

Three-Year Summative Analysis of First Year Medical Student Library Instruction



Brenda F. Green, MLS • Jasmine M. Bagay, BSBA • Richard Nollan, MLS, MA
Health Sciences Library • University of Tennessee Health Science Center • Memphis, Tennessee



OBJECTIVES

- This poster describes and evaluates library instruction provided to first-year medical students at a large urban health science center.
- This curriculum-integrated instruction included a two-hour lecture and required hands-on exercises. This poster presents a summative program evaluation, including a three-year analysis of attendance, exercise submission, utilization of resources, and student assessment of the session.

METHODS

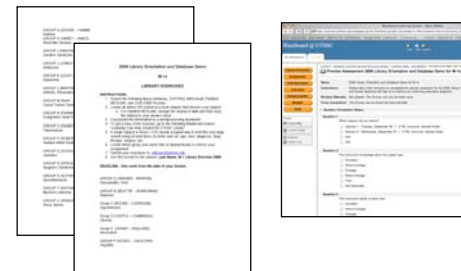
- Over a three-year period, over 463 first-year medical students were enrolled in a library instruction module accessible through the Blackboard course management system. The module provided access to the curriculum, exercises, survey instrument, and faculty contact information.
- Students received a two-hour traditional lecture that provided basic information about the library with an emphasis on accessing, retrieving, and disseminating relevant healthcare information.
- Following the lecture, students were required to complete and submit hands-on exercises that demonstrated the skills mentioned above. Each year, students also completed a 10-question survey available on Blackboard to assess the session.
- Library faculty and staff analyzed and compared statistical trends in attendance; both correct and incorrect submissions of exercises; utilization of resources; and student assessment of the sessions across the three-year period to evaluate program effectiveness and identify opportunities for improvement.

RESULTS

- Enrollment ranged from 153 to 156 per year over the three-year period. Although the number of attending students varied, attendance for these classes ranged from 95-100% of class enrollment each year.
- Of the 450 students who attended over the three-year period, 440 (98%) submitted the results of their assigned exercises.
- Each year, students were given assignments following a lecture in one or more of the following resources: MD Consult, Ovid EBM databases, STAT!Ref, and PubMed MEDLINE. Of the 440 total submissions over the three-year period
 - 362 (82%) students correctly completed their entire assignment.
 - Some 78 (18%) participants submitted results based on only a single database, usually PubMed, thereby rendering their submission incorrect.
- Common trends among incorrectly completed assignments include
 - Incorrect use or lack of use of MDConsult in 2004 submissions.
 - Use of only PubMed as a source, and not all four sources as instructed, in 2005 submissions.
 - Failure to use STAT!Ref in 2006 submissions.
- Database statistics for MDConsult, Ovid EBM databases, STAT!Ref, and PubMed MEDLINE indicated a significant increase in use during the 30-day period following the lecture in each year that students were required to use the databases to complete the assignment.
- Immediately following the lectures, survey respondents rated the usefulness of lectures and demonstrations at an average score of 3.6 on a 5.0 Likert scale.
- 43 of 66 respondents said they would recommend the workshop to others.

SAMPLE ASSIGNMENT, SUBMISSION, & EVALUATION

2006 Assignment and Session Evaluation



2006 Sample Assignment Submission (posted for students as an example of a proper submission)



STUDENT FEEDBACK

- "Perhaps it would be better to have a handout that gives each step to be followed to register and access different databases. This would be additional help on top of the good lecture that was given."
- "I thought that the demonstration of the searches in PubMed was particularly helpful."
- "I feel that this could have been done on an individual level from Blackboard. It would have been more beneficial to have a decently written set of instructions to follow than to have the lecture."
- "Thank you for posting a sample exercise. The original directions on the assignment were not very clear, and I think that the sample will prove to be helpful."

CONCLUSIONS

- A course management system is useful to the overall management of curriculum-integrated instruction.
- Students' ability to effectively use resources following instruction measures the effectiveness of the instruction.
- Library database use increases in the months following instructional sessions.
- Student attendance in library sessions is higher when integrated into an existing course.
- Curriculum-integrated instruction is superior to teaching workshops in terms of attendance and comprehension.
- Future workshops will address the overwhelming student requests for "step-by-step" instructions for searching databases.