Chapter VI

The Challenge of Teaching Effectively From a Distance

Valerie E. Polichar and Christine Bagwell
University of California, San Diego, USA

Distance learning has the potential to be as powerful at successful instruction as conventional classroom learning. To take advantage of this potential, planners and educators should apply known principles of perception and learning gleaned from cognitive, behavioral, educational, and perceptual psychological research. These principles include those of elaborative encoding, interactive learning, reinforcement and the spacing effect. These principles and their relationship to human learning are presented. Applications of these principles in conventional distance learning packages are discussed, including Web page development, course-in-a-box software, chat rooms, MUD/MOO environments, bulletin boards and real-time online lectures. Suggestions are provided to guide the course designer in developing effective instructional tools.

Janet, a student in a traditional classroom, is taken on a field trip as part of her studies of the history of her hometown. She goes on a walking tour of the downtown area with a guide. They stop to read plaques on important buildings, and Janet asks questions about some of the strange architecture she sees. Her guide points out aspects of the geography of the area that affected the development of the urban area; Janet looks up a street and sees the steep hill leading to an old church, and notices the smell of sea air in the still-bustling market center. After the tour, Janet is assigned a project: building a model of one of the buildings she has seen.

David is taking an online course in local history offered by his city's community college Website. Each week he connects and reads the latest chapter of the online text. He looks at online pictures of famous local

buildings. Every six weeks, he takes an online "midterm." If he passes two midterms and a final, he will pass the class and earn credits.

Most educators would probably agree that Janet's experience was "richer." But while one might suspect that it was also more effective for learning and retaining information about the subject, it might not be clear precisely why this is so. In fact, it is likely that her experience would lead to longer retention and better comprehension of the subject matter. This is not, however, an inherent disadvantage of distance learning. Rather, it is a difference in pedagogical approaches. With care, an online course can be made equally effective—even if not always equally sensually engaging. (It's hard to smell the sea through the computer screen!)

Instructors are spending increasing amounts of time and energy converting their courses into distance education. They create Web-based classes and local public broadcasting courses, and make use of packaged courseware, "drill-and-practice" software, and tools to enhance traditional face-to-face teaching environments. Students are beginning to embrace the new formats, but how certain can an instructor be that her students are truly learning the material? If she runs into one of them a year later, what will he be able to tell her about the subject matter? Will the student be able to translate and transfer what he has learned into his life, his work, his understanding of the world?

Much of the research into technology education has focused on the hurdles of attracting and keeping students' attention, interest and participation. For example, the TLT Group's respected Flashlight Program (1999; 2000; 2001) focuses on analysis of accessibility, technology barriers, and tracking use of educational technology installations. An article on "The effects of electronic classrooms on learning English composition" (Stinson & Claus, 2000) contains many references to aspects of the class that students "liked" or "disliked," and focuses on faculty/course evaluations as a method of evaluating technology enhancement success or failure. In the 1990s, a successful educational product was one that kept students involved and motivated to use it for the largest number of hours and the longest stretch of weeks. The research and applications focus has been, understandably, on assessing and improving student participation.

As educational technology moves into its next decade, practitioners and planners are beginning to evaluate whether or not a product successfully teaches (see, Smith & Warren, 1999), notes Patti Harvey, a consultant quoted in Geith (1999), "Faculty start to question what is working. We are now focusing on what learning is, how we describe it, and what that means for current approaches to how we measure for learning." Developing successful distance learning programs is going to require careful attention to, and

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/challenge-teaching-effectively-distance/30288

Related Content

Making the Case for Case-Based Learning in Computer Information Systems
Morgan M. Jennings, Charles H. Mawhinneyand Janos Fustos (2008). *Online and Distance Learning: Concepts, Methodologies, Tools, and Applications (pp. 55-67).*
www.irma-international.org/chapter/making-case-case-based-learning/27372

A Research of Applying Learning Diagnosis Diagram in Online Learning Diagnosis
Yu Lung Wu (2012). *Intelligent Learning Systems and Advancements in Computer-Aided Instruction: Emerging Studies (pp. 305-322).*
www.irma-international.org/chapter/research-applying-learning-diagnosis-diagram/61976

Instructors' Experiences with Using Groupware to Support Collaborative Project-Based Learning
John Day, Hao Louand Craig Van Slyke (2004). *International Journal of Distance Education Technologies (pp. 11-25).*
www.irma-international.org/article/instructors-experiences-using-groupware-support/1633

Ubiquitous Technologies and Learning: Exploring Perceived Academic Benefits of Social Media Among Undergraduate Students
Theodora Dame Adjin-Tettey, Daniel Selormeyand Hannah Aku Nkansah (2022). *International Journal of Information and Communication Technology Education (pp. 1-16).*
www.irma-international.org/article/ubiquitous-technologies-and-learning/286758

Developing Adaptive and Intelligent Tutoring Systems (AITS): A General Framework and Its Implementations
Mohamed Hafidiand Tahar Bensebaa (2014). *International Journal of Information and Communication Technology Education (pp. 70-85).*
www.irma-international.org/article/developing-adaptive-and-intelligent-tutoring-systems-aits/120617