Mortal or Moodle?
A Comparison of In-Person vs. Online Information Literacy Instruction

Distance Library Services Conference
April 13, 2018

Emily Gorman, MLIS
Research, Education & Outreach Librarian
University of Maryland, Baltimore
@librarianem

Catherine Staley, MLIS
Research Services & Innovation Librarian
Loyola Notre Dame Library
Background

Mid-sized (5,099 student FTE) private university in northern Baltimore City

Faculty buy-in
Purpose

- Evaluate efficacy of online and in-person library instruction
- Determine student preference for online vs. in-person library instruction
Methods

- 38 undergraduate students in a speech-language-hearing science course about professional and technical writing (2 sections)
- One section received a one-shot library instruction session in person, the other completed online modules in Moodle (a course management system) over a 2-week period
- Students completed a survey 4-8 weeks after the instruction
- At the end of the semester the course instructors provided the researchers with anonymized grades the students received on a literature review assignment
Instruction

Writing Research Questions
- Video and quiz

Choosing Keywords
- Video and quiz

Searching
- Advanced Seeker (EDS) tutorial, ComDisDome tutorial, and search submission

Primary vs. Secondary Research and Peer Review
- Videos, handout, and quiz

APA Citations
- APA guide, DOI guide, quiz, and optional RefWorks tutorials

Cited Reference Search and Journal Searching
- Journal search tutorial, Cited Reference Search tutorial, and quiz

Moodle link
Results

Online group scored higher on the literature review assignment (statistically significant at p < 0.005)

Online group median = 94

In-person group median = 87.5

Caveat - assignments were graded by two different instructors (although the same rubric was used)
Results

Online group tried a wider variety of databases when researching.

All of these databases were mentioned or demonstrated during the library instruction.

LLBA = Linguistics and Language Behavior Abstracts
Results

Majority of in person group reported “somewhat better” or “much better” research skills after library instruction.

Half of online group reported their skills stayed “about the same”
Results

Majority of in person group reported “somewhat higher” or “much higher” confidence in conducting research after library instruction.

Half of online group reported their confidence stayed “about the same.”
Results

Online group students who had received a previous library instruction session in person gave their format preference

Preference was overwhelmingly for the online format
Limitations

Small sample size, especially for in-person group

Confounding factors:

● Different course instructors
● No random assignment
● Slight differences in instructional content due to format limitations
● Online instruction was graded, in-person instruction was not
● Varying amounts of previous library instruction
Discussion

- Pacing: learners complete modules at their convenience
- Convenience: online learners have continuous access to instruction materials
- Status: upper-level students could approach online learning differently
Fall 2017 Implementation

● 34 students in 2 face-to-face sections
  ○ 25 completed the online modules
  ○ 9 received in-person instruction

● Changes to grading and feedback system
  ○ Librarians provided feedback on the quality of the keywords and search, but students received full points for just submitting

● Class visit
Implemented Changes to Instruction

Writing Research Questions
- Video and quiz

Choosing Keywords
- Video and quiz research question/keyword submission

Searching
- Advanced Seeker (EDS) tutorial, ComDisDome tutorial, and quiz
- Sample search submission in a different database

Primary vs. Secondary Research and Peer Review
- Videos, handout, and quiz

APA Citations
- APA guide, DOI guide, quiz, and optional RefWorks tutorials

Cited Reference Search and Journal Searching
- Journal search tutorial, Cited Reference Search tutorial, and quiz

Moodle Link
Fall 2017 Results

Difference in scores between in-person and online groups on the Fall 2017 literature review assignment was not statistically significant (p = 0.06)

Online median = 92

In-Person median = 96

Caveat - assignments were graded by two different instructors (although the same rubric was used)
Fall 2017 Results

Online group tried 1 additional database

All of these databases were mentioned or demonstrated during the library instruction
Fall 2017 Results

The majority of in-person and online students reported “much better” or “somewhat better” skills after library instruction.

More online students in this semester reported “much better” or “somewhat better” skills after library instruction than first semester.
Fall 2017 Results

The majority of students in the online group and in-person group reported increased confidence in research skills after library instruction.

1 student in the online group reported “much lower” confidence in research skills after library instruction.
Online group students who had received a previous library instruction session in person gave their format preference.

88% of respondents preferred online format.
Fall 2017 Discussion

- Faculty: students’ perception of or relationship with the professor could affect students’ overall reception of library instruction

- Feedback: elimination of grading could have influenced students’ assessment of skills
Going Forward

- Fully online version of this class offered in Summer 2018
- Incorporating active learning with emerging technologies
- Considering how to scale up or use this model for other classes
Questions?

Emily Gorman, MLIS  
efgorman@hshsl.umaryland.edu  
@librarianem

Catherine Staley, MLIS  
cstaley@loyola.edu