Class Context:

Exercise & Health Sciences (EHS) 460 is a research methods course that is required for the major. The majority of students in the class have already had introductory library instruction in an EHS 260 course. The professor always requests that students have maximum hands-on time in the classroom to work on finding research for their literature reviews. She specifically wants them to use SportDISCUS and PubMed as well as a citation management system (at UMass Boston, we subscribe to RefWorks). For this class, students reviewed 6 separate online modules before coming to the library and completed a series of activities for each module using a pre-formed search topic: the effect of energy drinks on exercise. Once in class, students worked in groups to repeat these activities for each module, including generating MeSH terms and advanced searches, for their own literature review research topics.

Materials:


Pedagogical Discussions:

- **Flipped classrooms**: Does truly flipping a classroom involve more than just assigning a video or pre-reading before class?
- **Group work**: Do students really learn more when they are encouraged to interact in groups?
- **Teaching upper-level info lit instruction**: What, if anything, can we assume about what students can already know and do?
- **Modeling**: Is there value in having students complete structured (or pre-formed) searches first, then having them repeat the steps with an unstructured (or un-formed) search?
- **Scalability and sustainability**: Can instructional objects be effectively re-used? Are vendor-created tutorials, or instructional objects created by other libraries or institutions, appropriate to use?

Student Feedback:

- Students were surprised and excited to be learning new, advanced skills in class: they pointed specifically to advanced search strategies, MeSH terms, and RefWorks as being valuable concepts/skills/resources that were new to them
- The vast majority of students felt the amount of pre-work content was appropriate and reported that it took them 60-90 minutes to complete on their own
- Most students rated both the online tutorials and the pre-work activities as equally helpful, and all students rated themselves, on a scale of 1 to 5 (1 being not at all prepared and 5 being could not be better prepared), a 3 or higher in terms of how prepared they felt for the library class after doing the pre-work
- Students appreciated the amount of hands-on time in class
- “It was informative and useful. Made me feel better prepared for this course.” “It was a pleasure learning new techniques from you.” “I liked this flipped format much better. It was more interesting.”

Future Improvements/Enhancements:

- Stronger incentives for completing pre-work from faculty member (e.g. homework or quiz grade)
- Collect and review student worksheets for authentic assessment