SCALING UP ASSESSMENT:
BUILDING A SHARED QUESTION BANK FOR EFFECTIVE ONE-SHOT TEACHING

Fifteen community college librarians have collaboratively developed and implemented a question bank tailored to measure information literacy learning. We have used the questions to conduct pre/post testing in more than 60 one-shot instruction sessions.

ABOUT MC

- Established in 1946 in Montgomery County, MD
- 4 campus libraries and 15 teaching librarians
- 43,000 students from 151 different countries
- 215 unique credit programs taught by 1,400 faculty

PROJECT BACKGROUND

In 2020, an Assessment Task Group in the library recommended creating pre/post assessments to evaluate our information literacy instruction. A question bank was created for these assessments. It emphasizes the learning outcomes taught in our classes and supports our college's General Education Program, containing four competencies that align with the ACRL Framework for Information Literacy: **researching**, **evaluating**, **using**, and **attributing** information.

TEAMWORK

All of the librarians in our division have created questions and tested the bank in their classes. This has allowed us to share the workload, improve the quality of our output, and practice critiquing each other's work in a constructive environment.

Faculty members are actively participating in this project to ensure that the questions effectively measure students' knowledge gains over time, particularly as they relate to the College's General Education goals. This endeavor not only supports our continuous improvement efforts but also enhances the overall effectiveness of our information literacy instruction.

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ALA Annual Conference & Exhibition San Diego JUNE 27 – JULY 2, 2024 AMERICAN LIBRARY ASSOCIATION

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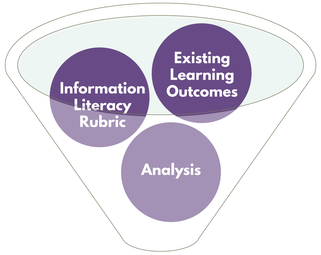
OUR PROCESS

1. Create performance indicators.



24 performance indicators across 4 categories

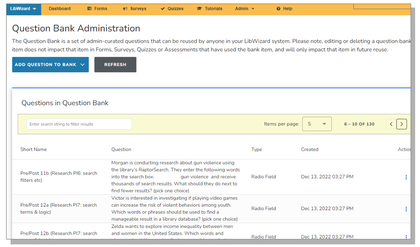
A performance indicator is a discrete and measurable learning benchmark. Below are sample indicators for each Information Literacy competency category:

Research	Students will develop and refine a search strategy using keywords.
Evaluate	Students will identify lateral reading techniques.
Use	Students will describe the paraphrasing process.
Attribute	Students will identify the elements that need to be included in a correctly-formatted citation for an APA reference list.

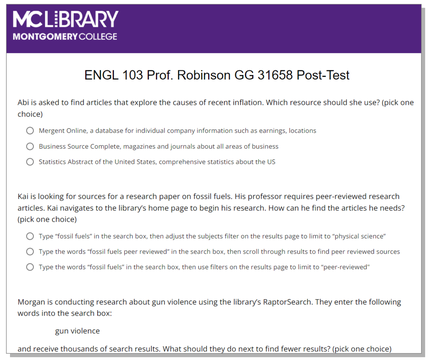
2. Write 65 pairs of questions.

Good questions focus on a single, specific behavior described in a performance indicator. Working from our performance indicators, we designed summative, scenario-based questions written in the third person. Simple, short questions and answers help the student understand what we are asking them to do. Each question is multiple choice, with a single correct answer, a wrong answer, and an answer that reflects a common student misunderstanding.

3. Load the question bank in Springshare's LibWizard platform.



4. Using LibWizard's Quizzes, create customized pre- and post- tests for each class.



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ENGL 103 Prof. Robinson GG 31658 Post-Test

Abi is asked to find articles that explore the causes of recent inflation. Which resource should she use? (pick one choice)

- Mergent Online, a database for individual company information such as earnings, locations
- Business Source Complete, magazines and journals about all areas of business
- Statistics Abstract of the United States, comprehensive statistics about the US

Kai is looking for sources for a research paper on fossil fuels. His professor requires peer-reviewed research articles. Kai navigates to the library's home page to begin his research. How can he find the articles he needs? (pick one choice)

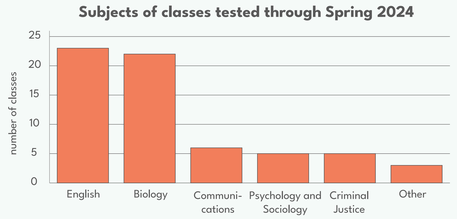
- Type "fossil fuels" in the search box, then adjust the subjects filter on the results page to limit to "physical science"
- Type the words "fossil fuels peer reviewed" in the search box, then scroll through results to find peer reviewed sources
- Type the words "fossil fuels" in the search box, then use filters on the results page to limit to "peer-reviewed"

Morgan is conducting research about gun violence using the library's RaptorSearch. They enter the following words into the search box:

gun violence

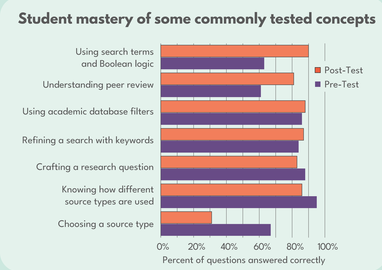
and receive thousands of search results. What should they do next to find fewer results? (pick one choice)

5. Administer tests before and after library instruction.



RESULTS

- Nearly 2,000 quiz responses through Fall 2023 have been analyzed using an Access database and Tableau visualization sofware.
- Student post-test performance has only been slightly better than pre-test performance (84% vs 80%). Larger differences can be observed within certain performance areas (see below).
- Librarians have acquired a deep familiarity with the college's information literacy learning outcomes; this is reflected in changes to our instruction practice.
- Our biggest challenge has been streamlining quiz delivery to students and increasing our response rate, which ranges from 20% to 90%.



NEXT STEPS

- **Continue similar testing during library instruction in Fall 2024 and Spring 2025.**
- **Assess the validity of our existing questions, modeling the research of other librarians (Mery et al. 2011; Boh Podgornik et al. 2016).**
- **Identify additional topics to emphasize during instruction, e.g., understanding source types, describing the purpose of peer review, and the basics of using information.**
- **Publish our complete analysis in a research paper.**

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REFERENCES

Boh Podgornik, B., Dolničar, D., Šorgo, A., & Bartol, T. (2016). Development, testing, and validation of an information literacy test (ILT) for higher education. *Journal of the Association for Information Science and Technology*, 67(10), 2420–2436. https://doi.org/10.1002/asi.23586

Ferguson, J., Hinchcliffe, L.J., & Cunningham, A. (2019, April 10-13). *At-Risk Students: Needs and Responses in the Information Literacy Classroom.* [Conference Workshop]. ACRL 2019 Conference, Cleveland, OH, United States.

Mery, Y, Newby, J., & Peng, K. (2011). Assessing the reliability and validity of locally developed information literacy test items. *Reference Services Review*, 39(1), 98–122.