

Don't Do Their Work: Active Learning and Database Instruction

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As with most instruction librarians, I am frequently asked to provide one-shot instruction sessions. Overwhelmingly, the most frequently requested sessions are database searching instruction. In responding to faculty requests it is easy to get drawn into training students to use a particular database instead of more broadly learning how to search for information. Training students how to use a database service, such as EBSCO, does have advantages. By my giving an “expert” demonstration, the students will see how to get to EBSCO and how to use some of the features. Also, providing practice time gives the librarian an opportunity to briefly observe students’ search techniques and assess their progress by noting that students are (or are not) finding articles. However, there are also several downsides to this teaching strategy. First of all, the students learn how to use a particular database, not how to search for information and transfer those skills to any searching platform. This teaching also focuses on Bloom’s (2001) lowest level thinking skill, remembering—all the students are asked to do is know and recall EBSCO. Additionally, these type of sessions have left me dissatisfied with assessment—I have observed that if students are asked to find an article related to their topic as their assignment for the one-shot session, many view it as a ticket out of class and will choose the first article they find, regardless of quality, in order to be finished with class. In this article, I will demonstrate how I addressed these issues by shifting away from a model focused on demonstrating search strategies in a single database to engaging students in wider-range of active learning activities that can increase learning and transferable knowledge.

The Setting

Most of the information literacy instruction at William Penn University takes place during a class session for one of the required Composition I and II courses, typically taken by freshmen. The essays in these courses require library sources, so it makes sense as a place to focus our information literacy efforts. For example, the writing project for Composition II asks students to examine an everyday object or phenomenon. This prompt produces a wide variety of topics, from the commonplace tube of toothpaste to the cultural touchstone of the senior prom. The students research the history, economic impact, aesthetic value or some psychological, scientific, educational or sociological aspect of the topic. This writing project is completed in several steps over the course of a 16-week long semester and one of the earliest steps is the students doing the research on their topic. Therefore, instructors typically request an instruction session early on.

The Activities

When conducting a one-shot, there is a great temptation to demonstrate and explain every feature (or at least, as many as possible) of a database to students. This can very easily eat up most of a session. Focusing on active learning techniques means those explanations are to be avoided. To make that shift from explaining to active learning a librarian can focus on the person who is doing the work. The educator Harry Wong (1998) sums up this technique very nicely by stating, “The person who does the work is the ONLY one who learns” (p. 204). This quote speaks to me when I am thinking of an active learning technique: If I spend a lot of time explaining and demonstrating database features then I am the one working. So, when I do my planning I am always wondering how I can get the students to do the work, and thus learn. I also switch activities frequently, as we all know how short attention spans are and I strive to avoid lulls. When pencils are down or students begin talking off topic, they are clearly done with the activity I have given them. Again, if students are not working, they are not learning. The following is the breakdown of activities I typically use in the Composition II one-shot session.

Keywords: Heads Up!

After introducing myself I begin my session by focusing on choosing keywords. To demonstrate keywords we play a game on my iPhone called Heads Up! that is available as an app on Android and iOS. The game is a deck of (virtual) cards labeled with words in a category, such as animals. A student volunteer holds my iPhone up to his or her forehead so the card cannot be seen by the volunteer (see Figure 1). The other students give the student volunteer clues about the word on the card and the student tries to guess the word. Of course, this game could easily be created with paper and markers, but many students are already familiar with the app version and it also has a timer with entertaining sound effects. After we have played the game for a few minutes, I explain that the word clues they have been offering the student volunteer are essentially keywords, synonyms and related terms.

Next, we complete an active learning activity to identify keywords for the students’ chosen topics. I call this activity Pass the Paper. The students write their topics on a piece of paper and then they are instructed to write three of the aspects of research for the writing project on their paper. For example, the topic might be “football” and the aspects “history”, “economic impact” and “psychology”. The students then take two minutes to write keywords, synonyms and related terms for their topic and the aspects. For the next step, the students pass their paper to the person next to them.

Then they add their keyword ideas to the other students' papers. I also encourage the students to write down questions that they have about each other's topics. Those questions frequently contain more keyword ideas. I aim to have students pass their papers three times and take one minute to write the suggestions and questions during each pass. I once had a student comment that this activity was the most useful library instruction she ever received.

Database Features: Discuss Amongst Yourself

Now that the students have a list of keywords, synonyms and related terms for their topics they can learn about the key features of EBSCO. I quickly show them how to get to EBSCO and then I tell them to practice searching with their keywords for 10 minutes. In addition, I ask them to write two things on a piece of paper while they are doing so. The first thing they write down is a feature available in EBSCO or something they notice that is interesting to them about EBSCO. The second thing they write down is a question they have about EBSCO. I have students do this individually, in pairs or in a group—whatever works best with the number of students in the class. After everyone is done writing down their features and questions, we go around the room and first discuss the features they noticed. Other students will usually chime in if they have the same thing written down. Or a student will ask where the student found the feature, such as the geography limiter. I encourage the students to answer those questions for one another. If the student answers the question and demonstrates how to use a limiter that helps reinforce the skill (after all, they are “doing the work”). After we have discussed all of the features students have written down, we move on to the questions. Oftentimes we have already covered most of the questions students have written down while we discussed features. By the time we have finished the questions we usually have covered every feature that the course instructor and I wanted the students to know. Next, I briefly point out that other library databases and search engines such as Google have similar features that allow one to limit searches. As shown by Flanary (2012), having a student understand that they simply need to “read the screen” allows them to be able to use options and limiters, regardless of the search tool. They just need to explore and experiment as we did in EBSCO. The students leave class able to choose keywords and have confidence searching library databases.

Benefits During and After Class

I have noticed several benefits in using active learning activities. During class, students stay on task because we change activities quickly; when students are on task, learning increases. The limited amount of time available in a one-shot instruction session makes every minute crucial in keeping students engaged. Other advantages are noted after the one-shot session. The quality of student questions increases, because the students come to me in person or email

me with specific strategies they have already tried and ask how they can improve their search. They also ask for explicit instructions on how certain limiters work. In contrast, when I have spent too much time demonstrating and lecturing the most frequent follow up I experience is a student saying, “I can't find anything about my topic.” They can't tell me what they have tried and I can sense their frustration.

Conclusion

Most instruction librarians are eager to please and we strive to provide the instruction that faculty request, most often how search a database. In the long term, demonstrating how to use a specific database is not the best use of our time and keeps the students focused on a skill they may find difficult to transfer. We want them to be able to use any information source that is available now and we also want them to be confident in searching sources as they change and evolve. My experience has shown me that the less time I spend talking and the more time I have students work the more they learn. As I continue my information literacy career I plan to continue on this path and develop more techniques to keep students engaged in active learning.

References

- Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., ... & Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives, abridged edition*. White Plains, NY: Longman.
- Flanary, A. (2012). Get a list, then ignore it: Using Google to make the one-shot less boring and more effective. *LOEX Quarterly*, 39 (1), 4-5, 10.
- Wong, H. K., & Wong, R. T. (1998). *The first days of school: How to be an effective teacher*. Mountain View, CA: Harry K. Wong Publications.

Figure 1:
Person playing
“Heads Up!” on their
phone (Photo Source:
iTunes)

