

Active Learning Strategies in Undergraduate Medical Education of Pathology: A Saskatoon Experience

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ABSTRACT

Medical education continues to be primarily structured around faculty authority and lecture. This promotes individualistic competitive environments rather than the co-operative ones needed for "patient-centered medicine." In much the same way as one can decide to either purchase a new home outright or renovate an existing home to better meet needs, in this study we set out to renovate an existing home by exploring the inclusion of active learning strategies -- collaboration, metaphor and analogy, and summarization techniques --in a general pathology course within the traditional undergraduate medical curriculum framework. The aim was to create a collaborative classroom opportunity for analyzing, problem solving, summarizing, and using visual/verbal metaphors to explain complex medical concepts in a simple fashion. Through this participation, students earned 10% toward their final grade and received general immediate feedback on their submitted work. The inclusion of these strategies was evaluated through student performance on the midterm exam and by a questionnaire completed anonymously by all students at the same time. The student performance in the midterm exam was slightly higher than in previous years. Of the total number of 256 responses to the open-ended questions from the students, 170 (67%) were positive about the inclusion of these active learning strategies. Seventy-two responses were negative (28%) while 14 (5%) comments were neutral. Some students indicated that these strategies detracted somewhat from traditional lecture time or that analogy and metaphor were "too abstract." Based on feedback from students and observing student participation, we feel that these strategies, as a "renovation" of the traditional lecture-based undergraduate medical curriculum, "do no harm" and, in fact, contribute to learning and social interaction in the delivery of pathology. The long-term impact of using resonant analogies and metaphors to explain complex medical concepts to patients may only become apparent when these students are doctors in team-oriented, patient-centered clinical practices.
