Everyone on board: Creating accessible online learning through universal design

Miriam Edwards
The University of Melbourne,
Australia

Sandra Boyd
Charles Sturt University,
Australia

This symposium will examine the potential barriers experienced by students with disability who choose to study online. Participants will consider the challenges as well as the opportunities educational technology affords an increasingly diverse student cohort.

Co-presented by an educational designer and a student liaison officer specialising in assistive technologies, the benefits of proactively addressing accessibility will be argued. Participants will be introduced to the principles of Universal Design for Learning (UDL) and how they may be incorporated into the curriculum, with a particular focus on online delivery. Participants will be invited to critique their own teaching materials such as Learning Management System (LMS) sites, lecture materials and public facing websites to identify accessibility issues. Participants will experience practical strategies and tools to increase accessibility within their learning design and teaching. These activities will be complemented by a list of resources for future reference. Participants will leave the session with a heightened awareness of accessibility issues within higher education and what actions they can take to be more inclusive within their own professional practice.

Keywords: Universal Design for Learning (UDL), university, disability, inclusive teaching

Why worry about disability issues within online learning and teaching?

In 2015, over 2 million Australians between the ages of 15 and 64 were living with disability. Trends within this group show an increase in the completion of year twelve or equivalent; growing from 25.6% in 2012 to 41.0% in 2015 (Australian Bureau of Statistics, 2017). Obvious indicators such as these suggest universities will attract more students with disability in coming years.

The Department of Education and Training explain how educational institutions can meet their obligation to students with disability. This includes a requirement to make reasonable adjustments to curriculum for students who self-identify and register for assistance. The process involves consultation with individual students, consideration of whether adjustment is necessary, identification of a reasonable adjustment and finally the making of that adjustment. If the educational institution complies to this process, they cannot be said to have discriminated (Department of Education and Training, 2005, p. 3).

The problem with the current protocol of students self-identifying to initiate inclusive learning design is two-fold. First, this places the onus on the person with the least power in the relationship (DET, 2015, p.ii). Secondly, it occurs after the educational design process, often leaving the lecturer on the 'back foot'. One strategy to address such issues is to incorporate principles of UDL and web accessibility into the curriculum design process and to support such a plan with targeted professional development for lecturers.

Applying UDL to online learning and teaching

Universal design is the process of creating products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design (CUD, 1997). In the application of universal design to learning, lecturers anticipate the presence of students with diverse abilities and make design decisions that result in learning opportunities being available to all, rather than focussing on what might be considered the 'typical' student (Burgstahler, 2015, p. 71). This approach acknowledges that students with disability may learn differently, but are not less academically capable (Australian Disabilities Clearinghouse, n.d., para. 2). Universally designed online curricula and course materials should provide learning experiences which address three broad objectives. They are:
1.   Students should be able to interact and respond to materials in multiple ways,
2. Students should be able to find meaning and thus motivate themselves in different ways, and

3. All web-based course material must be accessible to all (Australian Disabilities Clearinghouse, n.d., para. 3).

The accessibility of webpages, as in LMS content or online readings, is measured against the *Web Content Accessibility Guidelines* (WCAG 2.0). These guidelines cover a variety of recommendations for making web content accessible to people with a range of disabilities (W3C, 2018, para.2). Examples include descriptive text alternatives for images, meaningful URLs, transcriptions for videos, and clear navigation. These types of practices seem reasonable, perhaps even common sense in nature, but there is no guarantee they happen within online university courses. Perhaps this is due to several factors such as increasing demands placed on lecturers, the ever-growing list of educational technologies and faculty initiatives around new pedagogical strategies.

Empowering lecturers to be inclusive teachers

The current lack of training to equip lecturers in supporting students with disability is recognised internationally (see, for example, Burgstahler, 2015; Cunninghame, Costello, &Trinidad, 2016; Yuknis, 2014). Key findings from the *Final report on the 2015 review of the Disability Standards for Education 2005* are consistent within these claims, reporting Australian educators are aware of disability standards, but unclear as to how they should be implemented within their teaching practice (DET, 2015, p. v). Kent's 2016 investigation into the experiences of Open University Australia students with disability echo these concerns (p. 154).

Educational designers and disability support staff are well placed to collaboratively address this need. Opportunities exist in the area of professional development for university staff (both academic and professional) along with consultative roles throughout the curriculum development process.

References

Australian Bureau of Statistics. (2017). *Disability, ageing and carers, Australia: Summary of findings* (No. 4430.0). Canberra: Author.

Australian Disabilities Clearinghouse (n.d.). *Universal Design* [Fact sheet]. Retrieved from http://www.adcet.edu.au/disability-practitioner/course-design-and-implementation/universal-design/

Burgstahler, S. (2015). Opening doors or slamming them shut? Online learning practices and students with disabilities. *Social Inclusion, 3*(6). 69-79. doi: 10.17645/si.v316.420

Center for Universal Design (CUD). (1997, April 1). *The principles of universal design, version 2.0*. North Carolina State University website. [Fact sheet]. Retrieved from https://projects.ncsu.edu/ncsu/design/cud/about_ud/udprinciplestext.htm

Cunninghame, I., Costello, D., & Trinidad, S. (2016). *Issues and trends for students with disability: Review of NCSEHE funded research*. Retrieved from https://www.ncsehe.edu.au/wp-content/uploads/2016/08/Issues-and-Trends-for-Students-with-Disability-Review-of-NCSEHE-Funded-Research.pdf

Department of Education and Training (2005). *Disability Standards for Education 2005 plus guidance notes*. Retrieved from http://docs.educaiton.gov.au/node/16352

Department of Education and Training (2015). *Final report on the 2015 review of the disability standards for education 2005*. Retrieved from: https://docs.education.gov.au/documents/final-report-2015-review-disability-standards-educaiton-2005

Kent, M. (2016). *Access and barriers to online education for people with disabilities, Report submitted to the National Centre for Student Equity in Higher Education (NCSEHE)*. Retrieved from: https://www.ncsehe.edu.au/publications/access-and-barriers-to-online-education -for-people-with-disabilities-2/

W3C. (2018). Web Accessibility Initiative. *Web content accessibility guidelines (WCAG) overview*. Retrieved from: https://www.w3.org/WAI/standards-guidelines/wcag/

Yuknis, C. (2014). Removing the Disability from Distance Education. In T. Yuzer, & G. Kurubacak (Eds.), *Handbook of Research on Emerging Priorities and Trends in Distance Education: Communication, Pedagogy, and Technology* (pp. 156-168). doi:10.4018/978-1-4666-5162-3.ch011