

# Online Learning Assessments

In the 2017 academic year the Teaching and Learning team led a division-wide goal to ‘use authentic assessment to guide students to a growth mindset and collect evidence of learning.’ In order to achieve this ambitious goal we decided to increase our intentional integration of goal setting exercises with students at all levels of instruction interventions. We hoped that we would be able to create a goal setting instrument, online tool, for User Services staff to use with students during instruction that would show movement along a spectrum toward their information literacy goal(s). We defined four evidences of student impact that we hoped to be able to visualize by utilizing the tool: 1. Visible changes in learning and cognitive skill; 2. Student visibly applies an information literacy strategy; 3. Observable change in student affective state; and 4. Student affirms a learning plan.

Building upon lessons from previous assessment efforts, we chose to use the survey software Qualtrics to design, deliver and collect the learning assessment. We chose three instructional settings where we already were implementing or were well-positioned to introduce authentic assessment: Educational Psychology 104, Social Work 300 and our Writing Without Plagiarism tutorial. Each intervention is described separately below followed by a summary of our overall findings.

## Educational Psychology 104 Search Builders

### Goals and Learning Outcomes

For fall 2016 Educational Psychology (ED PSY) 104 Pathways to Success at UWM, we designed two interventions (search builders) to support student information literacy in the context of a research project and presentation. Our original goals for the search builders were

- a. to maintain an information literacy component in a course recommended for underprepared first year students,
- b. to extend our model for flipped instruction to maximize student learning and engagement, and
- c. to offer students a visible and transparent record of their attempted search strategies.

Learning Outcomes:

1. Students will be able to search for and find books and articles.
2. Students will be able to identify scholarly versus popular sources.

### Lessons Learned

The search builders were effective as pre-assessments that informed our instruction, both online and face-to-face. We reviewed the responses for evidence of students' basic search and retrieval skills and noticed that many students were not applying concepts included in the learning objects curated to support the search builder. Instead, students were simply filling in responses based on guess work. This lack of engagement with the content led to lower order application of information literacy skills. For example, when asked to provide the call number for the book they selected, some students entered information such as the Libraries' phone number, the ISBN, or the year the book was published. Based on these responses, we adjusted the design of the online [course guide](#) to reflect student behavior and prioritize essential learning objects. We also adjusted our face-to-face lesson plans to review concepts

that were misunderstood by the majority of students in their responses to the search builders. Most students were able to successfully demonstrate attainment of the learning outcomes, either in the search builders or in the classroom.

The search builders broke down the research process into its component pieces, and shared those pieces with students by emailing them their own responses. This was appropriate and supported the learning outcomes. However, this approach fell short of encouraging students to synthesize, integrate and apply what they learned in subsequent searches in order to find better source material.

### Future Directions

*The search builders are not an authentic assessment of higher-order application and synthesis of newly-learned concepts* that could be used by User Services librarians in a variety of courses. Despite indicating that most students could select a book and article related to their research topic, the search builder responses did not capture evidence of transformative understanding and do not make compelling stories to help us communicate our impact.

*The search builders will not be used in ED PSY 104 again.* The course no longer requires research. Instead, we may adapt the search builders for ED PSY 105, in which students will do a research project. If we do revisit the search builder strategy, we plan to engage in new ways with the ED PSY 105 GTAs to better integrate information literacy concepts over the course of the semester. We would also tweak the search builders to elicit more of the higher-order thinking we know is critical to information literacy.

## Social Work 300 Search Builder

### Goals and Learning Outcomes

Social Work 300 is a GER course with a fully online information literacy delivery model. A search builder activity administered through Qualtrics was introduced into this course as a strategy for making the search process more visible to students at the 300 level.

Learning Outcomes:

- Given instruction in developing a search strategy, students will be able to select a variety of sources to support their research on controversial issues related to aging in society.
- Given instruction in the attributes of a scholarly source, students will be able to apply these attributes as criteria in selection of scholarly sources.

