

Improving Student Appreciation for Universal Design Using a Simulation-based Comparative Approach

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An introductory Human-Computer Interaction course exposes students to the guidelines, processes and models used in the creation of usable interactive software systems. These concepts revolve around the principle of user centeredness, where the user is the focal point of the software design. However, one area that tends to be overlooked is that of universal design; the process of designing user interfaces for as many users as possible. This article presents the results of an action research study in the use of a preliminary assignment to introduce 37 computer science students, which represented the entire course, to the importance of universal design. Students were provided with the opportunity to construct knowledge via a comparison exercise using software development tools developed specifically for teaching universal design. The results were analyzed using the SPSS statistical analysis tool. The major findings were that students' appreciation of universal design increased, however, greater time to complete the assignment may have led to better overall results.

Keywords: Computer Science Education, Universal Design, Human-Computer Interaction

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