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Design Elements of an E-learning Course on Competence in Online Communication

The e-learning course "Online communication" presented in this paper is the result of a technological project funded by the Ministry of Science, Education and Sports of the Republic of Croatia and performed at the Faculty of Organization and Informatics in Varaždin. This project investigates information technologies for the education of internet users by means of flexible, self-paced and user-centered forms of learning.

The aim of the project is to enable the members of the Croatian academic community, and especially experts in the social sciences, to more conveniently deliver their knowledge to diverse internet audiences and to assist the advancement of knowledge and skills in online communication of students, employees and internet users in general. The goals of the technological project are also related to lifelong learning in governmental and business organizations, as well as to nonprofit projects in health communication, environmental protection and the like.

Except by the use of appropriate technology, the efficacy of on-line educational systems is determined by their instructional, esthetic and ergonomic features. The model of an e-learning system that we have designed presents an effort to associate the former elements with the attractive display of educational content, systems for self-assessment, exercises, and internet resources. Furthermore, we have attempted to realize an intuitively designed learning environment that enables flexible processes of knowledge acquisition that are paced according to the needs and capacities of learners.

Educational systems can be developed for individual, group, organizational, or mass education. Similarly, on-line courses could be designed for (1) high school or academic use, (2) corporate training, and/or (3) education of the general population of individual internet users. In our model of an on-line course, we have tried to create a system that could be used for all these three purposes and types of learners.

The educational content of the course is related to the knowledge and skills that are important in online communication, and also in part to the psychology of internet use. The content of the course was both an intended outcome of our project and the means for presenting our model of instructional, ergonomic and esthetic design in e-learning.

The content of the course is divided into the following thematic chapters:
- ***"self"*** (issues related to individual aspects of use of the internet, like computer literacy, cyberphobia, motivation for internet use, internet addiction, etc.);
- ***"interact"*** (topics related to internet-based communication with others, like online communication skills, channels, contexts, netiquette, etc.);

- ***"relate"*** (themes associated with online relationships, e.g. initiation of interaction, online conversation, attentiveness, self-disclosure, bonding, etc.);
- ***"present"*** (topics like self-presentation over the internet, homepage design, online presentation of products and organization, web design, etc.);
- ***"learn"*** (themes like finding information on the internet, selecting and evaluating information, e-learning, instruction and collaboration in e-learning, etc.);
- ***"secure"*** (topics like popular assumptions about internet security, risky habits of internet users, security and privacy issues, etc.).

The instructional design of our online course gives special attention to the elements of an e-learning environment that could have a positive motivational impact on learners. Brief quizzes, tests and exercises were designed for each subtopic of the online course, and (wherever possible) learners are provided with self-assessment questionnaires for feedback regarding their on-line communication skills and behaviors.

Many elements of effective web site design were also used to increase the motivation of learners and the usability of the online course. We tried to reduce the hierarchical organization of the educational content as much as possible and to enable access to all content elements and educational activities within the online course from one basic plane within the user interface. Graphic design of the online course was a separate issue since the potential users of the online course are not only university students but also corporate employees and the general population of internet users.

The design elements and several content modules of the e-learning course "Online communication" were evaluated by students who attended the university course "Psychology of the Internet" in a hybrid learning environment at the Faculty of Organization and Informatics in Varaždin.

Several software applications are also the result of our project. First, a very simplified Learning Content Management System (LCMS) was produced that employs advanced XML technologies with an effective user interface that can be used for different purposes and for the education of a large number of internet users and broad audiences. Second, a generator of web-based quizzes, tests and questionnaires was designed to enable interactivity and self-assessment. Third, a web application for online payment with major credit cards was developed to charge access to the online course for individual users from the general population of the internet.