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An Interdisciplinary Approach to a Dental Information Technology Course

Alan E. Levine PhD, MEd
UT Dental Branch at Houston

Richard D. Bebermeyer DDS
UT Medical School at Houston

Jung-Wei Chen DDS
UT School of Public Health at Houston

Dell Davis MLS
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Purpose: To develop an interdisciplinary course to teach dental students about evidence-based dentistry, development of search strategies, critical appraisal of literature, and dental informatics.

Information technology is an important skill required for success in dental school and beyond. Incoming dental students are very familiar (in 2005, >85% had high speed internet access off-campus and >90% were familiar with basic computer and email skills) with technology. This ½ semester course was given to 1st year dental students at The University of Texas, Dental Branch, Houston. The course is taught by a basic scientist, a librarian, and 2 dentists. Students complete several exercises including development of a clinical question, conducting a search to find answers to that question, and critically appraising one of the resources. Students share their findings in group discussions at the last session. Results of an on-line questionnaire containing Likert scale and free-text response questions for the last 3 years indicated that >75% of the students agreed or strongly agreed with statements that they learned how to effectively search for information in databases such as the Cochrane Collaboration and PubMed, that they learned how to effectively evaluate information contained in Websites and journal articles, and that the information on evidence-based dentistry and critical thinking skills was valuable. In response to open-ended questions, approximately 35% of the students mentioned the importance of learning to search PubMed and Cochrane databases as most important. The discussion of evidence-based dentistry, critical thinking, and informatics was mentioned as a positive by 5-10% of the students. Approximately 20% of the students felt the course was too basic and did not contain new information.

Conclusions: These results indicate the overall effectiveness of the course in familiarizing the 1st year dental students with information technology as it pertains to dentistry. Our future goal is to integrate the information contained in this course into increasing numbers of courses in the dental curriculum.