



Library-Faculty Collaborations for Information Literacy Westmont College ILO Report, 2021-2023

Introduction

The Westmont College library was on the cutting edge of Information Literacy assessment when it began to assess students' learning and engagement in reading, writing, and research in 2012. Savannah Kelley and Molly Riley created rubrics and led assessment projects that were adapted to a small Christian liberal arts college.

In this second round of Information Literacy ILO assessment, Voskuyl Library attempted to capitalize on their innovative work. We strove to address one of Riley's concerns—the lack of involvement of the Natural and Behavioral Sciences in both library instruction and assessment. We also hoped to include an analysis of information literacy in upper-division, research-intensive courses. We are disappointed that those goals were not accomplished in this round of assessment. [Appendix B6] However, we must acknowledge that we were working under less than ideal conditions. COVID fatigue and burnout were realities across campus, making recruitment of faculty partners difficult and limiting our ability to assess upper-division student work. Library staffing shortages and related inefficiencies plagued our efforts. Despite these challenges, we are grateful that we were able to do meaningful assessment work in ENG-002 English Composition, building on a collaboration that stretched back the 2014-2015 ILO assessment.

From our blinded and normed assessment of ENG-002 written work, we find that **student learning in wisely evaluating sources and ethical source integration ought to improve across all demographic groups.** "Wisely evaluating sources" includes **demonstrating attentive reading and discerning use of relevant sources.** "Ethically integrating sources" means **thoughtfully and ethically summarizing, paraphrasing, and quoting from sources.** Appropriate reading strategies undergird both of these habits of mind.

These conclusions were based on the results of the Information Literacy Pre-Instruction Surveys given to ENG-002 and KNS-072 Foundations of Kinesiology students. [Appendix B5], as well as the assessment of student writing in ENG-002 [Appendix B7] From additional conversations among faculty collaborators discussed below, we suggest these findings are indicative of a broader deficit in students' use of sources in other classes, including upper-division major courses. Librarians are working to **optimize point-of-need instruction and strengthen faculty collaborations.** However, we also call for **structural changes: incorporating the teaching and modeling of appropriate reading strategies throughout the college's curriculum with the support of Voskuyl Library.**

Building on the Past

In 2014 the college conducted the "Experiences in Information Literacy" module as part of the National Survey of Student Engagement given to first-year and senior students. That fall Molly Riley, Instructional Services Librarian, led the first campus-wide assessment of the impact of information literacy instruction on student learning. That ILO stated, "*Graduates of Westmont College will be able to identify, evaluate, and integrate sources effectively and ethically in various contexts.*"

Riley developed a Rubric for Student Writing [Appendix A1] for assessing research papers, and a Research Process Survey was administered after the writing process was complete. [Appendix A2] Two writing assessments were conducted: ENG-002 English Composition research papers and senior social science and

humanities capstone papers. Scoring was done by the ILO Task Force and other faculty committed to supporting information literacy. Another, smaller assessment of student writing was conducted in HIS-010 World History, a Common Contexts course, in January 2016 using the same rubric. [Appendix A3 shows comparative data from all three assessments.]

The most fruitful insight from Riley's [report to faculty in Fall 2015](#) was that **students struggled most with source integration.**

In the summer of 2016, library director Mary Logue was approached by the chair of the English department, Sarah Skripsky, to discuss collaboratively redesigning library instruction for nine sections of English composition (ENG 002, GE Writing for the Liberal Arts) which was **completed by about 50% of Westmont students.** In a given year, **approximately half of these sections may be taught by adjunct professors.** While all Composition instructors are guided by an ENG-002 Best Practices document, **robust instruction is a key concern, since the course establishes a foundation for student success and retention throughout our writing-intensive liberal arts curriculum.**

Each ENG-002 instructor was asked by the English chair to invite librarian Diane Ziliotto to lead two instruction sessions per semester. The first session introduced students to relevant library resources; the second focused on source integration. At the end of Fall 2016 and Spring 2017, research papers were collected. In May 2017, librarians and English composition professors gathered for a day-long session in which research papers were normed and evaluated against the 2014 rubric for source integration only [Appendix A1]. A random sample of 39 out of 100 papers were assessed. The results were compared to data on Source Integration from the 2014 ILO assessment. These demonstrated marked improvement in source integration. [Appendix A4] **These conclusions suggested that the redesigned library instruction model had been effective in improving the deficiencies noted by Riley in paraphrasing, summarizing, and incorporating quotations into student writing. This two-session librarian instruction model then became the norm for information literacy instruction in ENG-002 courses.**

Preparing for the 2021-2022 Assessment

In March 2021, librarians spent spring break reviewing chapters from a book recommended by Sarah Skripsky, *Teaching Critical Reading and Writing in the Era of Fake News.*¹ **The goal of these sessions was to revise the ILO to more closely reflect present student learning challenges in source evaluation, a concern heightened during the 2020 COVID pandemic and presidential election cycle.** Even before these events, librarians and faculty saw a decline in the ability to wisely evaluate the truth of information. **Another concern was the noticeable (if anecdotal) decline in reading comprehension and writing skills during the years since our last Information Literacy ILO assessment. Many faculty expressed frustration with teaching two tiers of students: the well-prepared who thrived on traditional liberal arts teaching methods, including deep reading of complex texts; and the under-prepared who found it difficult to read and digest challenging works.**

Librarians also strove to incorporate the *Association of College & Research Libraries Framework for Information Literacy for Higher Education* (2015), which was published after the last ILO assessment:

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Scholarship as Conversation
- Searching as Strategic Exploration

¹ Carillo, Ellen C, and Alice S Horning, eds. 2021. *Teaching Critical Reading and Writing in the Era of Fake News.* Studies in Composition and Rhetoric, Vol. 13. New York, NY: Peter Lang Publishing.

The *ACRL Framework* emphasizes the importance of learning information literacy ***within the context of disciplinary habits of mind***, critiquing previous standards that focused solely on skills such as database searching or source citation. Final language for the new Westmont Information Literacy ILO was agreed upon by librarians and Skripsky, now serving as the Writing Across the Curriculum (WAC) Coordinator, who joined the last session of the workshop via Zoom. [Appendix B1: Workshop 4 on Defining Information Literacy]

The result: Graduates of Westmont College will be able to ***strategically research, wisely evaluate, and ethically integrate*** sources in various contexts.

The Assessment Tools

Pre-Instruction Information Literacy Survey. Until 2013, the library had regularly administered a standardized survey of incoming students' information literacy skills during New Student Orientation.. That survey, SAILS, was proprietary and was dropped due to cost and a change in philosophy about the purpose of NSO. In summer 2021, Jana Mayfield Mullen researched available options and discovered an open source instrument, TRAILS, which was adapted for 12th-grade students and covered all aspects of information literacy. Mayfield Mullen adapted the questions in collaboration with other librarians, creating a survey of 19 questions that could be administered either in print or in an online Google form. [Appendix B2; Appendix B5.2 shows how this instrument was applied in KNS-072: Foundations of Kinesiology, Spring 2022.]

Revised Writing Rubric. Riley's 2014 rubric was adapted by Theresa Covich and Mayfield Mullen in the summer of 2021, in the light of the revised ILO language. They sent the document for review to librarians Bedoy and Ziliotto, as well as Skripsky. The revised rubric was utilized in all research paper writing assessments in 2021-2022. [Appendices B3.1 and B3.2.]

Metacognitive Reflections. Analysis of students' research and writing processes – from identification of a topic to final draft – had been conducted in the 2014-2015 Information Literacy ILO using the Research Process Survey. Particularly relevant for library collaborations with first-year composition sections, metacognition is one of the eight "habits of mind" described in the *Framework for Success in Postsecondary Writing* (2011). For library instruction, the *ACRL Framework* emphasizes "metacognition, or critical self-reflection, as crucial to becoming more self-directed in a rapidly changing [information] ecosystem." Several ENG-002 faculty, as well as Laura Drake Schultheis in BIO-130 Cell Biology, adopted metacognitive research reflections as a required assignment. The prompts varied from very detailed questions about the research process, to none at all. [Appendix B4; see also Appendix B6 for how it was evaluated by librarians in BIO-130.]

2021-2022 Assessment Focus: Academic Research Paper in Eng-002 English Composition

Library Instruction. Ziliotto and Covich partnered in teaching information literacy to nine sections of ENG-002. Ziliotto taught the **first session, focusing on teaching students to effectively search scholarly databases, the library catalog, and Google scholar to find relevant and reliable books and journal articles for their research assignment.** Some faculty sent preliminary student topics to Ziliotto, which allowed for more focused modeling and strategic use of keywords and subject searching. Ziliotto planned to give the printed Information Literacy Survey to students at the beginning of class. Due to time limitations and faculty preferences, the Survey was administered in most, but not all, of the nine ENG-002 sections. Mayfield Mullen input the results into Google Forms. The results were then shared with Ziliotto, Covich, and relevant faculty.

The Information Literacy Pre-Instruction Survey, as noted above, had its limitations in guiding instruction when given at the beginning of class. But this varied by professor. Skripsky, for instance, made time to discuss the results in class the day of library instruction. As she testified at the WSCUC ARC conference in April 2023 [Appendix C5], advantages of administering the survey included:

- [The survey] allows students to **demonstrate existing knowledge**
- Helps to identify **weaknesses in understanding** (e.g., website credibility evaluation, paraphrasing vs. direct quotations, savvy Boolean searching)
- Provides a **springboard for honest questions** during the teaching session
- Helps to identify **areas of focus for follow-up instruction**

However, Ziliotto found that it took up too much class time (20-25 minutes out of a 65-minute class) to administer 19 questions. Sharing a link to the Google form survey with students made it possible for librarians and the faculty member to see the results prior to class. Librarians could then shape instruction to meet actual student needs.

