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Towards a universal design in Psychometrics: Designing an accessible course for students with visual impairments in an online environment

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Oral presentation

Towards a universal design in Psychometrics: Designing an accessible course for students with visual impairments in an online environment

Author

Ariadna Angulo-Brunet, Isabel Duarte-Lores and José Israel Reyes

Affiliation

Universitat Oberta de Catalunya, Universidad de la Laguna and Universitat Oberta de Catalunya

Abstract

The Psychometric course is part of the Psychology degree program at the UOC. This is an online University that operates asynchronously. Students have access to various learning materials (e.g., texts, videos, forums) to study the course content and engage in activities designed to achieve the expected learning outcomes. This course introduces students to the study of a test's psychometric properties using simulated data that represent a plausible research scenario. The course has two key objectives: first, to provide students with access to a real test manual from a commercial publisher, allowing for an in-depth analysis; and second, to engage them in data analysis using JASP software to draw meaningful conclusions.

From the outset, the course was designed with accessibility in mind, ensuring the use of open-source software that does not require high-performance computers. Additionally, it was important that the software remained actively maintained and included a support channel for troubleshooting and inquiries. Despite efforts to apply universal design principles, the course presents challenges, especially for students with visual impairments. This presentation analyzes the teaching implications of adapting the psychometric course for visually impaired students. First, it examines the specific needs that arise within the course framework, particularly identifying the competencies and learning outcomes that are impacted by the current design. Second, it explores alternative solutions tailored to the online learning environment, considering that certain adaptations used in synchronous, in-person settings may not be feasible. Finally, the presentation introduces and evaluates the implementation of an ad-hoc adaptation in the course, emphasizing the importance of actively involving students with visual impairments in an iterative process to ensure a successful adaptation.
Beyond sharing insights from this teaching experience, this presentation aims to spark discussion on the importance of universal design in course development and the value of incorporating student perspectives, especially when working with diverse student populations.

Keywords

psychometrics, accessibility, universal design, inclusion

Primary authors: ANGULO-BRUNET, Ariadna; DUARTE-LORES, Isabel (Universidad de La Laguna); Dr REYES, José Israel (Universitat Oberta de Catalunya)

Presenters: ANGULO-BRUNET, Ariadna; DUARTE-LORES, Isabel (Universidad de La Laguna); Dr REYES, José Israel (Universitat Oberta de Catalunya)

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