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Inclusive Learning: Integrating Accessibility Resources into A Digital Health Learning Environment

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Abstract

This study aims to describe the implementation of Accessibility Resources (AR) in the Virtual Learning Environment of the Digital Health Specialization course (VLE-DHS). The implementation process was organized into two stages: (1) planning and implementation, involving the identification of minimum accessibility requirements and the application of accessible programming best practices; and (2) accessibility evaluation and validation, conducted through manual assessment using keyboard navigation, testing with screen readers, and automated verification with official accessibility tools, enabling the identification of issues not detected in the previous stage. Accessibility Resources were incorporated across all pages of the VLE-DHS, including keyboard shortcuts that allow direct access to different sections of the environment, facilitating navigation for users who rely exclusively on keyboard input; a high-contrast mode designed for users with moderate to severe visual impairments, which alters the interface color scheme by adopting a dark background and light text and can be combined with font size adjustments; and a site map that hierarchically organizes pages, allowing users to visualize the platform structure and directly access desired content. The planned and validated implementation of Accessibility Resources in virtual learning environments contributes to reducing usability barriers and promoting more inclusive educational settings. These findings underscore the importance of incorporating accessibility as a structural component in the development of digital educational platforms, thereby expanding equitable access to digital health education.

Keywords: Digital Inclusion; eLearning; Graduate Education; Persons with Disabilities; Specialization