A surprise in the results was that **students rarely missed the questions on narrowing and broadening topics** and using Boolean operators to maximize the efficiency of searches, **even though librarian interactions with students at the Research Help Desk and in-class instruction testify otherwise**. Not surprisingly, we found that the **most-missed questions dealt with source integration and evaluation**. [Appendix B5.1] This was in line with past assessments. [Appendices A3 and A4]

The **second session**, taught by Covich, **addressed ethical source integration**, and focused on **summarizing, paraphrasing, and quoting sources appropriately**. The ethical component is often understood to be only about correct source citation. However, librarians and faculty have found that many writers (not just students!) struggle with this task. And disciplinary differences can make this a challenge for students. For instance, the sciences (natural, behavioral, social) opt for passive voice and minimal intrusion of authors in the text, while the humanities, which value originality of expression, are more apt to introduce a quotation or paraphrase contextualizing the authors' importance for the writers' arguments and claims. In English Composition, students may follow the Modern Language Association (MLA) citation guidelines or may be encouraged to use the citation style with which they are most familiar. Fortunately, the **principles of ethical source integration apply across the disciplines**.

Assessment of Student Writing. In October 2021, Tatiana Nazarenko, Tim Loomer, Covich, Mullen, and Skripsky agreed on a methodology for the project. As Loomer explained, "[The group] decided on a randomized cluster sampling approach with students from ENG-002 (AY21-22). Eighty students were selected: 50% male/female with 30 HABH students (also 50% male/female). (Note: HABH = Hawaiian/Alaskan Native, Black or African American, & Hispanic/Latino . . . This assured reasonable sample sizes to test for male/female and HABH/Non-HABH differences." [Appendix C.5]

Student writing was collected for nine sections of ENG-002. The following faculty participated:

Fall 2021 Full-time: Cheri Larson Hoeckley, Sarah Skripsky
Part-time: Susan Isaac, Beth Lee, Robert Speiser

Spring 2022 Full-time: Kya Mangrum, Carmen McCain, Rebecca McNamara, Sarah Skripsky

At the end of each semester, faculty downloaded files of the documents from Canvas. These were saved in the library's shared Egnyte drive.

In addition to collecting research papers, ENG-002 faculty shared **students' Metacognitive Reflections on the research and writing process** (when assigned) with librarians, who piloted coding for research strategies. The hope was that these would augment findings from the survey and paper assessment that could inform our instruction. However, without standardized questions on the research process, the relevance of the reflections varied widely. Nevertheless, **some value was seen in librarians' involvement in the coding process. They found that they sometimes differed in the way they defined information literacy concepts, and even how much they valued certain research behaviors.** [Appendix B7.2]

An assessment workshop was planned for May Term 2022. Recruitment was a challenge. Faculty were exhausted after two years of COVID, and its impact on their personal and professional lives. Enrico Manlapig, a member of the ILO Task Force who expressed enthusiasm about participating in fall 2021, left the college. Tenured faculty were off-contract.

Previous faculty stipends had not adequately compensated parents for needed childcare. However, in negotiation with Nazarenko, and with the willingness of the library to add to funds as needed, stipends were raised to match hourly compensation for part-time faculty. Skripsky encouraged ENG-002 faculty to participate. She also asked that we recruit male faculty, and we were pleased to add two senior faculty colleagues to the group.

Day One, May 23, began with norming practice, led by Skripsky and Covich. This included discussions about interpretations and application of the rubric. Scoring differences on two sample papers were discussed in pairs, and then in the large group. Then assessors were given printed, anonymized copies of student work and sent on their way. Each paper was scored twice.

Assessors were asked to deliver scored papers to the library director's office by 5 pm. As these trickled in, comparisons were made to determine interrater reliability. Papers whose scorers deviated significantly were reevaluated by either Nazarenko or Mullen. Scores were then recorded in a spreadsheet for preliminary analysis by Chena Underhill, Eresources and Tutoring Coordinator. [Appendix B7]

There was also a handout accompanying the papers, which scorers were asked to fill out as they worked, with the following prompt: **The purpose of this assessment is to identify the top concerns and priorities for instruction (both English and library) this coming year. As you read and score these samples of student writing, please record any relevant thoughts, questions, suggestions, insights, or complaints below. . .**

Some common themes emerged:

- **Hardly anyone has a clear research question/claim**
- Need more attention to **how sources are related to each other**
- There was a **wide disparity between the best papers and the worst**
- About **2/3 of the papers read more like op-ed or persuasive pieces**—where the student already had made up their mind and . . . **sources are used as proof-texting**
- **Does exempting so many students from ENG-002 limit opportunities for peer-to-peer modeling and instruction and raising the bar?**

On the morning of May 24, Underhill's preliminary data analysis was shared with the team. That afternoon assessors met via Zoom to reflect on their experience and ponder the significance of the results for their own instruction. [Appendices B7.1, B7.2, and B7.3]

Digging into the Data. Building on Underhill’s collection and systematizing of the scores from the May workshop, Loomer did further analysis of the collected data in Spring 2023 and made these observations:

Student scores by demographic breakdown:

- There is **some evidence to suggest male/female students differed significantly** when looking at the scores from all three criterion together (average of 6.62 v. 7.23)
- HABH and non-HABH **did not differ significantly**
- First generation and non-first generation **did not differ significantly**
- Finding: **Small sample sizes likely prevented further statistical significance from being identified**

Summary Student Data

	n	ISS	WES	ESI	TOTAL
Male	40	2.342	2.242	2.038	6.621
Female	40	2.492	2.513	2.229	7.233
HABH	30	2.433	2.322	2.044	6.800
non-HABH	50	2.407	2.410	2.187	7.003
HABH-male	15	2.344	2.300	2.000	6.644
HABH-female	15	2.522	2.344	2.089	6.956
non-HABH-male	25	2.340	2.207	2.060	6.607
non-HABH-female	25	2.473	2.613	2.313	7.400
First generation	10	2.283	2.150	2.017	6.450
non-First generation	70	2.436	2.410	2.150	6.995
LAP	7	2.071	2.429	1.929	6.429
TOTAL	80	2.417	2.377	2.133	6.927

Loomer’s recommendations for future assessments included the following:

Expanding the rubric scoring system may be beneficial:

- ❖ May result in improved accuracy
- ❖ Consider: +/- scores to accompany the numeric score
- ❖ Consider: A five- to seven-point rubric may be beneficial

Increasing sample size may be beneficial:

- ❖ Small sample sizes make statistical significance challenging to identify, especially with small effect sizes
- ❖ Consider: Analyzing data collected over a two- or three-year period to increase sample size

Conclusion. The results were not surprising overall; from librarians’ impressions working with students in classes and at the Research Help Desk, we have seen students **struggle to use sources effectively**. One problem is that **they think they know how to search and do not allocate the time or attention for recursive or strategic research in databases**. We have also been aware of **students reading less** during and after COVID disruptions, so that student work on a research project might reflect **grabbing quotations**

under a deadline rather than a **deeper, wider, or more thoughtful reading** that the course professor may have wished.

We are not satisfied with 2.1-2.4 results on a rubric that runs from 1 to 4 (3 is “competent”). The faculty members with whom we have normed, scored, and discussed this rubric agree that the measurement is fair, and that **we want better for our students.** Our priority with this assessment was using stratified random sampling for demographic breakdown; after that effort, we found no statistically significant differences among groups. Therefore, **we conclude that student learning in information literacy ought to improve across all demographic groups.** We are working to **optimize point-of-need instruction** and **strengthen faculty collaborations.** We also call for **structural changes: incorporating the habits of mind of Information Literacy – particularly wisely evaluating sources and ethically integrating sources -- more explicitly into the curriculum.** We add that this is not just the job of librarians, but should be incorporated naturally by faculty into classroom instruction when appropriate.

Closing the Loop, 2022-2023

Revision of Library Program Learning Outcomes. Librarians Lauren Bedoy, Covich, and Ziliotto met in August 2022 to update the PLOs so that they better reflect the current information literacy landscape and the revised language of the ILO. The revised PLOs now guide the library’s instruction, research help, and assessment. Key additions to the program learning outcomes include **more attention to reading comprehension and understanding that different types of reading are needed for different purposes (skimming vs. deep reading, for instance).** [Appendix C1]

Follow-up on ENG-002 Information Literacy instruction. Ziliotto and Covich continued to follow the two-session model for instruction. While no assessment of metacognitive reflections was completed in 2022-2023, **Covich requested for the sake of future assessment that English faculty add information literacy-related questions to their metacognitive reflection prompts, if they do not already do so.** Covich also asked to have this included in the Best Practices for English Composition document that guides ENG-002 instruction. While no action was taken in 2022-2023, it will be added to the department’s meeting agenda in spring 2024. **The hope is that their inclusion will make future assessments of metacognitive reflections more productive for both librarians and faculty.** [Appendix C3.]

Faculty Development Initiatives. Immediately after scoring was complete in the May 2022 ENG-002 student writing assessment workshop, assessors met in a Zoom session to reflect on initial results while still fresh in their minds. There was verbal consensus that **the lack of deep reading skills hampers students’ ability to evaluate and integrate sources.**

Librarians, in consultation with Skripsky and Nazarenko, concluded that one significant way to improve student reading outcomes would be to equip faculty to more effectively teach students reading strategies for different types of texts. A Faculty Forum discussion was then scheduled January 12, 2023, **"Teaching Our Students to Read More Effectively."**

A few days before the session, Jana Mayfield Mullen sent an email survey to faculty, titled “Even at this busy time of the year, could you give us ONE SENTENCE?” on student reading practices. Thirty-one faculty responded. [Appendix A2] The summary of responses, grouped by discipline, was handed out at the Forum and referred to in the discussion. [Appendices C4.1 and C4.2] The results of the survey were clustered by division. It was hoped that faculty were able to see that colleagues in other areas are finding similar difficulties getting students reading. **It was clear from respondents’ answers that students struggle with the quantity of reading, with following an argument** instead of whatever catches their eye first, **and with prioritizing appropriately.**

Holly Shelton (visiting English professor with expertise in literacy, language acquisition, and writing in the sciences), Andrew Mullen (Education professor with expertise in reading across the content areas), and Theresa Covich (Instructional Services Librarian with experience teaching English composition and supporting academically at-risk students) were recruited to share tips and strategies for reading instruction.

