

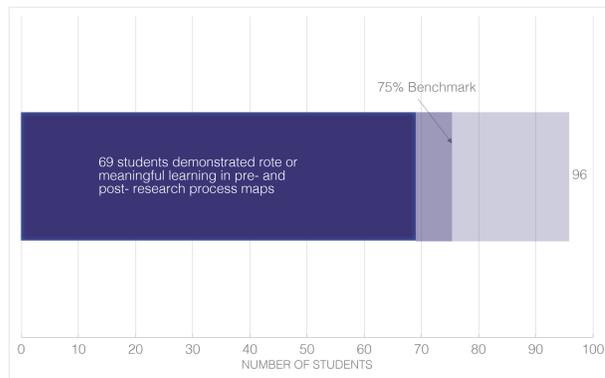
Using Signature Assignments to Assess Information Literacy Outcomes

Where We Started...

The LIB credit course program at the University of Northern Colorado consists of six distinct 100-level information literacy courses that share four student learning outcomes (SLOs). In 2015 we began developing signature assignments to assess learning in all 100-level information literacy courses. Signature assignments are course-embedded assignments, activities, projects, or exams that are collaboratively created by instructors to collect evidence for a specific learning outcome (Office of Institutional Research, Planning and Effectiveness, 2013). Since the 2018-2019 academic year, the signature assignments we developed for each SLO have been embedded in all sections of the courses. Here we describe the signature assignments used to assess these SLOs and the results of our assessment.

SLO 1: Develop a research process

The signature assignment asks students to map their research process at the beginning and end of the course. These pre- and post-maps are analyzed using a framework for measuring learning quality developed by Hay and Kinchin (2008) to assess change in the student's understanding of the research process. Student work was collected from six sections of the 100-level information literacy courses. For SLO 1, pre-post maps from 96 students were analyzed.



72% of students demonstrated rote or meaningful learning from their pre- and post-research process maps, narrowly missing our benchmark of 75% rote/meaningful learning for this outcome.

Authors & Acknowledgements

Brianne Markowski, Assistant Professor, University Libraries, Head of Information Literacy & Undergraduate Support

Rachel Dineen, Assistant Professor, University Libraries

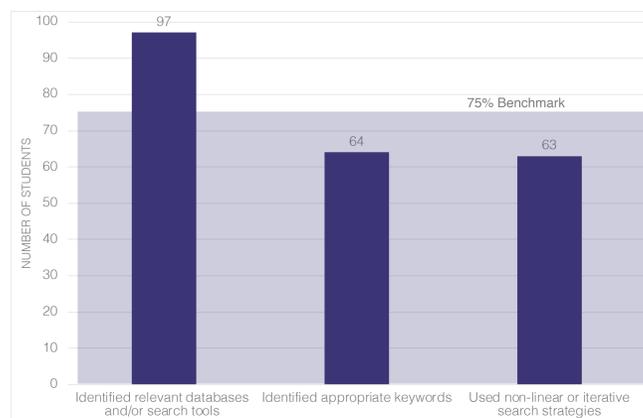
Lyda McCartin, Professor, Interim Director, Center for the Enhancement of Teaching and Learning

Thank you to the current and former members of the University of Northern Colorado Libraries' Curriculum Committee for their contributions to this project: William Cuthbertson, Stephanie Evers, Natasha Floersch, Darren Ilett, Jay Trask, and Stephanie Wiegand.

SLO 2: Demonstrate effective research strategies

The signature assignment asks students to reflect on the best search strategies for their research question. Reflections are analyzed for evidence of appropriate keywords, relevant databases/search tools, and use of non-linear or iterative search strategies. Student work was drawn from 11 sections of the 100-level information literacy courses. For SLO 2, a sample of 100 reflections were analyzed.

The analysis showed that 97% of students identified relevant databases or search tools to find sources, exceeding our benchmark of 75%. 64% of students identified appropriate keywords in their reflections and 63% described using methods other than keyword searching to find sources, missing our benchmark of 75%.



