

Holistic accessible online education: intersection between digital accessibility, human experience and systems design

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Abstract

Design is a critical aspect of online education, providing methods to understand who learners are in order to create learning environments and learning experiences to meet their learning goals. Through design thinking, online education providers can adopt a learner-centred approach by iterating in both development and teaching phases of educational provision, based on review and learner feedback. Most emphasis of design is on learning design, yet there is a complex ecosystem through which learners navigate, from applying to study, through to graduation or certification. Typically, each stage of the learner journey is owned by a different part of the institution, raising the potential for an experience that is fragmented and processes that are not always created for the learners' benefit. Through a holistic design approach, using techniques such as systems thinking, online education providers can identify the dependencies and impacts on the complete learner experience. This has particular relevance when considering the support of disabled students and the human experience of interconnected and complex educational systems.

Focusing specifically on digital accessibility (the means for which disabled students are provided with an equitable access to digital education), this session starts by positioning current practice that focuses on technical compliance as insufficient to define a design approach to accessibility. The WCAG international standards (W3C, 2024) provide a solid foundation for digital accessibility, with principles forming the legal basis for accessible practice (Directive (EU) 2019/882; Public Sector Bodies (Websites and Mobile Applications) (No. 2) Accessibility Regulations 2018), and a checklist of technical measures. However, the implementation of standards is intertwined with decisions over administrative processes, course content, navigation and choice of learning activities, which may compound existing barriers or through complexity of user experience introduce new demands on disabled learners. Furthermore, application of any standard such as Universal Design for Learning (CAST, 2018), requires an iterative and flexible approach (Cai & Robinson, 2021), that acknowledges a breadth of possible human experiences of the online learning environment.

Building on a case study that identified the value of user testing to explore the human aspects of digital accessibility (Cornock, 2024), this session looks further at how digital accessibility can be embedded throughout online education organisational systems and integrated into experience design. It is argued that institutions will start to see greater demands for working across functions to consider digital accessibility from the human-experience perspective, and not just technical compliance. The contribution of

design-thinking across each function in the organisational system keeps the focus on the student and their objectives, whilst the framework of systems thinking embraces the complexity of diverse human interactions towards a more accessible online learning experience. There are clear applications of this thinking to current and emerging questions in online education, including the support of disabled students remotely, community-building and sense of belonging, and the equitable use of AI and related policies.

This session prompts participants to consider a) their readiness for working in a cross-functional way to address digital accessibility, b) the design-thinking currently applied to digital accessibility and c) where in their own educational systems human experience, such as user testing, could provide specific insights into the full learner experience, including identifying opportunities to improve digital accessibility.

References

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