Table Talk was led by a team of librarians, faculty, and staff, most of whom had participated in the May 2022 ENG-002 assessment. Unfortunately the panel discussion started later than planned, so there was limited time to go deeply into the issues during Table Talk. Comments were recorded and shared in Google documents with leaders. [Appendix C4.2]

Major themes that emerged from the survey and discussion included:

- 1) **struggles in reading are pervasive**, across GE and major classes, lower and upper division.
- 2) **faculty** have **vastly increased support for students** and have **broken down assignments to accommodate learning difficulties**. However, more assistance does not necessarily improve student learning outcomes. For instance, Lisa DeBoer shared testimony at Table Talk about how students applied themselves more when she removed an assignment support she had added during COVID remote instruction. [Appendix C4.2]
- 3) students have trouble following **counterarguments** or sources introduced in order to disagree in full or in part. **Reading for conversation between sources** is not obvious.

As a follow-up to the forum, librarians were asked by some faculty and staff to specifically address reading strategies. **Covich and Delgado met with peer coaches from the Center for Student Success**, sharing the Reading in College handout and inviting them to encourage students to read. Covich and Delgado also emphasize the teaching of reading strategies in library tutor training, which is suitably certified by the College Reading and Learning Association. For specifics, see the Course Learning Outcomes stated in the IS 167 Tutor Training [syllabus](#), one of which is to "Demonstrate and facilitate attentive reading, discerning use and critical engagement with relevant sources both in your training course and in the content area course you support."

Mayfield Mullen met with the Faculty Professional Development Committee and Eileen McMahon McQuade to ask if the summer syllabus workshops could include reading instruction strategies. While open to this possibility, there was no further opportunity due to lack of faculty attendance. However, the new Provost Collection for Teaching and Learning, now housed in the library and discoverable in the online catalog, curates resources for faculty growth and professional development.

Reading strategies handout. Covich, Skripsky, and Julissa Delgado, Tutoring Coordinator, created a handout on college reading targeting students, with faculty being a secondary consideration. These handouts were **distributed at the January 12, 2023 Faculty Forum, in classes, and during New Student Orientation 2023**. Librarians shared them with Successful Scholars classes taught by Sonya Welch and student success coaches. They continue to be available at the Circulation and Research Help Desk. [Appendix C3]

Sustaining Library-Faculty-Administrator Collaborations for Information Literacy: Two-Shot Instruction Model & Assessment at a Small Liberal Arts College. Covich, Loomer, Nazarenko, Mullen, and Skripsky presented assessment strategies and challenges to the WSCUC Accreditation Resource Conference held in April 2023. This was an opportunity to share experiences with the broader community of higher education professionals working on assessment.

Recommendations

1. Assessment of the Information Literacy ILO should be embedded in specific courses across the disciplines and in both lower- and upper-division courses. All of the other Westmont College ILOs are assessed in particular courses or GE categories. [Appendix D1] The ongoing partnership between ENG-002 faculty and librarians has been fruitful, but it is not sufficient, as approximately half of the student body is not required to take this course. **For the next Information Literacy ILO assessment, we ask:**

- that **faculty, Voskuyl Library, and Academic Affairs administrators focus on the collection and assessment of upper-division student work in research-intensive courses.** A survey of department chairs was conducted by Nazarenko in Fall 2021. This can be a starting point for identifying participants in the assessment. [Appendix D2]
- We also ask that the **NSSE's *Topic Module: Experiences with Information Literacy* be administered to both first-year students and seniors in 2026 before the ILO assessment is designed.**

2. Faculty should continue to model and to teach deep critical reading skills in context and throughout the curriculum. As faculty responses to the survey before the January 12, 2023 Faculty Forum on teaching students effective reading strategies attested:

"Sometimes their written work seems to demonstrate an ability to summarize the key points of an article well, but when we actually begin to discuss, it can feel as if they actually don't understand what the article was all about."

"Students seem to 'eye-ball' the assigned readings rather than read in-depth (for details or deep comprehension/internalization of the info)"

"Many of my students don't know how to follow the author's line of argumentation; they'll think that a view an author is explaining and *critiquing* is the author's own view."

"The inability to cotton on to the organization of any article makes following the argument difficult, because they can't discern what's a main point, what's a subsidiary point, and what's the evidence to argue for a point."

"For me, the biggest challenge with student reading is how few of them do it."

This effort should involve everyone in Academic Affairs, including the GE Committee, department chairs, and student success coaches. **Librarians are happy to sponsor focus groups or faculty development workshops to foster best practices in this area.**

3. If Voskuyl Library is to be responsible for leading the college in assessing information literacy and supporting new programs, such as Engineering and Nursing, the college needs to rehire a Collection Development & Acquisitions librarian. Administrative demands for librarian involvement in Academic Affairs has increased since this position was left unfilled in 2016. Each of our librarians has both an administrative function, and a department liaison sphere of responsibility, that addresses instruction and assessment, collection development, and research help. Mayfield Mullen is the first library director who has also functioned as a liaison with teaching librarian responsibilities. Currently she is liaison for Communication Studies, Economics & Business, History, Kinesiology, Nursing, and Religious Studies. Nursing was added to her load in 2021. Lauren Bedoy is liaison for Psychology, Philosophy, Political Science, Physics, and Engineering. Engineering was added to her load in 2021.

In addition **librarians are increasingly involved in campus-wide assessment projects, including the Diversity and Global Awareness, Christian Understandings, Practices, and Affections, and Quantitative Literacy, and Written Communication ILOs.** The Director and Associate Director also serve on the **General Education Committee and Program Review Committee.** Unlike teaching faculty, our academic faculty status means we are not eligible for course releases. Provision of stipends is variable. The only recourse to increased assessment workloads is to decrease the hours devoted to librarian support of student learning.

The Executive Team approved the posting of this librarian position in March 2022. One excellent applicant turned down our offer, due to the small salary compared to two other offers he received. We currently have a local, knowledgeable Christian librarian who applied for the position in April 2023. It is in the college's best interests to hire this highly qualified and dedicated librarian. **Adequate library staffing is necessary so that we can equip Westmont students with the skills they need to navigate in a world of information overload.**

Future Collaborations

Librarians will be addressing **PLO 2 – Wise source evaluation** – in 2023-2024. Based on the two years of ILO assessment findings, **wisely evaluating sources** translates into these habits of mind:

- § Incorporating an **appropriate variety of sources**
- § **Citing authoritative and credible sources**
- § **Demonstrating attentive reading and discerning use of relevant sources**

The following initiatives are included under the **umbrella of PLO 2**:

1. Librarians are assessing annotated bibliographies in all nine sections of ENG-002 and using a new rubric for source evaluation developed in light of the revised PLO and the *ACRL Framework*. [Appendix E] We will also be exploring ways to improve our instruction, such as adopting the model of demonstrated in "Going Beyond the Source: a revised curriculum for Source Evaluation."²

2. Facing the challenge of generative AI such as ChatGPT for teaching and assessment. Skripsky and Covich worked during Summer 2023 to craft "**academic integrity guidelines regarding student use of AI tools such as ChatGPT**," based on Westmont guiding documents, comparison with resources and websites from other institutions, and best practices from instructional areas. These principles were reviewed and affirmed by the Provost as well as Academic Senators via email and sent to all faculty August 17, 2023. **Skripsky and Covich met with Senate Sept 15 and Sept 29, and are charged with making recommendations for updating the academic integrity policy and incorporating policy language for generative AI. They are slated to meet with Senate again in November and throughout the year to develop this policy draft;** Senators Steve Julio and Marianne Robins will advise between Senate meetings.

In addition and in support of this practical work, Skripsky and Covich have proposed an "**AI & AI Teaching, Research, and Reading Group**." Pending approval and funding from the Provost's Office, this group will:

1. **Research & discuss ethical frameworks for academic integrity policies.**
2. **Within ethical frameworks, focus on expectations for originality within and across academic disciplines.**
3. **Cultivate responsible, mission-specific use of generative artificial intelligence tools in our academic program.**

Fruits of these discussions would presumably be shared in faculty development workshops or Faculty Forum in future. **Once a new Academic Integrity policy is in place, librarians will include that in instruction sessions and in other work with students.**

3. For 2024-25, we plan to assess PLO 3, "ethical source integration" probably by working with capstone papers. This type of assessment works best in **research-intensive classes**. It is particularly important that this assessment include a variety of disciplines across all three divisions. **We invite faculty to identify the course or courses in their departments that fit this description, and to be open to sharing student work**

² Firouzeh Rismiller, Holly Cerney, Susan Shultz, Grace Spiewak, & Sveta Stoytcheva, "Going beyond the source: A revised curriculum for source evaluation," *College & Research Libraries News* [Online], 84.8 (2023): 286. Web, 25 Oct. 2023.

for this assessment. Remember – faculty/library partnerships in assignment design, information literacy instruction, and program assessment are essential to Westmont College’s educational mission.

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Thank you to the 2021-2022 Information Literacy ILO Task Force!



Left to right: Holly Beers, Religious Studies; Jana Mayfield Mullen, Lead Assessment Coordinator; Enrico Manlapig, Economics & Business; Theresa Covich, Co-Lead Assessment Coordinator; Sonya Welch, Student Success Coach and instructor; Ogechi Nwaokemeleh, Kinesiology

Thank you to the faculty and staff who participated in the May 2022 ENG-002 Assessment Workshop!



