Assessment of the Information Literacy ILO

In 2014-15, information literacy was the focus of Westmont's institutional learning outcome assessment. Information literacy is not only concerned with how students use tools to find information, but more importantly with what they do with that information once they've found it. This assessment project used both direct and indirect assessment methods to evaluate how students engage with information resources in their academic and disciplinary contexts, and was driven by the information literacy ILO: *Graduates of Westmont College will be able to identify, evaluate, and integrate sources effectively and ethically in various contexts.*

Direct Assessment
Methods and Tools

In both fall and spring semesters, student writing was collected from lower- and upper-division courses. The papers collected were all source-based writing assignments, meaning simply that students were at least required, among other particulars of the course assignment, to find and incorporate outside sources into their own writing. These papers were not written specifically for the ILO project, but were instead written for the ordinary purposes of the course. This was intentionally done, allowing the project to engage in authentic assessment by looking at student writing in the everyday context of the classroom.

A rubric was created for this project, designed with the language of the ILO in mind. The rubric looked at three primary aspects of information literacy: source evaluation, source integration, and source attribution (see attached). A group of Westmont faculty and librarians met to norm the rubric together, then read and rated the student papers against the rubric, rating each paper on a 4-point scale in the three areas. Each paper was read at least twice to ensure inter-rater reliability.

Results

	4 - Proficient		3 - Competent		2 - Developing		1 - Beginning	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Source Evaluation	1.5%	36.7%	24.2%	48%	56.1%	15.3%	18.2%	0%
Source Integration	1.4%	23.5%	14.1%	55.1%	53.5%	21.4%	31%	0%
Source Attribution	1.5%	16.3%	20.9%	46%	35.8%	30.6%	41.8%	7.1%

Of the 37 lower-division course papers read and assessed, more than 85% were written by first- or second-year students. The majority of students rated in the lowest two portions of the rubric across all three areas assessed. Of the three aspects of information literacy addressed by the rubric, students did best with source evaluation, scoring primarily "competent" (3) and "developing" (2). They struggled most with source integration, scoring primarily "developing" (2) and "beginning" (1). A trend did not necessarily emerge for source attribution; the data demonstrate students' skills in this area are much more varied.

Of the 47 upper-division course papers read and assessed, more than 95% were written by graduating seniors. This upper-division data demonstrates a very similar trend to the lower-division data described above. Students did best with source evaluation and also performed well in source integration. Again, a less visible trend emerged for source attribution, as students' scores were dispersed more widely across the rubric.

Students in this sample of upper-division writing show a marked improvement over the writing samples taken from lower-division students across all areas of information literacy assessed by this project. Especially noteworthy are seniors' improvement with source integration. The faculty and librarians involved in this project agree that this is the most challenging aspect of source use, so it is significant and heartening that 23.5% of students in upper-division courses rated "proficient" (4) and 55.1% rated "competent" (3) in this area.

Indirect Assessment
Methods and Tools - **Research Process Survey**
In conjunction with the direct assessment described above, a Research Process Survey was given via SurveyMonkey to students whose work was collected, asking them to reflect on their research process for the assignment and to identify which parts of the research process they found most difficult. This provided a critical look at how students' perception of the research process compares to their actual writing.

Results
Among all the data gathered in this portion of the assessment, these trends are most notable:
- About 20% of lower-division students reported talking to some member of their family for help with their research, compared to just 2% of students in upper-division classes. This demonstrates that a much greater portion of lower-division students are seeking to fill a need through family members that is not being met, or sought, on campus.
- More than 40% of upper-division students consulted a librarian in the course of the research process, but only 20% of lower-division students did so. Very few students overall, regardless of class standing, reported consulting with the Writers' Corner during the course of their research. However, a vast majority of upper-division students report that "writing my paper" is either "hard" (41%) or "very hard" (22%).
- Far more upper-division students (43%) than lower-division students (17%) report that "picking a topic" is either "hard" or "very hard" which may show that upper-division students are actually more deeply engaged with the research process.
- Only 23% of lower-division students report that "incorporating source into my paper" is "hard" or "very hard." Lower-division students may not understand the extent to which they need to grow in this area.

Methods and Tools - **National Survey of Student Engagement (NSSE) Survey**
First-year and senior students were given NSSE's "Experiences with Information Literacy" survey in 2014. This additional indirect assessment provides further insight into students' experiences with skill development and in-class assignments related to information literacy. The students who participated in this survey were not necessarily the same as those involved in the assessment efforts described above.

