

ABSTRACT

Is Web-Based Learning An Effective Alternative To Traditional Lecture-Discussion? Evaluation of Web-based Learning in a Family Medicine Clerkship.

Background: Web-based learning (WBL) methodologies are becoming increasingly popular in medical education, and have been shown to be comparable to text-based learning in knowledge gains, are enjoyed by students and may be more time-efficient for learners than other methods. The advantages, if any, of WBL in comparison to lecture-discussions are unknown. The purposes of this study are to determine the effectiveness of WBL in comparison to lecture-discussions of improving knowledge gains; to assess students' preferences for WBL or lecture-discussion; to compare students' learning time between the two methods and to determine the costs of the two methods.

Methods: We will carry out a modified factorial design using block allocation. Working with Academic Computing Support, we will develop two web-based learning modules based on current family medicine clerkship workshops, one focusing on geriatric issues and the other on headache. Students in one block will complete the headache workshop and the geriatric learning module; students on the next block will complete the geriatric workshop and the headache learning module. Blocks will be alternated with each clerkship block. All students completing the clerkship will thus complete either the geriatric or headache learning module and the alternative headache or geriatric workshop

Outcomes: We will use matched pre-post tests to assess knowledge gains. We will use Likert scales to measure students' attitudes towards both learning methodologies and will ask them their preference. We will also conduct focus groups at the end of each rotation to explore students' attitudes about preferences towards web-based learning or lecture-discussions.