### Lessons Learned

During the Fall semester of 2016, students completed the search builder and satisfied the information literacy assignment in the course. However, upon evaluation of student responses, we found that students were not applying information provided in the learning objects curated to support each concept. Rather students were simply filling in responses based on prior knowledge or trial and error. This lack of engagement with the content led to lower order application of information literacy skills. For example, when students were asked to explain why a source could be considered scholarly, they did not apply any of the criteria provided, but simply responded that they had used the search filter for scholarly sources. While opportunities for authentic assessment such as reflection and open-ended

responses were provided in the search tool, the expectation to complete the search builder as a single, linear assignment did not lend itself to those meta-cognitive activities.

Given that students could meet the minimum requirements for research in the target assignment without reviewing the learning objects curated for the course and without application of critical thinking, we determined there would not be value in continuing the search builder. Further, students were not benefitting from the graphic organizer that was produced and emailed to them upon completion of the search builder.

#### Future Directions

The information literacy component of this course has been revised in collaboration with the faculty member to encourage more critical thinking about and engagement with sources throughout the semester, rather than in one assignment. Information Literacy learning activities and assessment questions will replace the Qualtrics search builder.

## [Writing Without Plagiarism / Plagiarism and Attribution Tutorial](#)

### Goals and Learning Outcomes

The goal for developing the [Plagiarism and Attribution tool](#) was to provide a self-paced citation and attribution learning activity for Flex students. In order to support the needs of students who work in a self-paced and self-directed environment, the tutorial is branched and gives students opportunities to articulate responses, to make their prior knowledge and new learning visible.

The targeted student population for the content of this tutorial was Diagnostic Imaging students in the Flex program as well online and face to face Biomedical Sciences majors. Approximately 100 Flex Diagnostic Imaging students were enrolled during the pilot study and approximately 400 Biomedical Sciences majors.

Learning outcomes:

- Students will be able to identify instances of inadequate citation such as paraphrase without attribution.
- Students will be able to articulate strategies for improving attribution and citation.

### Lessons Learned

We reviewed student responses submitted between August 2016 and May 2017. In this time period, 117 students started the tutorial. This is a large number considering the Plagiarism and Attribution Tool was not directly linked to a course and the limited number of students in the Biomedical Sciences major who use MLA (Medical Library Association) Style.

Of the students who used the Plagiarism and Attribution tutorial, most completed the first example exercise, but responses and engagement waned in follow-up questions. The first question was answered approximately 60 times, while the last question was answered only 16 indicating that more students started the tutorial than completed it. Still, students were able to articulate strategies for improving citations such as naming the original study, specifically identifying the ideas of others, using phrases like

"according to", and using quotation marks. These responses show students with wide-ranging knowledge of plagiarism and attribution could successfully build on their prior knowledge in this area.

Responses collected in the Qualtrics tool support the learning outcomes. The collection of data also supports the larger goal of a self-paced tutorial for students that can be evaluated by library staff independent of a specific course.

### Future Directions

Based on the interest in this tutorial we will continue marketing it to faculty in Diagnostic Imaging major. We will also consider future development of second node of the tutorial using APA Style.

### Overall Findings

**Authentic Assessment of student learning is possible when directly tied to learning objectives.** A plug and play learning assessment is not ideal for authentic assessment. Authentic assessment by definition needs to match the curricular goals which will be different depending on student standing and nature of the course research requirement.

**"Search Builders" can yield evidence of students' knowledge or ability that is informative for teaching information literacy concepts in the classroom.** Requiring students to perform a task prior to instruction that is aligned with the goals of instruction is authentic and meaningful to both the student and the librarian.

**An online tool is just a tool and there is not a one-size-fits-all approach to collecting assessment evidence.** While it was helpful to use the online tool for delivery and collection there are other ways that the task could be delivered; in fact another mode or method of delivery may improve student learning.

**Collecting evidence of growth in learning requires assessments, learning activities, learning outcomes, and goals to all be aligned.** This finding further emphasizes our first finding, that a one-size assessment is not ideal for our goals. Instead of focusing on a uniform assessment, it would be more beneficial to focus on a uniform rubric that could be used in designing authentic assessments to meet assignment and course goals.