References:

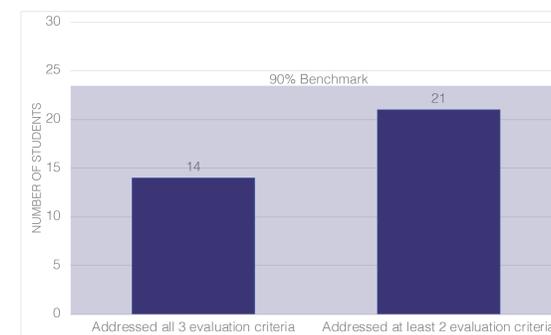
Hay, D., & Kinchin, I. (2008). Using concept mapping to measure learning quality. *Education + Training*, 50(2), 167-182. <https://doi.org/10.1108/00400910810862146>

Office of Institutional Research, Planning and Effectiveness. (2013, June 17). Signature assignment: Quick reference guide. *Pratt Institute*. https://www.pratt.edu/uploads/tl_culminating_and_signature_assignments_5_signature-assignment-quick_reference_guide.pdf

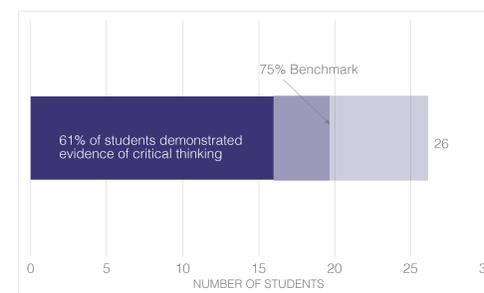
Embedding signature assignments in 100-level information literacy courses has systematized student learning assessment in our credit course program.

SLO 3: Evaluate information

The signature assignment asks students to justify their choice of sources for a posed research question based on the evaluation criteria of relevance, authority, and currency. Justifications are analyzed for evidence that the student can apply the evaluation criteria and demonstrate critical thinking. Student work was collected from six sections of the 100-level information literacy courses. For SLO 3, a sample of 26 justifications were analyzed. 53% of students applied all three evaluation criteria, well short of our benchmark of 90%. An additional 30% addressed two of the evaluation criteria in their written justifications. Currency was the criteria least often applied in the justification.



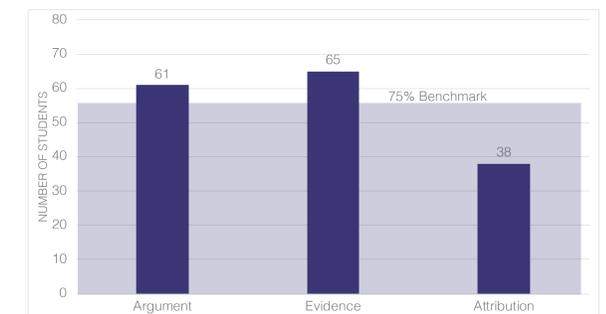
61% of students demonstrated evidence of critical thinking in their evaluation of a source, missing our benchmark of 75%.



SLO 4: Develop an argument supported by evidence

The signature assignment is a final research-based product (e.g. annotated outline, essay, presentation, poster) that requires students to answer their research question based on available evidence. Final products are analyzed using a rubric outlining three levels of achievement in the content areas of argument, evidence, and attribution. A sample of 77 final products was drawn from 11 sections of the course.

79% of students met expectations for argument, providing clear connections between most sources and argument in order to answer their research question adequately. 84% of students met expectations for evidence, presenting a sufficient amount of relevant evidence. For both argument and evidence, the 75% benchmark was exceeded. 49% of students met expectations for attribution, demonstrating ethical use of sources with some to no errors in use of citation style, well below our benchmark of 75%.



UNIVERSITY OF
NORTHERN COLORADO

University Libraries

What Happens Next...

Embedding signature assignments in 100-level information literacy courses has systematized student learning assessment in our credit course program. Looking at SLO achievement across sections and courses has helped us determine the extent to which students are attaining the expected learning outcomes. Most importantly, it has also helped us identify areas in our curriculum that need improvement. For example, based on the assessment data for SLO 3, we identified a number of steps to improve student learning including updating the sample topic, rethinking how we address currency in classroom discussion, and developing a formative assessment. The assessments described here could be adapted by other libraries looking to assess similar SLOs in information literacy courses or in course-embedded library instruction.