



Creating a Smart College: Using Technology to Enable Excellence

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Introduction

The College of Health Professions (CHP) at the Medical University of South Carolina (MUSC) consists of eleven health-related programs organized into three departments, the Departments of Health Administration and Policy, Rehabilitation Sciences, and Clinical Services. Until the college moved into its new complex during the summer of 2005, these programs were scattered across the MUSC campus in seven different locations. Each of these locations provided different levels of technology support for the faculty staff and students.

During the past several years as the college experienced significant growth in enrollment, extramural research, and distance education offerings, there was an increased awareness of the need for improved technology to enable faculty, staff and students. Plans to move into a new 80,000 square foot complex provided the opportunity for the college to examine its technology needs and to implement a far-reaching educational technology plan.

Planning

The college enlisted the help of Jon Kendall (formerly with ideaReserve) in the summer of 2004 to conduct interviews and lead the college in a visioning process to set the direction for the technology integration. There were several focus groups and small group discussions that were led by Mr. Kendall to determine faculty, staff and student needs from both the program and college-wide perspectives. This process ultimately led the college to develop a framework, *Technology to Enable Excellence*, which encompassed the college technology infrastructure, the student technology, and the faculty and staff technology.

The key components of *Technology to Enable Excellence* were identified as follows:

- Infrastructure
 - Enable anytime/anywhere learning and productivity
 - Wireless capabilities throughout the complex
 - Technology enabled niches such as the “cyber café”
 - Integration of audio, video and data
 - Smart classrooms and labs that have “memory”
 - Ability to access and distribute all forms of data throughout the complex and beyond
- Student Technology
 - Educate and equip students with the technological tools that will enable success in school and in their career
 - Laptops, Tablet PCs, or PDAs
 - Tools that take advantage of the technology infrastructure
 - WiFi capabilities
- Faculty and Staff Technology
 - Provide technological tools for successful teaching and research collaborations
 - Desktops, laptops, and distance education tools
 - Provide necessary development and support to take full advantage of the technology infrastructure

Implementation

The college has realized its technology vision following this framework. In July and August 2005, the CHP complex opened with a full range of technology to support innovative approaches to teaching, research and clinical service. The complex is truly an environment that supports anytime/anywhere learning and enhances productivity. All learning spaces, including conference rooms, labs, an auditorium and nine scheduled classrooms are equipped with a variety of technology components. In addition, the complex houses a Mock OR that serves as both a training site for hospital OR staff and as a simulation lab for students across campus. CHP Students participate in the laptop

leasing program that provides them with Dell laptops without additional charge during their program of study. The CHP vision was not realized alone. Several vendor partners provided support to the project, including Dell (\$550,000), Berchtold (\$160,000) and Alsteel (\$125,000).

Typical equipment lists for each type of room within the complex are listed below.

Large Auditorium-type classroom

- Video Wall Controller
- 4 Video Projectors
- Large Rear Projection Screen
- Immersion Board
- 3 Video Cameras
- PC and Document Camera
- IP Control System
- Microphones
- 2 Digital Audio Amplifiers
- 8 Speech Reinforcement Loudspeakers

Classrooms

- 2 Video Projectors
- 4 Surface - Ceiling Microphones
- Immersion Board
- IP Camera
- PC and Document Camera

Labs

- 1 Video Projector
- 2 Flat Panel Displays
- Immersion Board
- 4 Surface - Ceiling Microphones
- 3 IP Cameras
- PC and Document Camera

Conference Rooms

- 1 Video Projector
- Immersion Board
- IP Camera and Microphone
- IP Control System

All of this technology is tied together and managed through a master control room. Within this room there are ten Video/Data Displays, two Multimedia Workstations,

Production Editing System, Switchers, six Video Cassette Recorders, a Digital Video Recording and Playback System, four Audio Amplifiers and a Custom Rack.

Summary

The new CHP complex opened in July 2005. The vision has been realized. As the accompanying video tour to this presentation demonstrates, the faculty and students within the college are actively engaged in learning with the help of the new technology. Most have enthusiastically embraced the technology, and the college has set its course for providing excellent technology-enabled educational experiences.