Dorinne Banks and Tolonda Henderson Think before you flip

Using Fink's *Taxonomy of Significant Learning* to design flipped library instruction

E very summer for the past several years, George Washington University has held a Course Design Institute (CDI) in the library. CDI is a weeklong boot camp dedicated to helping faculty create or recreate courses centered on student learning. At the heart of the design methodology is L. Dee Fink's *Taxonomy of Significant Learning*. Fink defines learning as a change in the learner and his taxonomy identifies six areas where this might happen: foundational learning, application, integration, caring, learning how to learn, and a human dimension.

While Fink's context is the semester-long course, we began to ask ourselves how this taxonomy could be applied to library instruction. While it would be difficult to address the affective dimensions of Fink's taxonomy (caring, human dimension, learning how to learn) in a one shot session, we realized that Fink's framing of the cognitive aspects of learning could help us rethink which aspects of a one-shot lesson plan could be effectively scheduled before class and which needed to be addressed in person. In other words, Fink could help us to better flip our classrooms.

Traditionally, librarians have used in-class time to deliver content that the students have then applied in completing course assignments after the library session. The flipped model reverses this relationship: the content of the lesson is conveyed in advance—usually in a video—and class time allows learners to use the newly acquired knowledge to solve problems with the librarian present to help.

One of the trickiest parts of implementing the flipped model, however, is deciding which learning objectives are best addressed before class and which are best addressed in class. We know from experience that making this decision arbitrarily often means having to use class time to reteach what we meant for the students to learn beforehand. We have found that building our flipped lesson plans around Fink's cognitive aspects of learning allows in-class time to be focused on complex issues.

Of the three cognitive categories foundational knowledge, application, and integration—we find that foundational knowledge is the best category of learning to address before class. In Fink's words, "foundational knowledge provides the

Dorinne Banks is education librarian, email: dbanks@ gwu.edu, and Tolonda Henderson was formerly instruction and reference librarian, email: tolonda. henderson@gmail.com, at George Washington University, email: tolonda@gwu.edu

^{© 2019} Dorinne Banks and Tolonda Henderson

basic understanding that is necessary for other kinds of learning."¹ Once students have a good grasp of the foundational knowledge on a topic, they can work on applying and integrating that knowledge. As Sara Arnold-Garza puts it, "by moving the delivery of foundational principles to digital media, such as video lectures or tutorials, class time is freed up for engaging activities that allow students to apply these basics to practical scenarios in the presence of their instructor."²

In information literacy instruction, foundational knowledge includes students knowing how to access the library's website, identifying whether an article is scholarly, and differentiating between types of sources listed in a bibliography. Application means doing something with the foundational knowledge.3 It involves engaging in some kind of problem solving, decision making, or creative thinking. In the library classroom, this could be using a database's filter so that the results will all be scholarly. Integration is when we want students to identify the similarities, differences, or interaction between one subject and another. It involves seeing and connecting new ideas, people, or realms of life. The ACRL Framework for Information Literacy for Higher Education concept that "scholarship is a conversation," for example, is all about seeing and connecting ideas.

One example of a lesson plan that we've flipped using Fink's taxonomy is citation chasing. In order to successfully track down sources used by an article, students need to be able to 1) differentiate among different types of citations on a bibliography, and 2) use tools such as Google Scholar and the library catalog to find the sources.

There are many videos explaining how to use such tools, but to assign these videos as part of a flipped lesson would be to put the cart before the horse. In the language of Fink, looking at a citation and discerning what kind of resource it is pointing to is foundational knowledge, while using tools such as Google Scholar or the library catalog is application. In other words, students need to understand that books, chapters in books, and journal articles are different kinds of resources collected by different types of tools, before instructions on using those tools will be meaningful or significant. Therefore, the videos to be assigned before class should help students with discerning resource categories and in-class instruction should focus on the tools needed to find those resources.

Designing any one-shot library session needs to be done strategically. This is particularly true when using the flipped model of instruction so that in-class time can be spent on problem-solving activities rather than reviewing skills originally intended to be learned before class.

Fink's *Taxonomy of Significant Learning* offers a strategy for effectively discerning which learning objectives can be addressed on the students own time and which need the support of the librarian. By flipping foundational knowledge to before class and focusing on application and integration during class, librarians can help foster significant learning.

Notes

1. L. Dee Fink, *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses* (San Francisco: John Wiley & Sons, 2013): 35.

2. Sara Arnold Garza, "The Flipped Classroom: Assessing an Innovative Teaching Model for Effective and Engaging Library Instruction," *C&RL News* 75, no. 1 (2014): 10, https://crln.acrl.org/index.php/crlnews /article/view/9051/9890 (accessed June 4, 2018).

3. Fink, Creating Significant Learning Experiences 43. *****C