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SHOW ME, SHOW ME, SHOW me: PERFORMANCE BASED ASSESSMENT IN LIBRARY INSTRUCTION

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INTRODUCTION

The need for assessment of student learning is more important than ever, especially in an era of budget cuts and staff reductions. The advantage of assessing students in library instruction programs is twofold. By participating in institutional assessment efforts, academic libraries can demonstrate their value to their universities or colleges. Additionally, and perhaps more immediate, assessing students in library instruction sessions shows librarians what, if anything, students have learned as a result of their instruction. However, designing comprehensive assessment methods can be tricky, especially when the library instruction is delivered in a single session.

Assessment has been a part of library instruction for several decades. During this time, different methods have emerged, tied both to trends in higher education and the needs of library instruction programs. A 2001 survey conducted by the Association of College and Research Libraries (ACRL) College Libraries Section showed that 59% of responding libraries incorporated some sort of formal assessment in relation to their library instruction (Merz & Mark, 2002, p. 8). Whitlock and Nanavati (2013) explain that, when done well.

> the assessment process can gauge the impact of our teaching on student learning, extend learning beyond the initial educational experience, help us find ways to improve instruction, and prove the worth of our work to our students, our colleagues, our institutions, our communities, and ourselves. (p. 33)

Iannuzzi (1999) asserts "it is within the library's control to develop assessment tools that measure a student's ability to complete a task before he or she leaves the classroom" (p. 305). Various methods are utilized to accomplish this goal in libraries, with various levels of success. Librarians often rely on more formative methods of assessment, including one-

minute papers or evaluative surveys given at the end of library instruction sessions. While this feedback is valuable, it often neglects to measure what students are actually learning.

PERFORMANCE BASED ASSESSMENT

Performance based assessment, sometimes called authentic assessment, requires students to demonstrate learning by performing a task that involves the skills covered in the lesson. This type of assessment method offers a way for librarians to garner immediate results, while also providing students with the opportunity to use the skills they have learned in a real-world context. This is particularly useful for students learning research skills that will be used across the curriculum and concepts that form the foundation for life-long learning. Janesick (2006) promotes this method of assessment because it "replicates or simulates actual 'tests' in the workplace, personal life, and civic life" and for its practicality in assessing "the student's ability and skills to effectively and efficiently use a repertoire of many skills to complete a problem or task" (p. 4). This characteristic is in part what makes performance based learning so appealing for library instruction.

Benefits

There are many benefits to performance based assessment in library classrooms. Librarians involved in one-shot instruction sessions do not always have the opportunity to follow up on how well students retain information literacy concepts; performance based assessment provides the opportunity to determine right away whether or not students are learning. Additional benefits to performance based assessment are "close connections between instruction and assessment; ability to measure higher-order thinking skills; contextualization of assessment that leads to transfer of knowledge, greater equability, and increased validity; and

ability to use results to improve instruction and programs" (Oakleaf, 2008, p. 242).

One of the major principles of successful assessment of student learning is assessment that employs "a diverse array of methods, including those that call for actual performance" (Astin et al., 1996, p. 1). Authentic assessment techniques can be used in conjunction with more standardized assessments to provide a realistic portrayal of student comprehension. Students are required to actually use the skills they are being asked to learn while replicating the activities they will perform in everyday life. When this connection is communicated effectively, librarian teachers often see more buy-in from students involved in the assessment.

The idea that the skills taught in a library instruction session can be transferred to a real world situation holds appeal for students (Fook & Sidhu, 2010, p. 158). Whitlock and Nanavati (2013) found that "by assessing students in simulated and real-world contexts, we also build students' confidence in their ability to successfully accomplish those tasks on their own in subsequent, similar situations" (p. 36).

Challenges

Despite the numerous benefits of performance based assessment, it is not without its challenges. One such challenge is dealing with students' expectations of assessment, especially in the library classroom. Librarians should expect some amount of reluctance from students when extra work is required. Likewise, a small amount of coaching may be in order, as students can be unfamiliar and uncomfortable with sharing their experiences and thinking processes (Fook & Sidhu, 2010). However, librarians can address this by clearly explaining the requirements or guidelines of the task, and stressing its applicability to the course learning outcomes and/or research component.