Results
Westmont senior students' survey responses were at or above the national mean scores for almost every question asked on the NSSE survey. Though this is an encouraging sign, some trends among seniors are worth noting:
- The majority (58%) of seniors reported that professors emphasized "appropriately citing the sources used in a paper or project" "very much." However, our assessment of student

writing found that this is the area in which we see students struggle the most. This seems to demonstrate a disparity between what is emphasized in the classroom and how students actually perform with that task.

- Seniors reported that 46% of the time they "sometimes" exclude a source due to its "questionable quality," suggesting this isn't a terribly habitual practice for them. The responses to this survey question seem to suggest that either students are usually finding reliable sources, thus reducing the need to exclude poor sources, or students are not thinking as critically about the content of the sources they use.
- Seniors also reported that 47% of the time they only "sometimes" change the focus of a paper based on information gathered in the research process, which may demonstrate a reluctance on the part of many students to be open to considering new ideas or directions for their research, which is an important part of the research process.

Recommendations

Several discussions are planned for the coming year to provide faculty and librarians a forum for reviewing this data and collaborating on ways to improve students' information literacy skills, especially when it comes to source integration.

Source integration is the most challenging and most important aspect of the information literacy skills and abilities this project assessed. Source integration requires students to read sources critically and think critically about how to draw an author's argument or work into conversation with their own writing. When source-based assignments are scaffolded in such a way that requires students repeatedly demonstrate how their writing is developing in these areas, and provides them with regular feedback, we expect students would show greater improvement in this area. By opening conversation among faculty and librarians, we can discuss where, or if, these skills are already explicitly taught, and strategize further about where else this might be integrated. Another related question to explore is what other factors contributed to the marked improvement found in upper-division course writing over the lower-division writing samples, and how can we ensure more students are exposed to those benefits?

One senior student commented on the Research Process Survey that "[librarians] visiting classes isn't enough; mandatory one-on-one meetings [with a librarian] was more effective." And many librarians have anecdotally shared the benefits of meeting individually or in small groups with students, even at the cost of the time involved on the part of the librarian. Librarians are committed to continuing to explore this and other creative ways of working with students to help them develop and refine their information literacy skills.

Information Literacy in Student Writing Rubric*

Westmont College -- Institutional Learning Outcome Assessment, 2014-15

	4 - Proficient	3 - Competent	2 - Developing	1 - Beginning
Source Evaluation	Incorporates a wide variety of sources, demonstrating critical exploration of sources on the topic. Uses sources that are both relevant to the topic and are authoritative and credible.	Uses appropriate sources, but some sources lack variety or depth. The majority of sources are relevant to the topic and are authoritative and credible.	Uses sources that lack variety or depth, and has not sufficiently explored sources on the topic. Many sources do not appear relevant and/or are of questionable authority and credibility.	Clearly relies on poor sources and has evidently not explored the breadth of sources on the topic. Sources lack relevance to the topic and are not authoritative or credible.
Source Integration	Synthesizes and critically reflects on content of sources with sophistication. Integrates sources by summarizing and paraphrasing with sophistication, and incorporates quotations thoughtfully; thoroughly incorporates information from sources.	Strong evidence of synthesis and critical reflection on sources, with some areas for improvement. Integrates sources by summarizing, paraphrasing, and quoting, with some evidence of critical reflection on sources; incorporated sufficient information from sources.	Some evidence of synthesis and critical reflection on sources but with obvious areas for improvement. Relies on quoting or "patch writing" from sources with limited accompanying evidence of critical reflection on sources; could have incorporated more information from sources.	Very little evidence of critical engagement with or synthesis of sources. Relies on quoting or "patch writing" from sources without demonstrating true engagement with sources; fails to incorporate sufficient information from sources.
Source Attribution	Cites sources throughout paper consistently and completely.	Cites sources throughout paper with only occasional errors or inconsistencies.	Frequently cites sources incorrectly or omits some necessary citations.	Displays fundamental and pervasive errors in citation conventions.

*Portions of this rubric adapted from:

Gould Library Reference and Instruction Department. "Information Literacy in Student Writing Rubric and Codebook." Northfield, MN: Carleton College. 2012. http://go.carleton.edu/6a *and* AAC&U's Information Literacy VALUE Rubric, https://www.aacu.org/value/rubrics/information-literacy