Preparing Students for the 21st Century:
Using Multimedia Technology to Enhance Writing Instruction
at Louisiana Tech University

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Abstract

The goals of this project were to provide students the opportunity to receive computer-enhanced composition, technical writing, and literature instruction through streaming video productions or digitized video lectures; to e-collaborate with students enrolled in compressed video or Internet classes using web cameras; to view multimedia productions to supplement coursework in traditional classrooms; to compose, revise, and edit using word-processing software; and to experience the use of streaming video production systems, enhancing students’ likelihood of success in many business environments. These goals were achieved through building a multimedia classroom in the English department that included 29 wireless computers, a Tegrity system, and an OWL (Online Writing Lab).

Introduction

The goals of this project were to provide a greater number of Louisiana Tech students the opportunity to receive more technologically-enhanced instruction than was currently possible in two rooms designated to freshman composition and one to technical communication with somewhat limited hard and software capabilities. As a shared and multi-functional space, the classroom now provides all instructors with the opportunity to deliver computer-enhanced composition, technical writing, and literature instruction through streaming video productions or digitized video lectures; to e-collaborate with students enrolled in compressed video or Internet classes using web cameras; to view multimedia productions to supplement coursework in traditional classrooms; to compose, revise, and edit essays in-class using word-processing software; and to experience the use of streaming video production systems, thus enhancing students’ likelihood of success in many business environments.

The George T. Madison building room 207 in the English department of Louisiana Tech University was chosen as the site for the multimedia classroom. Installed in this classroom were 29 wireless computers (25 for students, 1 faculty computer, and 3 laptop computers), a Tegrity cart (a system for delivering online instruction via streaming video), 1 scanner, a black and white printer and a color printer, Stylewriter software, Endnote software, 3 Lacie hard drives, 3 computer video cameras for videoconferencing, 2 video cameras, one to add to the Tegrity cart, 2 dvd/vcr players, one for the Tegrity cart, 1 ceiling mounted projector, 1 Onkyo sound system, and an OWL (Online Writing Lab). The multimedia classroom became available for Tegrity instruction and recording in fall quarter 2003 and for classroom use winter 2004.

The new multimedia English classroom has made possible the technological innovation needed in the department by providing students with access to up-to-date equipment and systems. These enhancements include word-processing systems for composing, revising, and editing writing assignments using hard and software common to today's work environments, they have facilitated student learning though the use of multiple modes of visual and audio instruction, as well as the development of greater technological skills. The classroom has further provided the faculty with improved instructional capabilities and a vehicle through which to apply the instructional technology skills acquired through training and professional development.
The Tegrity System

Part of that professional development involved opportunities for Tegrity training. The Tegrity system is a user-friendly system that allows instructors to create online lectures without altering the instructor’s teaching style, as is often the case with compressed video suites. Ten faculty and staff members participated in intensive Tegrity training (2 days/16 hours). Sixteen additional faculty and staff members completed basic Tegrity training (2 hours). Two of those 16 pursued further training. Those participating were mostly English and foreign language faculty, but health information systems, nursing, education, and CITDL (Center for Instructional Technology and Distance Education) faculty also took part. The Tegrity system proves useful for instructors who teach online as well as those who teach in traditional classrooms for reinforcing lecture material. Tegrity lectures of material allow students to review information multiple times.

Tegrity further allows instructors to “be in two places at once” and constantly available. Instructors can better prepare for planned absences such as travel to conferences and avoid losing valuable class meeting time by recording a video lecture that students can access while the instructor is away. Another benefit of the Tegrity cart to instructors in traditional classrooms is that it enables instructors to save valuable class time. When only a few students need certain information (word processing basics, for example), instructors are able present the information outside of class through video. This information can also be made constantly available on the Internet, making it a “Just in Time” lecture. When students really need format information (midnight before the paper is due, for instance), students can find the instructions repeated in streaming video and linked to the class website.

Multimedia Classroom

The multimedia classroom first became available for faculty use during December, 2004. During winter quarter, 82 different class sessions were scheduled in the multimedia classroom. Thirteen faculty members used the classroom in a total of 20 different courses allowing 433 Tech students at least one (but often more than one) opportunity to experience the technologically-enhanced learning environment. Winter quarter, the classroom was used for a total of 121 hours for educational purposes. During spring quarter, 88 different class sessions were scheduled in the multimedia classroom. Fifteen faculty members used the classroom in a total of 24 different courses allowing 573 Tech students at least one (but often more than one) opportunity to experience the technologically-enhanced learning environment afforded by the classroom. Spring quarter the classroom was used for a total of 151 hours for educational purposes.

Courses in the Department of Literature and Language that have met in the classroom at least once include:

- ENG 099: Preparation for College English
- ENG 101: Freshman Composition I
- ENG 102: Freshman Composition II
- ENG 202: Introduction to American Literature
- ENG 303: Introduction to Technical Writing 303
- ENG 308: The Short Story
- ENG 417: American Literature:1865-Present
- ENG 463: Scientific and Technical Presentations
- ENG 475: Special Topics (Native American Literature) 475
- FLAN 489: Foreign Language Special Topics 489
- ENG 575: Graphic Design in Technical Writing
- ENG 584: Seminar in American Lit 584
The multimedia classroom has been used for presentations; testing (both residential and online); cd, dvd, and vcr presentations; Tegrity recordings; training; library access; Internet access; interactive style and grammar review using the OWL and other available resources; collaborations; and Blackboard orientation. In addition, students in English 475 (Native American Literature) were able to have a real-time chat on Blackboard with Nick Proctor, author of *Bathed in Blood: Hunting and Mastery in the Old South* and grandson of Dee Brown, author of *Bury My Heart at Wounded Knee* using the multimedia classroom. This was an opportunity not available to students before the installation of the classroom.

Altogether, the multimedia classroom has been used by almost 10% of Tech’s total student population. These students have had the opportunity to improve their technological skills in the areas of research, writing, and communication. Further, the Louisiana Tech Online Writing Lab (OWL) portion of this project assists students in understanding research procedures, developing critical thinking skills, and organizing those thoughts into high quality written essays.

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