3 English professors
1 philosopher
1 Education professor
1 French professor
4 librarians
1 library paraprofessional
2 administrators

Top, left to right: Pauline Remy, Modern Languages; Chena Underhill, Library Tutoring and Electronic Resources Coordinator; Rebekah MacNamara, English; Jim Taylor, Philosophy; Lauren Bedoy, Librarian

Bottom, left to right: Sarah Skripsky, English; Diane Ziliotto, Librarian; Andrew Mullen, Education; Sonya Welch, Student Success instructor; Kya Mangrum, English [not shown: Theresa Covich]

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- Tatiana Nazarenko, Dean of Curriculum and Educational Effectiveness, for her support and encouragement through this process.
- Sarah Skripsky, Professor of English & Writing across the Curriculum (WAC) Coordinator and long-time leader and partner in ENG-002 assessment

Submitted by Jana Mayfield Mullen

Deo gratias, October 2023

Information Literacy ILO Assessment Report, 2021-2023: Appendices

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Appendix A1: Information Literacy ILO Assessment Rubric for Student Writing 2014,

adapted by Molly Riley, Instructional Services Librarian*

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

*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>

Appendix A2: Fall 2014 Research Process Survey – Administered Post-Process to ENG-002 and HIS-198 Senior Seminar students via Survey Monkey

Answer the following questions as you reflect on the work you did for your X assignment in X class. About how much time did it take you to complete this assignment?

- 0 to 3 hours
- 3 to 6 hours
- 6 to 9 hours
- 9 to 12 hours
- more than 12 hours
- I'm not sure

Think about all the *places* you looked for sources or information on your topic. Check all that apply:

- Google or other internet search engines
- Journal and article databases (eg. JSTOR, EBSCO, ProQuest, etc.)
- Online book catalog for the Westmont Library (eg. WorldCat)
- Google Scholar
- Wikipedia
- Other (please list all; separate your answers with a comma): _____

Think about all the *people* you consulted as you worked on this assignment. Check all that apply:

- Fellow students in the class
- Fellow students outside the class
- Professors
- Librarians
- Writer's Corner
- I didn't consult anyone
- Other (please list all; separate your answers with a comma): _____

What *top two* criteria did you use to determine if the sources or information you found were reliable or credible?

- author's credentials / author's reputation
- place of publication / reputable publication
- year of publication / currency
- list of sources in the author's bibliography
- gut instinct
- Other: _____
- Other: _____

What *top two* strategies did you use to determine if the sources or information you found were relevant or useful enough to include in your paper?

- I read the whole article
- I skimmed the article
- I read the abstract (summary) of the article
- I read the title of the article
- The author agrees with my thesis / argument
- I used my discipline-specific expertise and knowledge
- Other: _____
- Other: _____

Think about your process throughout this assignment. Rate the difficulty of the following pieces of the research process: [this question will appear as a matrix of sorts; student will rate each item on the following scale: very easy / easy / about in the middle / hard / very hard / I didn't do this for this assignment]

- picking a topic / developing my "research question"
- finding sources on my topic
- reading and understanding my sources
- determining if my sources are relevant to my topic
- organizing / outlining my paper
- incorporating sources into my paper
- writing my paper

In your own words, briefly explain (1-5 sentences) the most challenging aspect of the research process so far:

Is there anything else that you would like your instructors or librarians to know regarding your experiences with this assignment? [not a required question]

A3: January 2016 Comparative Data for ENG-002, HIS-010, and Upper Division Research Papers Assessment

Information Literacy in Student Writing Rubric -- Comparative Data

>> HIS-010 > Fall 2015 > Library Assessment Project [36 papers from Heather Keaney's Fall 2015 section] → read/assessed in January 2016

>> ENG-002 > Fall 2014 > ILO Assessment Project [37 papers from different sections]

>> Upper-Div > Fall 2014 / Spring 2015 > ILO Assessment Project [49 papers from : *HIS 198 -- Senior Research Seminar, PHI 195 -- Senior Seminar, PSY 111 -- History and Systems of Psychology, RS 114 -- The World of the New Testament, SOC/AN 195 -- Senior Seminar, and ENG 158 -- Literature of the English Renaissance 1485-1600.*

	4 - Proficient	3 – Competent	2 - Developing	1 - Beginning
Source Evaluation <i>PLO 2 + 3</i>	HIS-010 - 11.5% ENG-002 - 1.5% Upper-Div - 36.7%	HIS-010 - 41% ENG-002 - 24.2% Upper-Div - 48%	HIS-010 - 42.3% ENG-002 - 56.1% Upper-Div - 15.3%	HIS-010 - 5.1% ENG-002 - 18.2% Upper-Div - 0%
Source Integration <i>PLO 4</i>	HIS-010 - 2.6% ENG-002 - 1.4% Upper-Div - 23.5%	HIS-010 - 21.8% ENG-002 - 14.1% Upper-Div - 55.1%	HIS-010 - 55.1% ENG-002 - 53.5% Upper-Div - 21.4%	HIS-010 - 20.5% ENG-002 - 31% Upper-Div - 0%
Source Attribution <i>PLO 4</i>	HIS-010 - 1.3% ENG-002 - 1.5% Upper-Div - 16.3%	HIS-010 - 38.5% ENG-002 - 20.9% Upper-Div - 46%	HIS-010 - 47.4% ENG-002 - 35.8% Upper-Div - 30.6%	HIS-010 - 12.8% ENG-002 - 41.8% Upper-Div - 7.1%
Research Question/Claim <i>PLO 1</i>	HIS-010 - 6.4% ENG-002 - NA Upper-Div - NA	HIS-010 - 41% ENG-002 - NA Upper-Div – NA	HIS-010 - 42.3% ENG-002 - NA Upper-Div - NA	HIS-010 - 10.3% ENG-002 - NA Upper-Div - NA

Appendix A4: ENG-002 May 2017 Source Integration Research Paper Assessment with Comparison Data

<p>Source Integration</p> <p><i>PLO 4</i></p>	<p>Synthesizes and critically reflects on content of sources with sophistication.</p> <p>Integrates sources by summarizing and paraphrasing with sophistication, and incorporates quotations thoughtfully; thoroughly incorporates information from sources.</p> <p>2017: 21%</p> <p>2014: 1.4%</p>	<p>Strong evidence of synthesis and critical reflection on sources, with some areas for improvement.</p> <p>Integrates sources by summarizing, paraphrasing, and quoting, with some evidence of critical reflection on sources; incorporated sufficient information from sources.</p> <p>2017: 49%</p> <p>2014: 14.1%</p>	<p>Some evidence of synthesis and critical reflection on sources but with obvious areas for improvement.</p> <p>Relies on quoting or “patch writing” from sources with limited accompanying evidence of critical reflection on sources; could have incorporated more information from sources.</p> <p>2017: 22%</p> <p>2014: 53.5%</p>	<p>Very little evidence of critical engagement with or synthesis of sources.</p> <p>Relies on quoting or “patch writing” from sources without demonstrating true engagement with sources; fails to incorporate sufficient information from sources.</p> <p>2017: 8%</p> <p>2014: 31%</p>
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Appendix B1: Spring 2021 Information Literacy ILO Workshop – Defining Information Literacy, Session 4

Workshop 4: Defining Information Literacy, 2021

Westmont College Institutional Learning Outcome, 2014

identify,
evaluate,
and integrate sources
effectively and ethically in various
contexts

ACRL Framework & our 2014 ILO

- Authority Is Constructed and Contextual
 - Addresses source evaluation & ethical source integration
- Information Creation as a Process
 - Addresses source evaluation & ethical source integration
- Information Has Value
 - Addresses source evaluation & ethical source integration
- Research as Inquiry
 - Addresses identify sources, source evaluation, & effectively integrate sources
 - Missing from our ILO: developing research question/topic development
- Scholarship as Conversation
 - Addresses identify sources, source evaluation & ethical source integration
- Searching as Strategic Exploration
 - Addresses identify sources & source evaluation

How else might we approach Information Literacy?

Chartered Institute of Library and Information Professionals (CILIP) definition of
Information Literacy, 2018

The ability to think critically and make balanced judgments
about any information we find and use.
It empowers us as citizens to develop informed views and to
engage fully with society.

CILIP's definition . . .

- Moves beyond higher education
- Explained in plain language for all
- Targets E-safety
- Includes digital literacy
- Focuses on critical thinking
- Goal is to equip informed citizens

What might be missing in our ILO?

- Research As Inquiry -- do we address the research process adequately? Is Research the same as Identifying? Is Identifying the best word? Would Find be better? Searching?
- Where is topic development addressed in the ILO we currently have?
 - Note that the PLO 1 which does address it was added after the ILO assessment of 2014
- Should we directly address the information environment in our ILO? "Sea of information" "digital literacy" "e-safety"?
- Where are seeking for truth and the acquisition of knowledge that leads to wisdom? Too abstract to be measured?



Information Literacy ILO 2021

Graduates of Westmont will be able to
Strategically research,
wisely evaluate, and
ethically integrate sources
in various contexts

Appendix B2: Information Literacy Pre-Instruction Survey 2021-2022

Please circle the BEST answer for each question. Thank you!

1. Answer: d **You want to do a presentation to the class on using green products in the home, but your professor said that your initial topic needed to be more focused. Read the initial topic and the revised topic. Is the revised topic broader (less specific) than the initial topic, or narrower (more specific) than the original topic?**

Initial Topic: The benefits of going green in the home with environment-friendly materials.

Revised Topic: The benefits of going green in the home with LED (light-emitting diode) light bulbs.

