Use of Lightboard Technology to Introduce Vaccine Topics

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BACKGROUND

- RX 415 Self Care & Health Promotion I is a course intended to teach students how to use and evaluate self-care strategies and assist patients in achieving optimal health through these strategies.
- Adult and pediatric immunizations, topics covered in the course, are content-heavy and often require a review of concepts from previously completed courses to optimize student comprehension.
- This lecture has previously been taught in various ways to maximize student engagement and critical thinking\textsuperscript{3}.
- Dvorkin Camiel and colleagues described implementation of a flipped classroom model with a team-based learning approach in a self-care course as having a favorable response from students\textsuperscript{4}.

OBJECTIVES

To utilize lightboard technology to provide a "modified flipped classroom" to teach immunization concepts and maximize time for application-based learning.

METHODS

- Co-lecture
- Lecture
- Discussion of individual vaccine recommendations
- Application
- Vaccine contraindications and precautions
- Vaccine adverse effects and reporting
- Vaccine myths
- Immunology review
- How to use the CDC immunization schedules
- Case-based application
- Student presentations on vaccine-preventable diseases
- Video
- Lightboard notes

RESULTS, cont.

- Overall point biserials similar
- Video
- Lecture
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RESULTS

- 2016
- Quiz (MC)
- Recitation: Disease presentation & Cases
- MC questions on final exam
- No due prior to class
- Mean: 9.9/10 pts; median: 10/10 pts
- 103/104 students submitted notes with key concepts
- Mean score on 8 questions: 75%; without 2 outliers = 92% mean
- Overall point biserials similar

- 2017
- Quiz (open-ended)
- Recitation: all case-based application
- MC questions on final exam
- Application cases
- 4 multiple choice questions
- All knowledge-based
- Pediatric & adult questions separated
- Questions combined
- Mean score on 4 questions: 74%