Designing, Developing, and Implementing an Interactive Learning System

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ABSTRACT

This article describes what interactive, group driven distance learning can be and what it can produce. It provides a solution to one of the primary concerns facing distance learning today, which is to find ways to increase the amount of student involvement and thus maintain student interest in what they are learning. The learning needs of today's students are described. A significant technological part of the solution will be seen in the description of three online learner-centered delivery systems and their communication needs. The vision, goals, objectives, methodology, and results are discussed along with feedback from the participants. (Keywords: communication, digital expertise, delivery systems, interactive learning, instructional technology, methodology, research evaluation system)
INTRODUCTION

TODAY ELECTRONIC TECHNOLOGY is used widely in the home, workplace, schools, and for entertainment. The ubiquitous presence of technology available to the current generation has remarkably raised their educational expectations (Atkins, Van Houweling, Duderstadt, 2002). We are currently teaching the first generation of students who were “born with a mouse in their hand.” They are learning, working, playing, communicating, and forming a society that is completely different from current and previous generations. They expect their teachers to be in step with their technological skills; furthermore, they expect to control what, when, and where they learn (Tapscott, 1998, Oblinger & Oblinger, 2005; Carlson, 2005). Educators must catch up with this generation's digital expertise or become less able to meet their students' educational needs.

In an effort to involve students interactively via technology the University of Akron and its partners, The Committee for A Responsible Federal Budget (CRFB) and Internet2, with funding provided by the U.S. Department of Education, have worked to create learning systems that meet the learning needs of the current technology-wise generation. The first electronic product created for this purpose was An Exercise in Hard Choices™. The long term goal of this project was to reconstruct deliveries of the Exercise to include open broadcast delivery, facilitation, and resulting student deliberations in marking up the current Federal Budget.

BACKGROUND

The CRFB was created in 1980 by two congressmen, Robert Giaimo (D-CT) and Henry Bellmon (R-OK). In 1981 Carol Cox Wait became CRFB's first President and directed the first edition of An Exercise in Hard Choices. (see http://www.crfb.org/) It provided an educational process through which participants engaged in activities that simulated the Federal Budget process. A cross section of Americans (young, old, conservative, liberal and independent) participated in the pilot study of the paper-based Exercise. Their decisions were