- a. Broader
- b. Narrower

2. **When you research a topic, it is important to know its relationship to other concepts. Which phrase represents the **BROADEST (least specific)** subject under which all of the other topics would fit?**

- a. Pain management for older animals
- b. Air transport regulations for pets
- c. Animal welfare
- d. Zoo design and construction

3. **In a European History Class, your research paper is about Martin Luther and his religious beliefs. As you begin your research, you realize that you need to refine the search terms to focus your topic on the German religious leader from the 16th century, Martin Luther; not the civil rights leader from the 20th century, Martin Luther King. Choose from the list below, the one example of a search that will help refine your search on this topic.**

- a. Martin Luther AND religion
- b. Martin Luther AND religious beliefs NOT King
- c. Martin Luther AND religious beliefs
- d. Martin Luther OR King AND religious beliefs

4. **Your fitness professor has assigned a speech on steroid use by athletes. Using an Internet search engine, you search for the term steroids. Your result list has 5,000 results, too many to review in the time you have. Many results are trying to sell you a product, called creatine. To remove these irrelevant results you change your search terms to read as follows:**

- a. Steroids OR creatine
- b. Steroids NOT creatine
- c. Steroids AND athletes AND creatine
- d. Steroids AND athletes NOT creatine

5. You are searching in your online library catalog for primary source material for the author Maya Angelou. Which search will you use to locate these sources? Select the best strategy for your next search.

- a. Keyword
- b. Subject
- c. Author
- d. Title

6. Identify the fact that is NOT supported by the following paragraph:

One of the several reasons behind the obesity crisis has been the development of suburban America and the urban sprawl trend. As suburbs began to expand in the 1980's, automobile dependence became pronounced. People in suburbs no longer walk to get a loaf of bread and their children no longer walk to school. This trend toward dependence on automobiles and the resulting impact on the obesity crisis is demonstrated in a study done by Reid Ewing, a research professor at the National Center for Smart Growth at the University of Maryland. He surveyed people living in both the most populated counties in the United States and the least populated. He found that the residents of sprawling Geauga County in Ohio were an average of 6.3 lbs. heavier than the residents of crowded Manhattan County in New York.

- a. Dependence on cars became pronounced in the 1980's.
- b. People who live in Geauga County, Ohio, are 6.3 lbs. heavier than people who live in Manhattan County, New York.
- c. People who live in suburbs do not walk anywhere.
- d. Urban sprawl is one of several causes behind the rising obesity rate.

7. Which sentence most strongly reflects the statement, "Small changes that people make in their lives can have an impact on the fight against obesity?"

- a. Studies show that people who walk often can reduce their weight.
- b. I think that people who want to lose weight need to exercise by walking a minimum of thirty minutes 5 times a week.
- c. A 1995 study demonstrated that placing a sign between a flight of stairs and an escalator stating, "Stay Healthy, Save Time, Use the Stairs," increased stair use from 8% to 16%.
- d. It is easy to lose weight if you join an exercise club and do what a trainer tells you.

8. Read carefully these quotations from historians about World War II:

Author 1: "Although many scientists who worked to create this weapon and many of the military who would have to use it opposed its use to some degree, the general public backed Truman in his decision to call for unconditional surrender. In a June 10th Gallup Poll, 82% of Americans surveyed stated that the Japanese were a more heartless country than the Germans (18%). Many felt that destroying one of Japan's cities with this new weapon would simply be retaliation for the devastating attack of Pearl Harbor which brought the United States into the war in December of 1941. With only 20% of Americans surveyed believing that the war would end by the end of 1945, the idea that a single weapon would bring a quick and definite end to the war in Japan also confirmed the belief held by Truman and his Cabinet that the atomic bomb should be used."

Author 2: "During World War II, President Truman had to make many difficult decisions regarding military matters, including, most importantly, the decision to utilize the new atomic bomb. In order to make these decisions, he looked to military authorities, his cabinet members, scientists and the views of the American public. Most of the American public, 80%, believed that the war would not end within the year 1945. Despite the objections of others, Truman felt he had the firm backing of the general United States population and his Cabinet; he believed that the use of the atomic bomb would be justified in order to end the war quickly."

Which author discusses this statement: "The majority of Americans believed that the war would not end within the year 1945."?

- a. Author 1
- b. Author 2
- c. Both Author 1 and 2
- d. Neither Author 1 and 2

9. Your U.S. Government professor assigned a research project that requires you to analyze and compare voter registration data across the country to your state's voter registration. Your assignment includes comparing two states to your own state. You have learned that in the U.S. all forms of government create records that are accessible to the public. Which of the following sources will provide you with the data necessary to make your comparison?

- a. U.S. government textbook
- b. Local voter registration office
- c. Newspaper archives from each of the states
- d. U.S. Census Bureau website

10. You have been given an assignment in your literature class to paraphrase the ideas in a passage from an American author. You are having problems with the assignment because you do not know exactly what it means to paraphrase. From the choices below, choose the sentence that best describes the process of paraphrasing.

- a. Paraphrasing means to restate the idea of the excerpt or passage by changing a few words in the excerpt with synonyms.
- b. Paraphrasing means to restate the idea of the excerpt or passage in your own words. The paraphrase can be about the same length as or longer than the original excerpt.
- c. Paraphrasing means to restate the main ideas of the excerpt or passage in your own words. It is very brief compared to the passage or excerpt.
- d. Paraphrasing means to use the exact words of the excerpt or passage and use quotation marks.

11. To earn extra money as a college student you have begun a DJ business. You have created a website about your DJ business. You want to include some of the photographs of your work as the DJ at weddings on your website. You go to a wedding photographer's website and find some photos of yourself playing music and announcing the wedding party. You do not see a copyright notice and it would be easy to copy the photos to your site. You are undecided as to whether or not you can use the photographs. What can you do?

- a. Since the photographs do not have a copyright notice, the photographs are not copyrighted and may be used on your website.
- b. Since the photographs do not have a copyright notice, you can use the photographs and then add the name of the photographer and the URL from the photographer's website.

c. Since almost all materials created privately and originally after April 1, 1989 are copyrighted and protected whether they have a copyright notice or not, you must seek permission from the photographer.

12. You have been asked to write a three-page paper for your college freshman English class. You will use MLA format for your paper. The professor has stressed that citation is extremely important. You feel confident about your knowledge of MLA citation but are trying to remember the examples of when you do not have to use MLA citation. Choose the answer that most correctly indicates when MLA citation is NOT needed.

- a. You do not need to cite sources for familiar proverbs, well-known quotations, or common knowledge
- b. You do not need to provide a citation for a recent event that was reported in three different sources.
- c. You do not need to cite sources for information that is not written by experts in the field.

13. A student began an investigation into the legalization of marijuana. The research focused on arguments concerned with long-term effects of its use. While doing research, the student found information about the possible benefits of chemicals in marijuana for treating medical conditions. The student would now like to change the focus of the research paper. Choose the answer that best reflects the new focus of this student's research.

- a. Effects of marijuana use on fetus development
- b. Evidence of marijuana addiction
- c. Short- and long-term effects of marijuana on the brain
- d. Use of the marijuana chemical cannabidiol for treatment purposes

14. You are doing a paper on mollusks and found a website on "The Endangered Pacific Northwest Tree Octopus" (<http://zapatopi.net/treeoctopus/>). The assignment requires reliable sources. What is the BEST and FASTEST approach to verify that this is a credible site?

- a. Check the website to identify the sponsoring organization.
- b. Search the website name in a search engine and review the results.
- c. Review the links on the website.
- d. Learn more about the tree octopus in a book on Cephalopod mollusks.

15. Your political science professor has assigned a project about Amendments to United States Constitution. The project must address the original context and intent of the amendment, the way it has been applied over the course of its history, and how the amendment relates to a current social or legal issue. Your group is researching the Fourth Amendment, which addresses the right to privacy. Which research question below best addresses the information your group needs to find?

- a. How is the Fourth Amendment applicable today?
- b. How has our interpretation of the Fourth Amendment changed since its adoption?
- c. Why was the Fourth Amendment included in the Bill of Rights?
- d. What legal cases have involved the Fourth Amendment?

16. You want to use the information in the following quote for your paper on malaria.

“In recent years, hundreds of millions of anti-malarial mosquito bed nets have been distributed across the malaria-infected world, along with cavalcades of antimalarial drugs and diagnostic kits. As a result, since 2000, malaria mortality has fallen by 25 percent.”

Shah, Sonia. “A Cure for Africa’s Common Cold: Why Malaria Persists.” *Foreign Affairs* (2013): n. pag. 24 Oct. 2013. Web. 12 May 2015.

Which of the examples below correctly paraphrased the information to avoid plagiarizing?

- a. Distributing hundreds of millions of anti-malarial mosquito bed nets, cavalcades of anti-malarial drugs and diagnostic kits has reduced malaria mortality by 25 percent (Shah).
- b. Since 2000, malaria deaths have fallen by 25 percent due to distribution of anti-malarial mosquito bed nets, drugs, and diagnostic kits (Shah).
- c. Since 2000, malaria mortality has fallen by 25 percent due to hundreds of millions of anti-malarial mosquito bed nets, cavalcades of anti-malarial drugs and diagnostic kits (Shah)

17. Part of the copyright law addresses “fair use” of reproduced work. “Fair use” is the limited use of copyrighted materials without obtaining permission. Generally, these limited uses included criticism, comment, news reporting, teaching, scholarship, and research. The law addresses consideration of the amount of the copyrighted material used. With this information in mind, choose the example listed below that is an example of “fair use.”

- a. Your friend wants to use music from a recent popular album as background music for his presentation in class. Since you already bought the album, you burn a copy for him to use for the project.
- b. To raise money for the chess club, you show a personally owned copy of a recently released film after school. You charge a one dollar entry fee per person.
- c. For a discussion on the theme of gender in comic books, a teacher scans a section of a comic book. The teacher posts this scanned portion to the password-secured class website so the class members can read and discuss the text.

18. You are doing a research paper on Apollo 12 astronaut Neil Armstrong. Which of the following is a secondary source?

- a. Letter qualifying him as a Naval Aviator
- b. Neil Armstrong’s college transcript
- c. Neil Armstrong’s flight log
- d. Neil Armstrong’s biography

19. You have found a book that looks like a great source to use for your paper. It has fifteen chapters and more than 350 pages. What is the fastest way to find the information that you need?

