Creation and Implementation of Scientific Research Methods Modules in PSYCO 104
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PROJECT BACKGROUND

CURRENT PROBLEM
- Department of Psychology requires ONE statistics course (STAT 151), taught by Department of Mathematical and Statistical Sciences
- Psychology students not receiving sufficient amount of research methods and statistics education, with limited demonstration of its applicability and usefulness in psychology

PILOT PROJECT
- Incorporate statistics education into currently existing course(s)
- Create eClass teaching and testing modules to pilot in section of PSYCO 104

FINDINGS

ONLINE TEACHING VIDEOS
- Videos created covered:
  - scientific method
  - measures of central tendency
- Software used:
  - PowerPoint Mix (e.g., Figure 1)
  - Video recording on green screen in CTL (e.g., Figure 2)
  - Adobe After Effects and Premiere Pro for video animating (e.g., Figure 2)
- PDF files of video scripts also created

ONLINE TESTS
- Tests generated using eClass Quiz
- Questions created in various categories and randomly selected for each test generation
- Feedback provided for each response (e.g., Figure 3)
- Mastery of learning approach used, with attainable 10/10 score
- Test scores automatically uploaded to eClass gradebook

STUDENT SURVEYS
- Student surveys created using eClass Feedback
- Requested information related to such things as:
  - ease of module use
  - perception of module usefulness
  - perception of statistics in field of psychology (e.g., Figure 4)

CONCLUSIONS

Online modules can be:
- useful for teaching materials related to statistics and research methodology
- integrated into a large section of PSYCO 104
- easy for instructors to implement with prefabricated materials made available
- easy and beneficial for students to use

FUTURE DIRECTIONS
- Continued development of modules on more topics for both PSYCO 104 and 105
- Continue to pilot modules in various sections
- Consider replacing 4% course credit with guaranteed midterm and final exam questions