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EDUCATING STUDENTS IN INSTITUTIONS OF HIGHER EDUCATION IN THE 21ST CENTURY

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Abstract

It is becoming increasing clear that the task of teaching students in the 21st Century will present a very different challenge to university and professional school faculties when compared to challenges encountered in the 20th Century. For one thing, faculty are beginning to realize that the time allotted to obtain an academic degree is no longer enough time to teach the ever-increasing amount of complex content that is being published yearly. At the same time, it is likely that society will expect students to have acquired a working knowledge of much of this new content during their tenure at an institution of higher education. Most educators agree that there will be no easy solution to this dilemma. Perhaps one approach that can help meet this new challenge is to expect students to perform more self-directed learning activities and require institutional administrators to provide the necessary computer technology and the associated infrastructure to support such activities.

Southern Illinois University School of Medicine (SIUSOM) has struggled with these issues during the past decade. As its solution, SIUSOM has implemented a problem-based curriculum that not only requires students to be self-directed learners, but also provides a variety of multimedia programs used to facilitate and assess the content knowledge and critical thinking skills of self-directed learning activities. These programs, which represent the full spectrum of teaching, learning, and assessment software, include 1) multimedia content/tutorial learning modules, designed to give students an opportunity to learn many principles and concepts of medicine outside of the traditional classroom environment and at their own pace, 2) Web-based, critical thinking software, created to allow students the opportunity to practice the patient encounter virtually, 3) performance-based assessment software constructed so that students can document the information they obtain from an encounter with a live, standardized patient, and finally, 4) Web-delivered content quiz banks, provided so that students can self-test their level of understanding of required content prior to a formal assessment of that content.

The purpose of this presentation is to discuss some of the educational challenges and technical issues that are involved in designing a curriculum and integrating interactive software in such a way that students can learn and teachers are able to evaluate basic and clinical content knowledge without expanding the traditional period required to obtain a degree from an institution of higher education. Examples of key features and functions of some of these software programs will be demonstrated.

Keywords

Multimedia education, practice-based learning , problem-based learning, critical thinking, self-directed learning, self-assessment software, performance-based assessment

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