- a. Use the index
- b. Skim the book
- c. Check the book jacket for a summary
- d. Read through the table of contents

ANSWER KEY

1. Answer: b
2. Answer: c
3. Answer: b
4. Answer: d
5. Answer: c
6. Answer: c
7. Answer: c
8. Answer: c
9. Answer: d
10. Answer: b
11. Answer: c
12. Answer: a
13. Answer: d
14. Answer b
15. Answer: b
16. Answer: b
17. Answer: c
18. Answer: d

Appendix B3.1: Information Literacy ILO Student Writing Rubric 2021-2022 Revision Process

Info Lit ILO Rubric for Student Writing

1 message

Jana Mayfield Mullen <jmayfield@westmont.edu>
To: Tatiana Nazarenko <tnazarenko@westmont.edu>

Tue, Jun 22, 2021 at 2:38 PM

Dear Tatiana,

Please find attached revised rubric. It has been vetted by all the liaisons. I shared it with Sarah Skripsky, too, but she is out of town and did not respond with any suggestions.

I have made some progress with the ILO team recruitment: Sonya Welch and Enrico Manlapig.

Diane and I stopped by Tim Loomer's office this morning and had a good talk with him about related matters. Nice to see someone in Kerrwood without masks!

Hope your summer vacation plans are working out despite COVID.

Jana

--

Jana Mayfield Mullen, MDiv, PhD, MLIS

Revised ILO Rubric

1 message

Jana Mayfield Mullen <jmayfield@westmont.edu>
To: Theresa Covich <tcovich@westmont.edu>, Diane Ziliotto <dziliott@westmont.edu>, Lauren Kelley <lbedoy@westmont.edu>, Sarah Skripsky <sskripsky@westmont.edu>

Wed, Jun 9, 2021 at 3:45 PM

Dear Liaisons and Sarah,

Theresa and I worked together last week to revise the rubric for Information Literacy from 2016.

Would you please review this new version and let us know what you think?

One term Theresa questioned was the "variety" of sources that appears in source evaluation, columns 2-4. This Theresa's comment:

"And I'm not entirely comfortable with "variety" of sources, because we don't want that as an end in itself--but I know that term had been even more important in the old rubric"

Would "breadth" be better? Or do any of you have another idea?

The language of this rubric will inform the revision of our PLOs next year. And Tatiana wants the rubric posted to the ILO assessment website as soon as possible.

Thank you for working with us on this!

Jana

--

Jana Mayfield Mullen, MDiv, PhD, MLIS

Diane Ziliotto <dziliott@westmont.edu>



Appendix B3.2: Revised Information Literacy ILO Student Writing Rubric

	1 - Beginning	2 – Developing	3 – Competent	4 – Proficient
Inquiry and Strategic Searching	<p>Research question or claim is unclear and/or very difficult to identify, is of an inappropriate scope, and is not consistently addressed throughout the paper.</p> <p>Evidence that the student used the most readily available sources, whether or not they were relevant or credible.</p>	<p>Research question or claim is somewhat clear, but with obvious areas for improvement in definition and scope. It is only somewhat addressed and answered throughout the paper.</p> <p>Evidence that the student’s search strategy was limited to a cursory search in the scholarly literature.</p>	<p>Research question or claim is clear and manageable, with some areas for improvement in terms of clarity and/or scope. It is consistently addressed and answered with only some areas for improvement.</p> <p>Evidence that the student has refined his/her search strategy in the scholarly literature.</p>	<p>Research question or claim is very clear and well defined, neither too broad nor too narrow, and is consistently addressed and answered throughout the paper.</p> <p>Evidence that student has recursively and deliberately searched in the scholarly literature.</p>
Wise evaluation of sources	<p>Relies on untrustworthy, biased, or irrelevant sources.</p> <p>Student writing demonstrates no evidence of evaluating the context or ideas of the sources.</p> <p>Sources lack relevance to the topic and are not authoritative or credible.</p>	<p>Uses sources that lack variety or depth, and has not sufficiently explored sources on the topic.</p> <p>Student writing demonstrates little evidence of evaluating the context or ideas of the sources.</p> <p>Some sources do not appear relevant and/or are of questionable authority and credibility.</p>	<p>Uses appropriate sources, but some sources lack variety or depth.</p> <p>Student writing demonstrates some evidence of evaluating the scholarly context of sources.</p> <p>The majority of sources are relevant to the topic and are authoritative and credible.</p>	<p>Incorporates a wide variety of sources, demonstrating critical exploration of sources on the topic.</p> <p>Student writing demonstrates ample evidence of engaging in the scholarly conversation within or across academic disciplines.</p> <p>Uses sources that are both relevant to the topic and are authoritative and credible.</p>
Ethical source integration	<p>Very little evidence of critical engagement with or synthesis of sources.</p> <p>Relies on quoting or “patch writing” from sources without demonstrating true engagement with sources; fails to incorporate sufficient information from sources, including citations.</p>	<p>Some evidence of synthesis and critical reflection on sources but with obvious areas for improvement.</p> <p>Relies on quoting or “patch writing” from sources with limited accompanying evidence of critical reflection on sources; could have incorporated more information from sources, including citations.</p>	<p>Strong evidence of synthesis and critical reflection on sources, with some areas for improvement.</p> <p>Integrates sources by summarizing, paraphrasing, and quoting, with some evidence of critical reflection on sources; incorporated sufficient information from sources.</p> <p>Citations are accurate.</p>	<p>Synthesizes and critically reflects on content of sources with sophistication.</p> <p>Integrates sources smoothly by thoughtfully summarizing, paraphrasing, and quoting. Thoroughly incorporates information from sources to support the research claim. Citations are consistently accurate.</p>

Appendix B4: Metacognitive Reflection Prompts – ENG-002

From: **Theresa Covich** <tcovich@westmont.edu>
Date: Mon, Nov 29, 2021 at 4:33 PM
Subject: collecting ENG-002 materials for assessment
To: Susan Isaac <sisaac@providencesb.org>, Beth Lee <betlee@westmont.edu>, Sarah Skripsky <sskripsky@westmont.edu>, Cheri Larsen Hoeckley <larsen@westmont.edu>, Robert Speiser <rspeiser@westmont.edu>
Cc: Diane Ziliotto <dziliott@westmont.edu>

Dear ENG-002 Faculty,
Thank you for being so generous with your time this term and inviting Diane and me to your classrooms for the library's information literacy instruction and the pre-test. **For the rest of our ILO assessment this year, we will still need two pieces from your students--both a metacognitive reflection (in whichever way you ask for that in your class) and the final paper.**

When students have submitted their final work, please send us:

- 1) your assignment (handout or instructions) as a reply to this email for the metacognitive reflection, so we can see what students were asked to do.
- 2) a zip folder of submitted reflections
- 3) a zip folder of submitted papers.

Yes, we are asking for these to be separate folders (Canvas assignments).

The library has, in past assessment cycles, collected papers with the collaboration of ENG-002 faculty. I believe it is very important for us to look systematically at the metacognitive reflections and capture insights that would have fallen through the cracks otherwise; this helps us glimpse the writing process instead of just the final product and to attend to underrepresented voices. Our thanks to you and your students for the time to submit and collect these.

We had thought earlier in this term that we'd collect via a widget or magic through the assessment software (Chalk & Wire) from Tatiana's office all within Canvas. However, due to technical delays, we are going back to having you submit what you download from Canvas. We do plan to anonymize and randomize submissions before faculty readers see them at the ILO assessment at the end of the year.

If you have any questions, please contact me and/or Diane Ziliotto. I will send a reminder at the beginning of finals week.

Thank you again,
Theresa and Diane

Theresa Covich, Ph.D.

Library Academic Support Manager

Metacognitive Prompt 1

Selected questions

Why I Write: Write a 1-2 page philosophy of writing to start off your portfolio, talking about what writing should be, why it matters, what role it plays in our world, etc. Feel free to use any of the sources we have read this semester as you craft your own ideas. Make this as winsome and stylish (through the use of intentional rhetoric and descriptive language) as you can without losing sight of your own unique voice.

How I Write : In this 1-2 page section, you need to explain your experience as a writer, including but not limited to (and in any order that you wish) your challenges, your goals, and your strengths in writing. What about writing comes easily? What feels impossible? What parts of the writing process do you still need to work through?

What I Write: In this section, you will include at least three separate pieces of your writing. At least two of these pieces must be something you wrote for this class; the third can be from this class, a different class, or a personal piece of writing. Before each piece of writing, write a brief 5-1 page introduction (on a separate page) explaining what you enjoyed most about the writing process or the final draft of that piece. Each introduction should include the title of the piece, the reasons you wrote it (include class title if written for a class), when you wrote it, and anything you learned about yourself or the writing process or that subject or the world by writing that piece.

Metacognitive Prompt 2
Selected questions

3. Think back over the semester and estimate how much time you spent on this essay. What specific part of the process was most time consuming? How much time did you spend on that part? How much time did you spend in the last week? What parts of the paper, or the writing process, were you concentrating on in recent days?
4. What did you try to improve, or experiment with, in this paper? How successful were you? If you have questions about what you were trying to do, what are they?
8. What preparation or planning did you do before you began drafting this paper?
9. Did you do any additional reading or working with sources between the first draft you brought to class and this final draft?
11. If you had 24 more hours to work on your paper, what, if anything, would you do with it?
12. Which of your sources had the most impact on how you shaped your argument?
15. Tell me something that surprised you as you researched and composed this essay.

Metacognitive Prompt 3

Please write a one page reflection of your writing process for the research paper. Following are all the steps covered by the class, but write about your process: were they helpful to you, what was your strongest/weakest point, what did you learn, how has this project been for you? Feel free to write about your impressions of the assignment, how long it took for you, and anything that comes to mind. Your grade will depend only upon it being turned in on time. Thank you.

