Evaluation of Certificate Course Format Redesign

- Midterm course evaluation survey (first two courses)
  - Individual course elements, including use of video for module overviews
  - Best features/areas for improvement
  - Time spent on course
  - Instructor performance
  - Preference for graduate credit vs continuing education
  - Analysis of video access statistics

Innovative Instructional Materials and Methods

- Smart Podium
  - Use of Smart Podium lectures
  - Inclusion of multiple-choice questions and instant feedback

- Gamification
  - Gamification elements such as points, badges, and leaderboards

- Response-specific audio feedback to quizzes

Interrelation of Programs

4 certificate courses, which include one course that is also part of the AMIA 10 x 10, provide basic information for someone wanting to learn about health informatics, but who may not be degree-seeking.

Program and Curriculum Design

- UAB AMIA 10x10 and certificate can be applied to the full master’s degree
- Content same across different programs; delivery modality modified to accommodate needs of type of student enrolling
- Format of certificate courses significantly redesigned, later applied to other programs
  - Self-paced online modules, 2-4 units/weeks long
  - Collaboration with instructional designers
  - Innovative instructional methods, including increased use of video

Methods

Innovative Instructional Materials and Methods

- Self-paced course units
- Modular content design
  - Short (under 25 min) videos for single topic
  - No references to specific unit/module/course
  - Intro/summary videos to put the content in context
  - Content tagging and reuse
- Flashcards as study guide
- Ignite presentations
- Interview-style guest lectures
- Course navigation guide

Results

- 50% of certificate students later enrolled in UAB’s MSHI program
- 86% of certificate students preferred transferrable graduate credit with graded assignments as opposed to only continuing education credit or pass/fail courses
- 80% of students preferred video module introductions as opposed to text
- All redesigned/innovative course elements found helpful by all students
- All students spent more than 8 hours per week on each course; majority spent more than 12 hours/course
- Sample comments from midterm course evaluations:
  - "The lectures are very informative and helpful. The way lectures are recorded, it seems like a live class and not a prerecorded video."
  - "[One of the best things was] the concentrated learning pace. I have learned a GREAT DEAL in a short period of time."
  - "VERY good picture of the current state of information systems in healthcare."
  - "Online learning is a challenge for me."
  - "... learning to pace myself is an area for improvement."
- Comparison of videos using Smart Podium vs narrated slides
  - Focus on lectures for application of concepts; half of which used Smart Podium
  - Mean number of plays/student: 2.2 for Smart Podium lectures and 1.4 for narrated slides

References