An additional challenge to implementing performance based assessment is the time required of the librarian to plan relevant activities. Standardized assessments such as pre- and post- tests are faster to create and may be somewhat easier to grade with limited time frames, but they do not consistently provide an opportunity for students to apply, analyze, evaluate, and create (Whitlock & Nanavati, 2013, p. 36). While librarians

will spend more time initially designing the method or technique to use, the actual assessment of students often takes place in the classroom. Examples of assessment techniques and best practices are discussed in more detail shortly.
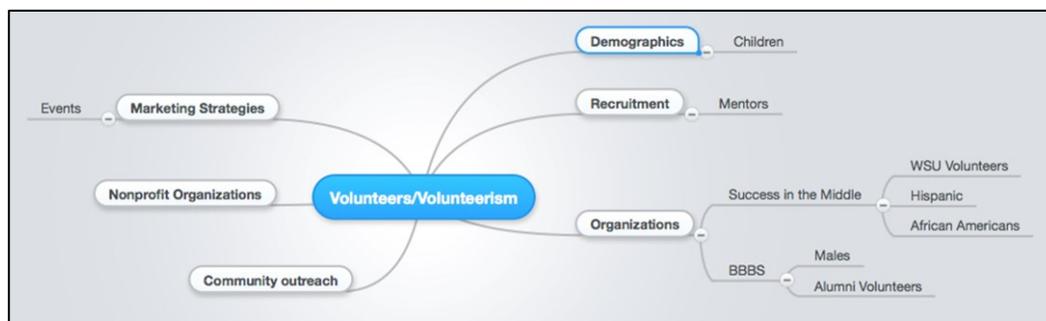
Examples & Techniques

Performance based assessment might require a bit more planning on the part of the librarian, but it can be molded to fit the time constraints of the library instruction session. Many librarians already include active learning in their instruction; thus, only a small adjustment to their teaching is required. Performance based assessment complements active learning because it offers "librarians an analysis of how students apply the outcomes taught in a specific class" (Carter, 2013, p. 50). For example, the assessment can be as simple as having a student find an article for a paper they are writing during the instruction session and email that article to the librarian for review. Developing shorter assessment tasks is a quick, effective way to:

> determine how well students have mastered basic concepts, procedures, relationships, and thinking skills within a content area. Generally these tasks take only a few minutes to complete so that several can be combined in a single assessment. Examples of such tasks include open-ended tasks, enhanced multiple-choice questions, and concept mapping. (Hart, 1994, p. 43)

Concept mapping, sometimes referred to mind mapping, is an effective way to visually assess students' comprehension of an idea or subject. Concept maps can be displayed on white boards for class brainstorms, or individual students can create them electronically. Several free, online tools are available for concept mapping, including MindMeister, Bubbl.us, and Text 2 Mind Map. The concept map below was created during the library instruction session for a Communication Research Methods course during an exercise to brainstorm keywords and topic relationships (Figure 1). The session was not taught in a computer lab, so students told the librarian what terms to add on the concept map and how they should be connected. The entire exercise took approximately ten minutes, and the librarian emailed the finished concept map to all students in the class.

Figure 1: Concept Map Created in Communication Research Methods Course

Additional popular techniques for performance based assessment include demonstrations, oral presentations, writing samples, formal observation, student portfolios, journal writing, and role-playing (Janesick, 2006, p. 29). These activities can easily take place during a library instruction session with some forethought on the part of the librarian. For example, worksheets offer an easy way for librarians to gauge learning. During an instruction session, students complete a series of tasks mimicking the research they will do for their assignments (**Appendix A**). Alternately, students could perform tasks directly related to their assignment, as in the article emailing exercise above. The result is a win-win: students gain experience using the skills and tools they need to complete their course work and librarians have a ready display of student learning.

In another scenario, assume a librarian is asked to teach an instruction session for a nursing course. One of the learning outcomes for the session is: *At the end of this instruction, students will be able to evaluate disciplinary journals for authority*. Performance based assessment in this context might include an activity that requires students to work in groups to examine three or four nursing journals and prepare a brief presentation describing the steps they went through to establish authorship and credibility for the journals. The librarian can observe the presentations, scoring the students on a rubric tied to the learning outcomes for the library instruction. Rubrics are a common method of assessing student learning in library instruction because of their flexibility as well as a way to provide "timely and detailed feedback to students" (Oakleaf, 2008, p. 245). Observing short presentations on information literacy concepts can easily be accomplished in one class period and can be applied to any discipline.

Role-playing, or scenario-based learning, is another way students can demonstrate learning in the classroom. Scenario-based learning puts students in a realistic situation that requires them to make decisions and discuss outcomes of these decisions; the scenarios "are created to allow students to seek or demonstrate knowledge" and can take the form of instructions given to students to complete or a "written set of circumstances with 'gaps' for students to complete themselves" (Errington, 2012). In a marketing class, for example, students can complete a scenario-based activity that requires them to take on the role of a marketing manager and engage in peer discussion to identify strategies for addressing a problem (**Appendix B**). As with the previous example, the librarian can assess students' discussion with a rubric.

Performance based assessment can also extend beyond the classroom with techniques such as student portfolios or online journals. These methods allow librarians to assess learning over time: "electronic portfolio assignments are ideal for helping a student organize work and demonstrate knowledge acquisition. The portfolio provides a framework that encourages students to develop the abilities needed to become independent, self-directed learners" (Jefferson & Long, 2008, p. 143).