Metacognitive Prompt 4

(1a) Final Cover Memo (~250 words reflecting on your research and writing process while making a case for the value of your project, especially your final draft). Three required topics:

- How did you apply concepts from class and/or readings? What was most helpful to you in this unit? (e.g., Toulmin argument reading/lesson, academic argument reading, talk show improvisation in class, teaching visits from librarians, etc.)
- Did you use any academic support services (library help desk, Writers' Corner, or my office hours), and if so, what was helpful?
- How helpful was Zotero was to your research and writing process? Possible topics: How did you use Zotero (for quick grab of source data, for citation help, etc.)? Did viewing your peers' sources in the group library influence your research at all? How might you use Zotero in the future? etc.

Metacognitive Prompt 5

After you do the formal course evaluation, please write a few of paragraphs of reflection that answer the following questions:

Writing Process: What is my writing process? How do I come up with ideas? How do I organize my ideas? What makes me want to write and what discourages me from writing?

Learning about Writing and Research: What have I learned about writing at Westmont and in this class? What have I learned about research at Westmont and in this class? How has my writing changed from when I was in high school? Is there anything I have changed about my writing in this class in particular?

This Class Specifically: What did you find most useful and what did you find least useful in the class? Anything else you would have liked to learn? Which papers/activities did you like the most and which did you like the least? What would you find the most helpful in any future writing classes, or how might professors in your discipline help you learn more about writing in your field? Do you have any tips or suggestions for things other professors did in your other classes that might be helpful in an online writing class? Is there anything we did in this class that you think might work well in classes on other topics?

Appendix B7.2 ENG-002 Metacognitive Reflections Meditations; aka, The Junk Drawer

Fall 2021 ENG-002 Metacognitive Junk Drawer

- Students getting revision help & readers from outside of class but not the WC or RHD–dorm, etc.
- Sense of belonging [to college community, scholarly writing, academia]--one reading in Spieser that many students spoke to. Ties in with first-gen initiatives.
- Lee: ?
- Spieser 8--tired senior: "In response to the results of Sommers and Salts's multi-year study on freshman writers through their college careers, I personally didn't take any freshman year writing courses, so their findings don't really apply to me. Can I say that I am a 'legitimate member of a college community'? Great question, I feel like that would warrant a different reflective essay which I will unfortunately not have time to write between my finals. . . . I can at least say that this class has helped me practice self-reflection through writing quite a lot, which probably would have benefitted me earlier in my college career (or earlier in life). Only time will tell how this will play out in the future, there's always grad school"
- Spieser 15--"I personally was told in high school that most of my writing was unnecessary and a waste of my teacher's time to read it all. I had never written more than 1.5 pages before coming to college, even in my AP English class. Taking this class and being told to keep writing anything and to describe what I'm thinking gave me so much confidence in my writing, when before I thought of it only as a burden to my teacher. It gave me the feeling of finally being out of high school and in a place and environment where I really get to grow and learn more about myself through my writing."

Thoughts After the Metacognitive Assessment - Mar 4, 2022

- Frustration when sentences do two
- "Founds lots of sources" – Mayfield Mullen and Covich used "variety of search"
 - Continue to disagree about what this means! For future assessments should we add another category?
- Does talking about something – say, integrating sources – count, if there is no evidence that the writers did it? Awareness vs. evidence. Are they parroting
- Easier to attain some things – synthesis – than source integration

- Lots of evidence that students have not “de-toxed from high school”
- Larsen Hoeckley students were asked to estimate how much time was spent on essay
 - 4 - 100 hours
- “Would take it back to Writers’ Corner to get a librarian to look at it” – counted this as “librarian” even though they were confused
- Talking about things about that were about writing process, not research
- Isaac de-emphasized research - no mention of instruction – versus Lee, who has relationships with librarians and asks for extra meetings
- Also didn’t break out of 5-paragraph mould – excessive repetition
- Some professors ask students to show them something they’ve found in the library – immediate application

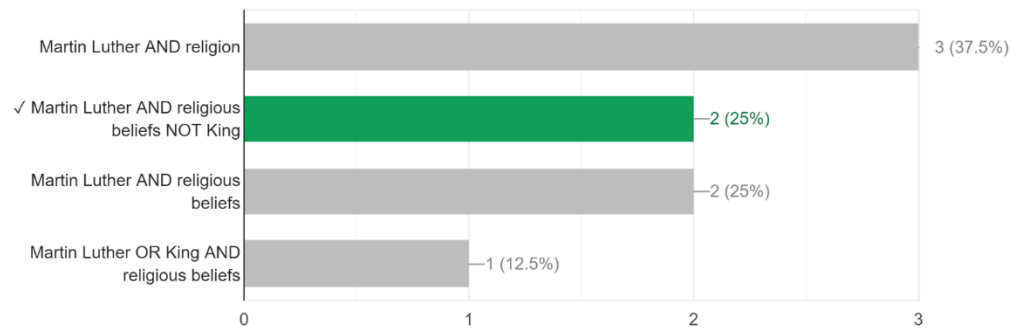
Appendix B5.1: ENG-002 Most-Missed Information Literacy Survey Questions by Program Learning Outcome

PLO 1: STRATEGIC SEARCHING

Fall 21 / Lee

In a European History Class, your research paper is about Martin Luther and his religious beliefs. As you begin your research, you realize that you need t...rds that will help refine your search on this topic.

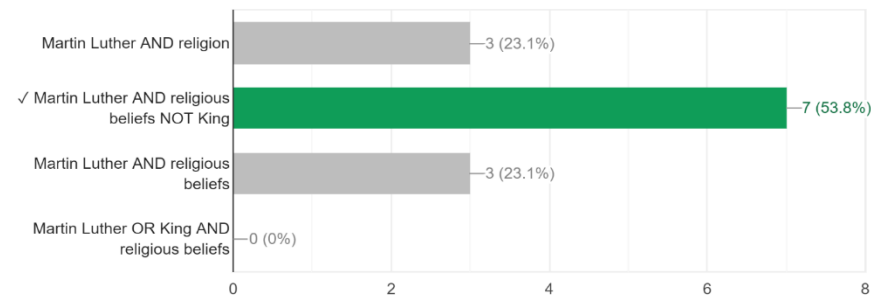
2 / 8 correct responses



Spring 22 / McNamara

In a European History Class, your research paper is about Martin Luther and his religious beliefs. As you begin your research, you realize that you need t...rds that will help refine your search on this topic.

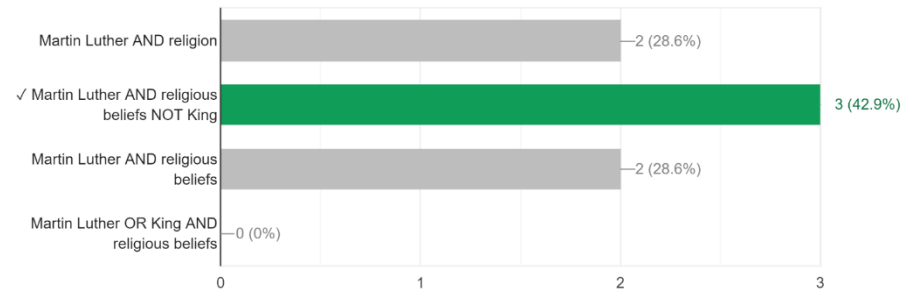
7 / 13 correct responses



Spring 22 / Mangrum

In a European History Class, your research paper is about Martin Luther and his religious beliefs. As you begin your research, you realize that you need t...rds that will help refine your search on this topic.

3 / 7 correct responses

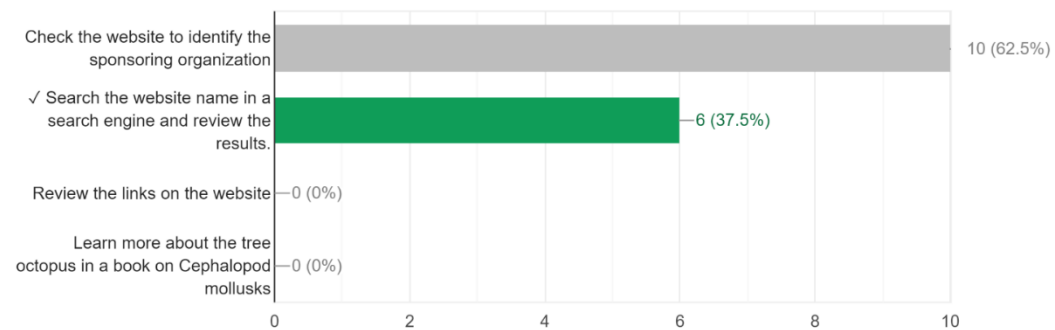


PLO 2: WISE SOURCE EVALUATION

Fall 21 / Isaac

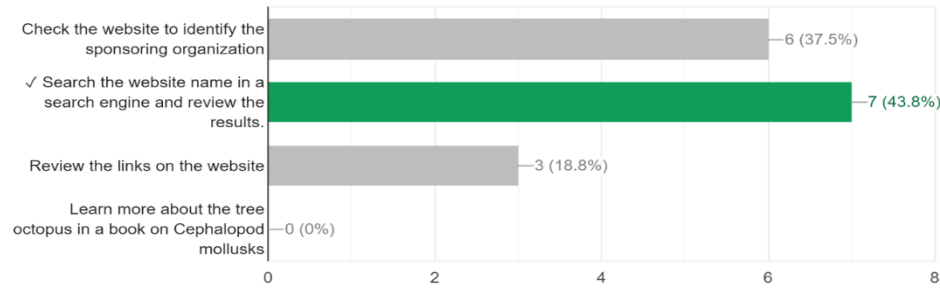
You are doing a paper on mollusks and found a website on "The Endangered Pacific Northwest Tree Octopus" (<http://zapatopi.net/treeoctopus/>). Th...ST approach to verify that this is a credible site?

