Managing the Professional Curriculum: What to do with Essential but Non-Traditional Topics

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In professional education curricula, the teaching of what we might consider essential skills like interpersonal communication are often overlooked in favor of other more traditional, subject-specific content. In the medical profession, for example, a strong, therapeutic, and effective relationship is the essence of doctor-patient communication. However, while communication skills are introduced in our first year Practice of Medicine course, so are other basic and clinical science topics that are more directly measured by national board exams. Similarly, the complex medical / societal problems that disproportionately burden medically underserved populations such as HIV/AIDS, domestic violence, substance abuse, and geriatric issues, do not appear on national board exams yet need to be addressed in the medical school curriculum.

While developing interpersonal communication skills are seen as essential in most all professional education programs, and training a geographically dispersed and culturally competent physician workforce is a critical need for our state (Texas), we are all challenged by the need to teach the basics in our various disciplines. Delivering web-based cases to learners who are on campus or are geographically dispersed, allows programs to infuse non-traditional topics at opportune times into the curriculum.

Since the early 1990s, a number of reports have discussed the opportunities offered by integrating computer-aided instruction into teaching, particularly in medical education. Computer-based education methods, including cases delivered to students via the Web, appear to be useful in filling gaps in medical students' exposure to common problems and in providing a consistent source of information about these conditions. However, development of web-based clinical cases has traditionally meant a huge investment of faculty time, inconsistent presentation styles, and modules that required little interactivity on the part of students. Or, it meant turning over clinical case scenarios to technical support individuals who needed to constantly check back with faculty to ensure fidelity of information and presentation. In response to these issues and with funding from a HRSA Predoctoral Training Grant (D16 HP00034-03), we developed an online case authoring template – Design-A-Case© (DAC), to build problem-based and discovery-oriented, interactive web cases (Shokar, Burns & Bulik, 2007).

To assess the utility of the web-based clinical cases developed with DAC to support constructivist oriented, self-directed learning, we utilized student surveys and focus groups, and a faculty group peer review process. A completed study shows that 3rd year medical students completing the web case assignments on our Family Medicine clerkship scored significantly higher on the National Board of Medical Examiners (NBME) subject exam and the Standardized Patient (SP) exam than those who did not. Additionally, nine one-hour focus groups were conducted at the conclusion of the Family Medicine clerkship and indicated positive medical student involvement with clinical decision making within the content of the case. Students also commented positively on additional case features such as supplemental internet searches and appreciation for the "clinical pearls". The peer review process was initiated to ensure quality in on-line materials developed for medical students; it also provided a recognized mechanism for validating faculty effort in authorship of web-based cases. Validation of our peer review process is demonstrated by the institution-wide recognition of the quality of the web-based, clinical case materials that faculty have developed when presented for promotion and tenure.

Shokar GS, Burns DS, Bulik RJ. Design-A-Case Template. (Computer software). Copyright: 2004, 2007 Board of Reagents UT System: University of Texas Medical Branch: http://www.designacase.org/ (accessed 9/2007).