CM 640 Special Topics
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Enhancing Learning Experiences: Accessibility and Usability in Online Courses

As online courses continue to gain popularity, it becomes increasingly crucial for institutions of higher learning to prioritize accessibility and usability. The matter goes beyond merely adhering to legal requirements. These principles play a vital role in ensuring equal access to education, advancing inclusivity, and promoting retention and engagement. Usability and accessibility not only benefit students with disabilities but also enhance the learning experiences of all students.

The onset of COVID-19 abruptly shifted traditional education into the online environment. While many instructors and students had to quickly adapt to remote learning in 2020, the prevalence of online courses had been growing steadily for nearly a decade. By 2021, about 60% of all postsecondary degree seekers in the U.S. took at least some online classes (Hamilton, 2023). Online learning will only continue to increase.

For many, online courses are attractive for their flexibility and convenience. One of the benefits to online learning is the option for education to take place anywhere and at any time. To get the full measure of this benefit, the courses must be accessible to all (Hidalgo & Watson, 2021). Creating environments that are both usable and accessible is paramount to the user experience.

Usability refers to the ease with which users can navigate and interact with a system, while accessibility applies to creating an inclusive learning environment for individuals with disabilities. When usability and accessibility are combined, a course is designed “to benefit as many people as possible and meet the needs of people with disabilities.” (Ueki et al.)

Public universities must comply with legal requirements such as the Americans with Disabilities Act of 1990 (as well as the 2008 amendments to the act), and Section 504 of the Rehabilitation Act of 1973. These mandate access to education and services for individuals with disabilities.

Sheryl Burgstahler, Director of Accessible Technology Services at the University of Washington, finds it to be easier and ultimately less expensive to apply universal design principles at the outset of course design. "The result is more than just improved student success rates. I think accessibility technologies improve learning for all students, and students with disabilities benefit in the same way" (Burgstahler, n.d.).

There are many ways in which accessibility features support students who do not have disabilities. In *Online Teaching At Its Best*, the authors note that accessible courses facilitate mobile learning:

> Features that help all students include striking color contrast, clean and easy-to-read font styles, meaningful headings, well-organized narratives, and descriptive links to websites. Many people are not blind, but simply have low vision or trouble distinguishing colors, often seeing a color as gray, yellow or beige. Others juggle tasks, such as reading email on a laptop while making supper in the kitchen, replying to a discussion or email or riding a bus, working under fluorescent lighting that causes jumpy text on screen, listening to a podcast while walking across campus or in a noisy space, or studying during a gym work out. Besides hearing, visual, or physical limits on their abilities to access materials, some students have dyslexia or attention deficit hyperactivity disorder, and course formatting can hinder or help how well they can comprehend your course content. (Nilson & Goodson, 2018, p. 166).

Clear and concise instructions, intuitive navigation, and responsive design contribute to a seamless learning experience, allowing students to focus on the subject matter rather than struggling with the platform itself. Well-designed courses present information in a logical and organized manner, making it easier for learners to locate relevant resources, assignments, and discussions. Features such as transcripts and subtitles allow students to review course content at

their own pace and accommodate different learning speeds. Digital accessibility enhances the overall learning experience for students.

Attention to the user experience also promotes student engagement. A user-friendly interface encourages active participation by reducing barriers to interaction, fostering a sense of belonging, and encouraging students to contribute to discussions and collaborate with peers (Taylor, et al., 2015). Usability empowers students to fully engage with the course, thus enabling them to develop a sense of ownership and motivation. By ensuring that all students can access and navigate course content effectively, an inclusive learning environment supports student success.

Universal design for learning (UDL) is "a strong framework for facilitating usability in the online classroom and emphasizing other important issues in a technological age from a pedagogical perspective" (Vie, 2018). UDL reduces barriers to learning and takes into account learner variability. UDL guidelines provide choices for students to personalize their learning experiences while also providing them with the tools and strategies needed to become expert learners (Adams, et al., 2021).

Features such as multimedia integration, interactive exercises, and varied assessment methods enable students to engage with the course material in ways that align with their preferred learning styles (Nilson & Goodson, 2018). For instance, visual learners may benefit from infographics and videos, while auditory learners may prefer audio recordings or podcasts. By incorporating multiple modalities, online courses accommodate various learning preferences, resulting in enhanced comprehension and retention of the material.

Another experience factor to consider is instructor presence. Dawn Dunaway, an instructional designer who has been studying instructor presence in online courses, says that "the

biggest student complaint we hear in online learning is that when there is a lack of instructor presence, students feel isolated. This greatly impacts student success in connecting to the content and course. Instructor-made videos are the best way for instructors to establish teacher presence in the course. Seeing their face, and hearing their voices, students develop trust and a relationship with instructors that cannot be developed as fully or as quickly through text alone" (D. Dunaway, personal communication, June 27, 2023).

When online courses offer an exceptional user experience, students have more successful outcomes and an impetus to choose similar courses in the future. By prioritizing accessibility and usability in online courses, instructors "can ensure equitable access for all students seeking opportunities afforded by higher education in an increasingly globalized and pluralistic world" (Hidalgo & Watson, 2021). The pursuit of these principles reflects an educational institution's dedication to inclusivity, diversity, and equal opportunities for all students.

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