Abstract

As universities and institutes compete to survive the change in paradigm of higher education in order to meet the growing needs of a knowledge based society, it becomes pertinent for traditional universities to keep pace with virtual campuses. Therefore, it is imperative that we create an education system that sets its aims and ambitions high and is capable of rapid adaptation to its technological environment so that new technologies do not represent a black hole of additional expense but help improving quality of student learning. Course redesign projects should focus on common course papers in multiple disciplines incorporating various characteristics like making teaching-learning more interactive and learner-centered; introducing computer-based learning resources like tutorials, exercises, quizzes, feedback; adding greater flexibility by using modular format for mastering learning and enabling an expanded support system for help on-demand. Such redesign involves collective commitment of all faculties teaching the course to ensure capabilities provided by information technology. The supplemental model retains the basic structure of the course but supplemented with technology based out-of-class activities to encourage greater student engagement with the course content. Rather than emphasizing on student mastering the facts, the redesign is to teach the students to develop their understanding of the scientific process through inquiry based activities.

Collaborative approach involves deciding commonality in delivering of core topics of various disciplines. Rather than developing and delivering similar content in isolation and hence duplication of effort and loss of resources, if a common resource is developed by all disciplines for core topics, it would lead to huge savings on time and finances. Life Sciences, as example is particularly well suited for technology mediated learning as visuals can play a very important role in illustrating the concepts through images, animations and videos. Information technology should be used to achieve particular academic goals and target specific elements of the curriculum. Integrating technology and new pedagogical techniques with numerous courses together will reduce the institutional cost substantially and make learning experience more effective for students. Interactive web-based materials can be flexibly used by faculty of various courses to add, replace, correct or improve the existing material to suit their own specific requirements. Sustaining innovation would depend upon a commitment to collaborative development and continuous quality improvement by incorporating feedback from all involved in the teaching and learning process.

Keywords: Blended e-Learning, Higher Education, Supplemental, Flexible and Collaborative Approach, Course Redesign

Remarks: The full paper may be found in www.elearningap.com