

Web Usability: Comparing Differences in Verbal and Written User Response Data

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The growth of Web-based technologies challenges technology educators to understand, teach and apply the principles of effective Web site design. Computer-based usability studies traditionally involve the testing of an interface to determine whether it meets the tenets of good human-computer interaction design (Nielson, 2000). Among other types of data, these studies often rely on verbal and/or written comments from end-users who evaluate the Web site; however, usability research findings are only as good as the quality of user comment data collected. Few studies exist which explore differences in the quality of verbal and written comments or which uncover incongruity in user response data as part of a Web site usability study. To effectively teach and apply Web usability principles, additional research is needed to further identify not only Web usability issues affecting design decisions, but also to examine the nature of user comments when evaluating site design features and flaws. The findings presented in this paper are part of a larger Web usability study of an institutional Web site designed for non-instructional purposes. Qualitative research methods were used to explore differences in the quality of verbal and written comments and incongruity in user response data on certain usability factors. Research findings may prove to be valuable to Web site designers in understanding user behavior and user thought processes when engaged in Web site evaluation. This information may also help guide future Web usability research in understanding end-user responses and preferences. Usability factors investigated in the study included: consistency of site design, background and font color scheme preferences, font size and style, quantity and quality of graphics, navigational effectiveness, and overall site organization. The sample for the study consisted of 29 undergraduate students enrolled in various College of Business computing classes at a mid-sized eastern university. Qualitative data collection methods included a design walk-through, audiotaped talk aloud protocols, observation by a trained moderator, and written comments as part of a Web Site Usability Questionnaire. A trained observer instructed participants to proceed through a pre-defined set of search tasks at a College of Business Web site. After completing the search task phase, the observer instructed the participant to return to the Web site home page. Participants were then instructed to view various pages while completing the Web Site Usability Questionnaire, which featured an open-ended section for users to make written comments about each usability factor. The study also utilized videotape analysis of participants' verbal comments during the entire usability testing process. Results of the study will be reported following data analysis.