SOCRA-TEASE: A COMPUTER MENTOR FOR INSTRUCTIONAL AND RESOURCE EFFICIENCY

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Introduction: Two well-recognized and often conflicting educational realities are the enormous advantages of small group, problem-based instruction and the constant and economically predictable shortage of qualified faculty to mentor this type of learning environment. To remedy this conflict between instructional and resource efficiency we developed Socra-Tease, a computer-based educational resource designed to provide true independent problem-based mentoring. In addition, Socra-Tease was designed to provide broad applicability to a wide range of subject materials, simultaneous presentation to varied target audiences, valid and reliable testing and evaluation, broad availability via local area networks and the internet, simple maintenance and quality control, and finally reliable and timely mentor-to-student and student-to-mentor feedback.

Design: The central design element of Socra-Tease and its image-based derivative Morpho-Logic is a series of sequentially ordered, faculty designed, content dense multiple choice questions coordinated with an external authoritative resource and faculty developed discussions. Each question is identical in format and is intended to be addressed by the individual or small group in the following manner: 1) review of the context statement, question and answer choices; 2) evaluation of answer choices using the provided authoritative resource; 3) selection and recording of answer choice; and 4) review of detailed discussion. The true instructional power and integrity of this deceptively simple repeated sequence becomes increasingly apparent with use, going far beyond the traditional use of computers as repositories of didactic presentations, resource organizers, laboratory substitutes, and distributors of operational information.

Application: The initial application of Socra-Tease was in a forty-hour pathobiology course presented to the 140-member freshman medical student class at the University of Pittsburgh in March of 2002. This course consisted of eight Socra-Tease small group sessions followed by didactic review lectures resulting in a final ratio of small group to lecture time of three-to-one. The course also provided two formative examinations based on Socra-Tease questions and discussions.

Discussion: Exceptionally high student attendance, performance and course evaluation as well as the receipt of an Excellence in Education award for the Socra-Tease-based pathobiology course demonstrated that Socra-Tease provided the advantages of small group, problem-based instruction while conserving faculty time. Its application in medical education as well as other instructional environments is just beginning to be understood and exploited.