I am Peter Shipman, Dental Medicine and Cancer Librarian at the Robert B. Greenblatt, MD Library at Georgia Regents University, and I am presenting this paper on behalf of my colleagues Kim Mears, the Scholarly Communications Librarian, and Maryska Connolly-Brown, Serials Resource Librarian.
To refresh your memory, Georgia Regents (GRU) is the consolidated institution of Georgia Health Sciences University (formerly the Medical College of Georgia, or MCG) and Augusta State University with the goal of becoming a comprehensive research institution. We have officially been Georgia Regents University since 2013 with the main campuses based in Augusta.

At GRU, the medical school has retained the Medical College of Georgia name, which we call MCG. MCG’s Office of Student and Multicultural Affairs has operated the Student Educational Enrichment Program, or SEEP since 1970.

The SEEP program is a mix of pre-college and college programs to help students prepare for a future career in the health sciences. Courses include chemistry, biology, writing, studying a topic (health disparities topic has been used frequently), and a Library Seminar. The college level SEEP students do not have a formal library component but focus on college-credit sciences, research projects, and Kaplan MCAT prep.
The SEEP pipeline program has a proven track record in recruiting students to GRU, fulfilling a core function of diversifying the physician workforce in the State of Georgia. Overall, the program has brought about 300 students to MCG and GRU. This year, seven SEEP participants have been accepted into the medical school (class size 200) and four into the dental school (class size eighty-five), one in the PhD program, and one into allied health.
The Library Seminar for pre-college SEEP is an information literacy course with a health sciences twist, so we include topics such as evidence-based medicine, MeSH, PICO, etc.

The pre-college cohort is usually around ten students, rising high school seniors or rising college freshmen that are 17 or 18 years old, recruited through area high school counselors. The students commute daily to the Augusta health sciences campus and they receive stipends for successfully completing the course work.

The Seminar meets for five, two-hour sessions, with two librarians and one SEEP handler or minder. The course was converted to an online format in GRU’s learning management system, Desire2Learn, in 2013.

The current 2014 Library Seminar is on a pass/fail standard of a pre-test and a high-stakes, graded post-test.
SLIDE FOUR – RATIONALE –

The rationale for moving from a traditional, face-to-face, information literacy class with paper tests was based on preparing them for their undergraduate baccalaureate experiences. Our students would inevitably find themselves in an online environment in college, with some courses taught completely online; the students would have to take online tests.

The librarians would create and record content and test material for online use, and apply flipped classroom techniques. We would use face-to-face time for active learning. Inverting teaching in a flipped classroom forces the student to be more responsible for learning outside of class, with the teacher helping with homework or reviewing concepts. The prevailing thinking on flipped instruction is this technique will increase knowledge and retention.
Methods

- Desire2Learn (D2L) learning management system
- Pre-test online
- Online lecture and handouts
- Post-test online (graded)

SLIDE FIVE – METHODS
The learning management system Desire2Learn would hold the class content. Content is recorded lecture, handouts and readings; Desire2Learn would also be used to administer the pre-test and post-test.
SLIDE SIX – 2013 EXPERIENCE –
The intention in 2013 was to do the class online.

Unfortunately, due to our institutional consolidation, not all students had an online presence in the learning management system. The workaround was to try to come up with an equivalent experience for the online group and the non-online group, as some students were in D2L, and some were not in D2L. We reverted to the traditional face-to-face and instructional paper system when we saw grades dip slightly. We believed the dip was due in part to the complications associated with the workaround – two different experiences for the students.
In 2014, it was agreed to test the Library Seminar with only a pre-test and a post-test because the students needed more effort directed to their science classes.

There was improvement which was expected. The administrators assigned to the class elected not to take the tests.

The D2L system color codes the grading. In the top, pre-test box, the orange color showed most scored a little over fifty percent.

The color codes in the bottom box show a range of a little over seventy percent, to over nine-nine percent.
You may have to squint to see the overlay of two images.

The image on the right was pulled from D2L with the students grades: the blue bars are A students, the B students are in green, and the C students are in yellow; the administrators are N/A, as they did not take the test.

D2L allows the instructor to view the students “progress” or their time spent online in the course. The image next to the bars, on the left, reflects the number of visits and time spent online with the seminar content.

It was interesting to me that there is no correlation between visits and time spent online with the final grade.

While the best student spent over three hours in the course, most spent between one and two hours. One B student spent less than one hour, and another B student spent 5 hours. We think the student spending 5 hours fell asleep or forgot to logout of the system.
The student experience in D2L was largely authentic, and all the students tended to get the material. You might be surprised to know that when asked at our last session what was the one thing they learned that stuck with them, many identified the use of Boolean operators as a powerful technique in narrowing searches.

The librarians had to spend more time to create live face-to-face content because less time was spent on search mechanics or background information; search mechanics and background information was covered in the recorded online lecture content. It was challenging to create online tests based on past paper tests, because the formatting of some of the paper test questions did not translate as well to the online format (such fill-in-the-blank).

The greater amount of online activity did not correlate to a higher final test grade. Some of this may be due to the fact that some of the content was informational in nature, and not part of the post-test. For example, we covered topics like APA 6th style, and plagiarism.
The class content and test are evaluated annually, so slight change is made to the course each time it is taught.

While I do not expect to be a SEEP instructor in 2015, I am currently exploring to have the course offered to the pre-College SEEP students at the Savannah State campus with our Library instructors from Augusta. The Savannah SEEP program is four years old, and structured similarly to the Augusta program, with ten, seventeen and eighteen year-olds in the pre-College cohort.

The one weakness to one post-test is not only is the test fairly high-stakes for the students, but most instructors using the flipped model usually spend the first part of a face-to-face class to test on the online content so students do not blow off their work.

A weakness to having only one post-test, besides that the students receive one single grade for the class, is that a single test goes against good flipped classroom practice. Instructors using a flipped model usually spend a short time at the beginning of a face-to-face class having a short quiz on the online content, to insure students are learning it. Teaching yourself content is a difficult skill for high school students, but the idea of weekly testing
will probably be broached again as we plan for 2015.
A happy coincidence happened this fall. I flipped my portion of a GRU dental course, and having more face-to-face time with the students, allowed me to implement a FlipQuiz game during the live class. FlipQuiz is in a Q and A format, rather than the Jeopardy A & Q format. FlipQuiz is archived in the course in Desire2Learn, so the game, as class content, could be repurposed as a study guide. Unfortunately, I was not able to test students on the online flipped content before the class session.

The FlipQuiz product was a suggestion from Tony Nguyen from NNLM/SEA, received as a RSS feed about four days before the class. FlipQuiz proved to be easy to use and set-up, and on subsequent class evaluations, FlipQuiz was one of the most popular tools I have ever introduced into a class. Because of the flipped model.

Thank you for your time and attention today.
Questions?
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