



“Creating a Future Vision for the 21st Century Campus: Rich Media and Distributed Learning Environments”

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The Changing Landscape of Education

The 21st century campus is dramatically changing. With the advent of wireless technology, coupled with innovative hardware, software, and interactive technology, the classroom looks very different today. Even “places” for education have changed with globalization. The boundaries among cultures and institutions of higher education are blurred. Furthermore, the workplace has seen a tremendous need for continuously retraining workers to keep an up-to-date workforce.

Technology is promoting creativity and interactivity that engages students and enriches the learning process. In fact, Millennial generation students are demanding a change in the educational process and are expecting technology to be integrated into the learning experience.

In the past year, more than ever, institutions of higher education have experienced increased demands for programs and services with decreased resources. These demands have included a changing student population needing a more flexible learning environment. Today’s students are often older, working and raising families. For many of these students, earning a degree takes longer while the costs of education continue to rise.

The factors listed above are pushing institutions of higher education to restructure the campus of the 21st century. The use of rich media, through a distributed learning environment, is an approach being used by one institution to address the needs of the changing campus.

Distributed Learning Environments

New information technologies have provided many opportunities for change in distance learning environments, allowing for more sophisticated and interactive delivery. In the past, distance learning environments were defined by time and/or distance separating the instructor and learner. Today, time and place independence allows for learner flexibility to access the information when needed. These learning environments are called distributed learning environments. Distributed learning environments utilize learning resources/materials distributed on a variety of media, i.e. videoconferencing,

videotape, e-mail, Web-based instruction (i.e. chat discussions, discussion boards, rich media, Webcasting).

Distributed learning environments tend to be more learner-centered therefore allowing for more flexibility for the learner. The distant learner as well as the traditional on-campus learner may experience courses delivered in part through electronic media in both asynchronous and synchronous modes.

Rich Media and Webcasting Applications at Clemson University

Rich media is the blending of audio, video and the computer and has been around for 10 years. Some predict that the growing market of rich media will quadruple by 2013 (Frost & Sullivan, www.frostandardsullivan.com). This technology can enhance the learning environment for learners both on- and off-campus. Since the introduction of rich media to several faculty members in the College of Health, Education and Human Development at Clemson University, a number of creative distributed learning environments utilizing rich media have developed. The following are examples of these practical and innovative strategies.

Digital Portfolios and Rich Media Presentations Using Mediasite™

Students in the Student Affairs graduate preparation program and undergraduate students in the Nursing program developed digital portfolios enhanced by the use of rich media. The students utilized Web-based streaming technology present personal educational experiences online or on a compact disc. The rich media enhanced portfolios are an avenue for students to highlight the skills, abilities, values and what they have been able to accomplish while pursuing a degree.

Digital portfolios provide many opportunities in graduate education. For example, the use of digital portfolios can assist students, faculty and professionals alike in focusing on effectively developing professional skills needed in the field of Student Affairs. The rich media presentations allow students to highlight the presentation skills they have refined while in graduate school in their digital portfolios.

In the School of Nursing, digital portfolios provide a cumulative history of undergraduate honors work. Each digital portfolio includes an introduction of the student's research project using rich media and a PowerPoint™ presentation.

As described above, the rich media enhanced portfolios are an effective tool to use in education. Rich media enhanced digital portfolios provide students and young professionals with a dynamic and effective means of creatively displaying their skills. Graduates are able to make themselves "stand apart from the crowd" when applying for jobs and interviewing.

Mini-lecture and Rich Media Presentations Using Mediasite™

The second project titled, “Enhancing Your Online Courses: Rich Media Mini Presentations” was a small research project investigating student satisfaction with rich media mini-lectures/presentations as part of online courses managed in Blackboard™. The question investigated was, “What is the degree of student satisfaction in an online/blended course enhanced with rich media presentations?”

Methodology: Data for this study was collected using Reaction Surveys to 33 graduate students, in four different time zones, enrolled in online courses. These surveys included open-ended questions regarding students’ reactions to the rich media mini-lectures or presentations that were part of an online course. The instructor’s goal was to enhance the quality and integrity of the online courses while at the same time helping to facilitate the ever expanding instructor’s workload.

Results: The majority of students surveyed responded positively to the use of rich media in the online courses. The researcher noted some difference in responses along Masters and Doctoral level students.

Summary - Lessons Learned

Rich media shows promise for distributed learning environments. From the examples provided above, we have explored some creative uses of rich media.

- The Web-based rich media supported digital portfolios are providing students with a unique way to highlight professional and educational development.
- Using rich media mini-lectures in online courses enhanced the learning experience for students.
- Students particularly appreciated the rich media mini-lectures since the recordings can be replayed over and over.
- Faculty, even low-tech faculty, found the rich media easy to use with low impact on their time. In the end, they had very professional and polished presentations to share with the digital world.
- Faculty are able to package information, i.e. orientation sessions, online courses for students dispersed by time and geography.
- Using rich media was well received by the faculty and students alike.

Bibliography

Havice, W.L. and Havice, P. A., Editors, (2005). *Distance and distributed learning environments: Perspectives and strategies*. Peoria, IL: MacMillan/McGraw-Hill.