


Chapter 1

Inclusive Digital Learning: Standards, Strategies, and Trends in Accessibility

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ABSTRACT

As online and hybrid programs become increasingly common in higher education, ensuring digital accessibility is essential for fostering inclusive learning experiences. This chapter equips faculty, administrators, and instructional designers with strategies for authoring digitally accessible content. It outlines key legislation related to accessibility compliance, including the ADA, Sections 504 and 508 of the Rehabilitation Act, and Title II updates. Plus, the chapter highlights Web Content Accessibility Guidelines (WCAG), Universal Design for Learning (UDL) principles, and other frameworks for accessible design. It shares best practices and tools for developing accessible documents, multimedia, and mobile content. Lastly, the chapter explores the role of artificial intelligence (AI) in supporting inclusiveness, as well as other future trends in digital accessibility.

INTRODUCTION

Within the past 50 years, accessibility in higher education has expanded its focus from physical spaces, such as ramps and elevators, to digital learning environments. As course modalities shifted from face-to-face to online and hybrid formats, insti-

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tutions in the United States (U.S.) began recognizing the importance of proactive design of digital content, learning platforms, and virtual experiences. The practice of designing and delivering digital content and learning experiences that are usable by all people, including those with disabilities, without the need for adaptation or specialized design, is referred to as *digital accessibility* (Mancilla & Frey, 2020). This transition toward inclusivity, equity, and learner-centered practices in digital environments removes barriers before they impact student success.

Among higher education students, online and hybrid learning options are increasingly popular for the flexibility and convenience they offer busy adult learners. In the U.S., more than half of college students complete at least one online course (National Center for Education Statistics, 2021), an upward trend that continues in the post-pandemic era. A national study recently indicated that 30% of students with disabilities prefer online asynchronous courses to traditional in-person formats (Mowreader, 2024). When designed well, online learning offers an equitable opportunity for achievement and academic degree completion for all learners. However, students with disabilities may face systematic barriers accessing digital materials, such as uncaptioned media, insufficient color contrast, or unformatted documents (Bartz, 2020; Shpigelman et al., 2021). Institutions have a legal and ethical imperative to ensure all instructional materials are inclusive and equitable. As online education continues to expand, the need for proactive, institution-wide accessibility initiatives are critical.

Faculty, administrators, and instructional designers (IDs) must navigate the complex landscape of accessibility compliance considering federal and state regulations, emerging and assistive technologies, and pedagogical strategies. Yet, accessibility is more than a compliance issue; it is a transformative praxis that enhances learning for all students. Accessibility benefits a wide range of learners, including non-traditional students, multilingual learners, and students in low-bandwidth environments. Fostering an inclusive culture should be an institutional priority that encompasses policy development, faculty training, and technological resources. Common barriers to achieve these priorities in digital learning environments include a lack of financial resources, time, and technical skills (Mancilla & Frey, 2020). In addition, there is often confusion among institutional stakeholders regarding the parties responsible for ensuring instructional materials are accessible (Linder et al., 2015; Lomellini et al., 2024).

This chapter equips higher education professionals with the tools and knowledge to build inclusive digital learning environments that benefit all students. Aimed at faculty, administrators, and IDs, it introduces professional guidelines, actionable strategies, and emerging trends that foster a culture of accessibility. The chapter highlights key legislation related to accessibility compliance and other foundational frameworks for accessible design. It presents practical strategies for authoring and

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