Re-Defining “Standard” Classroom Technologies:

Building a toolkit for connecting with today's tech-savvy students

One of the key factors driving classroom technology upgrades these days is the quest to bring *added value* to our traditional learning environments. In relatively recent years this has been an instructor-driven effort arising from teaching methods that were increasingly dependent on displaying digital resources. The *added value* consisted of data projectors, computers, DVD players, Ethernet (both wired and wireless), and perhaps an AV control interface to bring a measure of usability to these classroom tools. Administrators have been able to earn high praise by simply supplying a standard package of technology-based tools that almost everyone wanted regardless of personal approaches to instruction. For most well-established institutions bringing *added value* to the classroom remains largely a capital projects effort with little or no thought being put into the precise pedagogical demands that have been met by using educational technologies.

But all of this is changing rapidly as we are forced to come to the realization that our journey towards educational technology nirvana does not end with attaining a certain standard of computer-based digital multimedia technology sophistication in our classrooms. Many of us now find ourselves increasingly subject to the demands of a tech-savvy generation of students who interpret the notion of *added value* in learning environments completely differently than we traditionally have. In fact, our technology-laden classrooms are taken for granted and our students, who are now growing up believing they can quickly Google for any answer under the sun, are rejecting methodologies that focus on the memorization of information in favor of individualized learning strategies and tools that actually lead them to a better understanding of the educational content they must encounter.

At an institution with over 100 years of experience that includes advances in learning theory, learning science and technological aids we are finally moving beyond an 80% reliance on lecturing, albeit enhanced by digital bullet points, clipart, sound bites, and internet resources, we are finally moving towards student-centered learning environments, but not because we are so smart; ironically, it is because our clients are beginning to demand it of us. This means turning to pedagogical-based analyses of the roles technology plays in our classrooms and it is a process that impacts not only how we look at basic room configuration and design but is also leading us to evaluate how our technology offerings can better support desirable pedagogical outcomes and overcome barriers that prevent our smart classrooms from being used by our very smart faculty in the smartest of ways.

It is common to find theories of learning that suggest instruction is most effective when it engages students in both active and interactive learning experiences where learners can respond or interact in some way with the learning material they encounter. Passive listening, viewing, or reading simply cannot yield the same benefit. With this in mind I have worked to identify technologies capable of supporting some degree of interactive learning under the assumption that the true value of modern educational technologies is fully realized when students are learning through either active introspection or social interactions.

In response to our new generation of tech-savvy students and the new standard for what actually constitutes *added value*, my goal has been to create an updated toolkit of instructional tools that re-define what most of us would now consider the standard set of classroom technologies, such as whiteboards, document cameras, computers, and data projectors. This Best Practices session will highlight implementation experiences my institution with course-integrated Web 2.0 technologies that extend the real-world class into the virtual, as well as classroom-based technologies such as audience response, podcasting/course-archival, and teleconferencing; all which serve to change the way instruction is delivered and enhance the student-centered elements of learning that today’s students crave.