BEST PRACTICES

When designing a performance based assessment component, librarians should follow several tips to create an authentic learning environment and gather usable data.

Tie Assessment to Learning Outcomes

Performance based assessment is most successful when tied to student learning outcomes which can, in turn, be tied directly to information and other 21st century literacy standards. In order to determine exactly what and how well students are learning, librarians must measure student learning through these outcomes. Many librarians already have intended objectives for their lessons; it is a fairly simple matter to organize these into outcomes that explicitly state what learning will occur.

Articulating learning outcomes at the beginning of the instruction session lets students know exactly what skills they will be required to use during the course of the instruction. Worksheets or other activities provide the opportunity for students to practice and demonstrate the concepts taught during the session. As mentioned earlier, rubrics are a good way to measure performance based learning, especially when the assessment technique involves presentations or demonstrations.

The process of articulating performance based learning outcomes is also a good way to demonstrate to faculty members how information literacy lines up with curricular and disciplinary standards. Likewise, learning outcomes should be explicitly communicated to students in order for students to remain aware of the tasks they will need to accomplish (Whitlock & Nanavati, 2013, p. 38). Learning outcomes should be discussed at the beginning of the instruction session, as well as during the description of the assignment or activity and even on printed materials, such as a handout or rubric.

Communicate Applicability

As with many assessment methods utilized in library instruction, librarians will see the best results when they tie the assessment to a course assignment. Having the assessment be worth a grade encourages students to take it seriously and changes their perception of the assignment from "busy work" to something that is applicable to the coursework. Likewise, students appreciate assessment activities that have applicability to their chosen professions; Fook and Sidhu (2010) encourage instructors to "take into consideration assessments that require [students] to synthesize knowledge and skills learnt in the classroom and apply it for 'real' situations in their future workplace" (p. 160).

In the absence of a course assignment, librarians should design an activity or library assignment that requires students to perform the same types of research they will be completing in their course or major. At the same time, the librarian and the faculty member must stress how the skills transfer to other situations.

Provide Feedback

As with more traditional assessment methods, a key component of performance based assessment is feedback. Rubrics can be very useful for this because they provide instantaneous feedback, are easily adapted to information literacy standards, are inter-disciplinary, and provide a "clear measure of the level of the learning attained by the student" (Diller & Phelps, 2008, p. 78). Rubrics developed in conjunction with teaching faculty can even be used as an assessment component for the course, further enhancing the assessment component's applicability.

Students should also be encouraged to make appointments with librarians to discuss feedback related to the assessment in order to fully engage in the learning process (Fook & Sidhu, 2010, p. 160). Developing a dialogue with students that extends beyond the library instruction session is crucial to emphasizing the transferability and longevity of the concepts taught.

CONCLUSION

The demand for assessment data in higher education has reached a ubiquitous level. Due to the vast array of assessment techniques available, librarians can struggle with identifying the best method for assessing student learning. Performance based assessment provides students with the opportunity to practice conceptual skill building in a real world context, while at the same time providing librarians with instant feedback by demonstrating what they have learned. As with any technique, performance based assessment should be implemented thoughtfully, rather than just for the sake of including an assessment component. With careful planning to design measureable learning outcomes and appropriate assessment activities, librarians can gather usable student learning data that can be communicated to administration and inform their future instruction.

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APPENDIX A

Searching ERIC
Library Research Session: ENGL 680

Choose a topic that interests you related to composition theory & practice (or just do a basic search for composition theory)

(1) Try an Advanced Search for the topic. What search term(s) did you use?

Number of results:

(2) Now try a search with the Thesaurus. What alternate search terms were you able to find? Do they seem more or less relevant to your topic?

Number of results:

(3) You decide to focus specifically on teaching writing to middle school aged children. Find one way you could narrow your search to reflect this focus.

(4) Choose an article you might use for the Article Review assignment. Is the full text available for this article? If not, how else could you access the article?

APPENDIX B

Scenario Activity for Marketing 609: Marketing Programs

Learning Outcomes
After this instruction, you will be able to:
- assess data retrieved from different databases in order to determine if you have enough information to complete your case analysis report.
- recognize the need to access information from a variety of business sources in order to complete your assignments.

Scenario
You are a marketing manager for Whole Foods Market. You've just received word that tomatoes from one of your suppliers might be infected by salmonella. You are asked to provide the company with a report that details how this might affect the company both socially and financially. You remember that this has happened before - a few years ago, the spinach supply was also infected by salmonella. You decide to investigate what happened to the company during this time and if there were any repercussions regarding consumer relations. Work in small groups to answer the following questions.

1) What do you need to know?

2) Where can you locate the data to help you determine this information?