
- Universities of Australia (2017). At a Glance: The 2019 Universities Australia Student Finances Survey Retrieved from https://www.universitiesaustralia.edu.au/wp-content/uploads/2019/06/Student-Finances-Survey-Factsheet.pdf
- UNSW Library (2020). Leganto Guide: Leganto. Retrieved from https://subjectguides.library.unsw.edu.au/leganto

- Betts, K. (2009) Lost in Translation: Importance of Effective Communication in Online Education. Online Journal of Distance Learning Administration, 12(2).
- Retrieved from https://www2.westga.edu/~distance/ojdla/summer122/betts122.
- Ashton, C. (2018) I Used the Web for a Day Using a Screen Reader. Smashing Magazine. Retrieved from https://www.smashingmagazine.com/2018/12/voiceover-screen-reader-web-apps/
- Wyatt, A. (2019). Adding a ScreenTip. Tips.net. Retrieved from https://word.tips.net/ T000042_Adding_a_ScreenTip.html
- Adobe Acrobat (2020). Create and Verify PDF Accessibility. Retrieved from https://ht
- Open Textbook Library. Retrieved from https://open.umn.edu/opentextbooks/
- UCSF Lesbian, Gay, Bisexual and Transgender Resource Center. Zoom Profile. Retrieved from https://lgbt.ucsf.edu/pronouns-matter-virtually
- WebAim. Contrast Checker. Retrieved from https://webaim.org/resources/contrastchecker/
- Eshet Alkalai, Y. (2004). Digital Literacy: A Conceptual Framework for Survival Skills in the Digital Era. Journal Education of Multimedia and Hypermedia, 13(1). Retrieved from https://www.learntechlib.org/p/4793/
- Kennesaw State University (2020). Enhance your Online Course Delivery. Retrieved from https://dli.kennesaw.edu/enhance-your-online-course-delivery/integrity-online-exams/untitled.php
- What is Learning Management System & It's Examples. SimplyInfo. Retrieved from https://www.youtube.com/watch?v=-7PM9tGKyo8
- Story, M. F. (1998). Maximizing Usability: The Principles of Universal Design. Assistive Technology, (10)1, 4 – 12. Retrieved from https://www.tandfonline.com/doi/abs/10.1 080/10400435.1998.10131955