6 / 16 correct responses



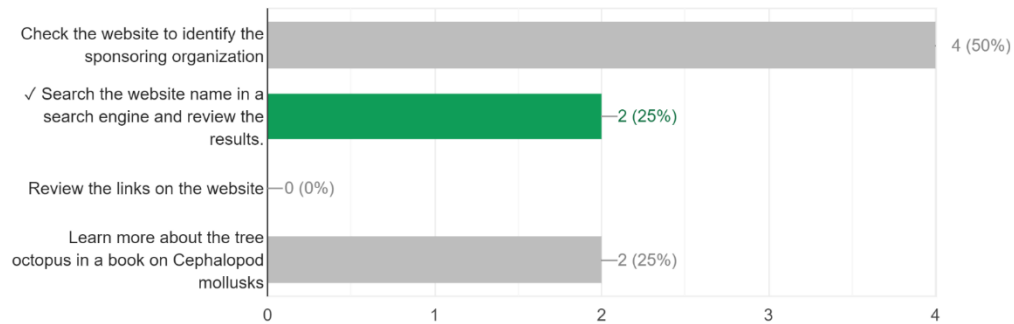
Fall 21 / Larsen Hoeckley

You are doing a paper on mollusks and found a website on "The Endangered Pacific Northwest Tree Octopus" (<http://zapatopi.net/treeoctopus/>). Th...ST approach to verify that this is a credible site?
7 / 16 correct responses



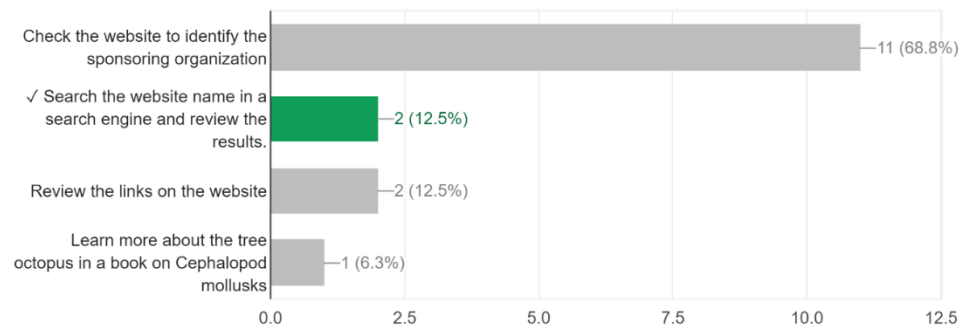
Fall 21 / Lee

You are doing a paper on mollusks and found a website on "The Endangered Pacific Northwest Tree Octopus" (<http://zapatopi.net/treeoctopus/>). Th...ST approach to verify that this is a credible site?
2 / 8 correct responses



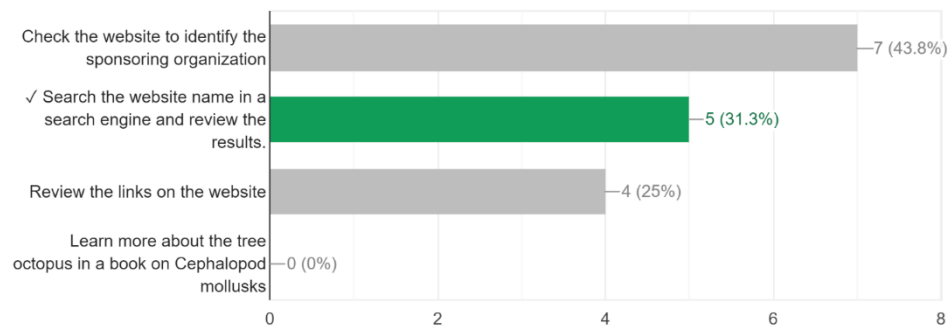
Fall 21 / Skripsky

You are doing a paper on mollusks and found a website on “The Endangered Pacific Northwest Tree Octopus” (<http://zapatopi.net/treeoctopus/>). Th...ST approach to verify that this is a credible site?
2 / 16 correct responses



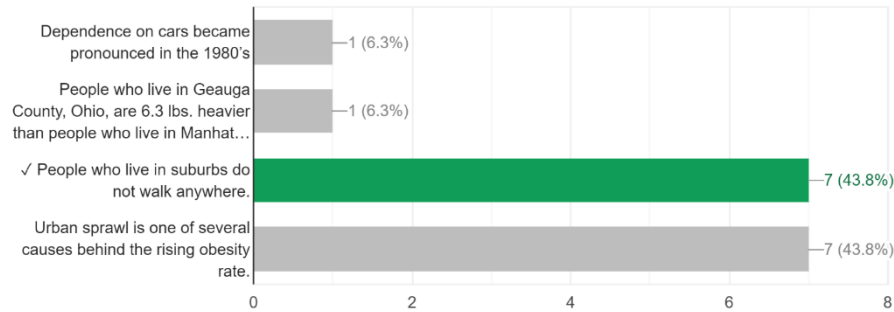
Fall 21 / Speiser

You are doing a paper on mollusks and found a website on “The Endangered Pacific Northwest Tree Octopus” (<http://zapatopi.net/treeoctopus/>). Th...ST approach to verify that this is a credible site?
5 / 16 correct responses



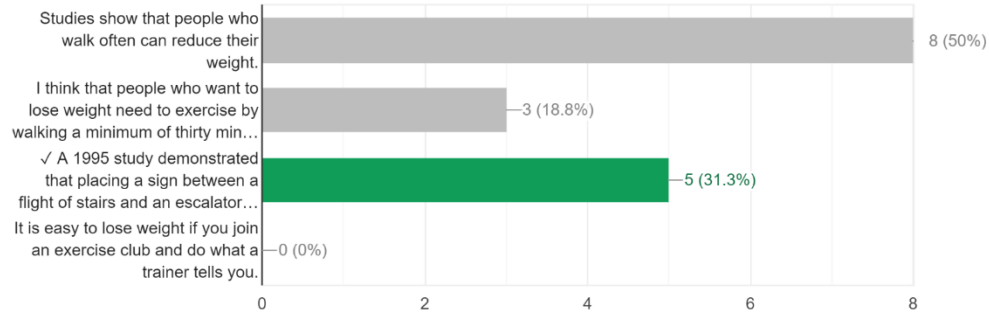
One of several reasons behind the obesity crisis is the development of suburban America and the urban sprawl trend. As suburbs began to expand in...lowing facts is NOT supported by Ewing's study?

7 / 16 correct responses



Which sentence most strongly reflects the statement, "Small changes that people make in their lives can have an impact on the fight against obesity?"

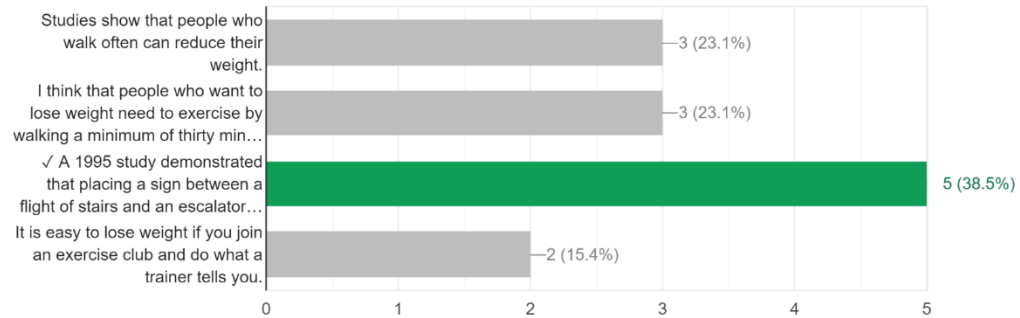
5 / 16 correct responses



Spring 22 / McNamara

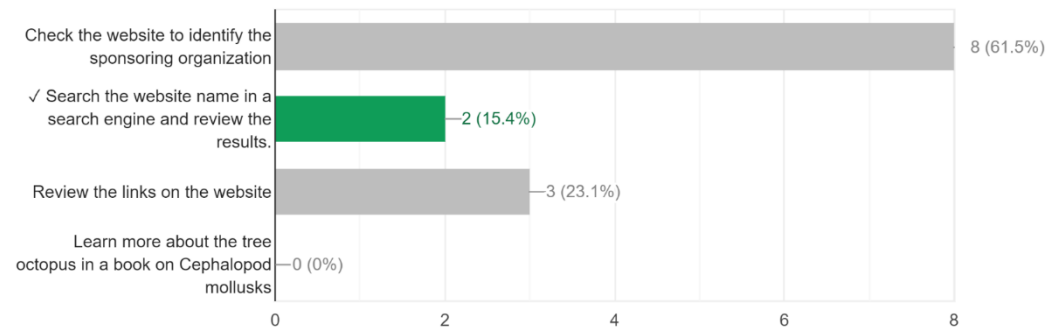
Which sentence most strongly reflects the statement, “Small changes that people make in their lives can have an impact on the fight against obesity?”

5 / 13 correct responses



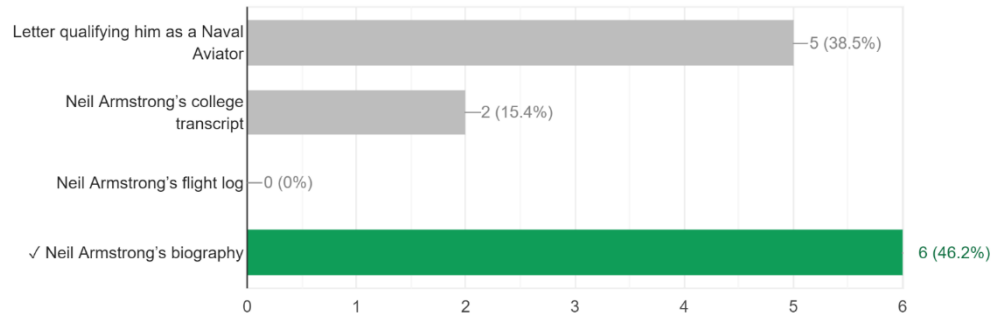
You are doing a paper on mollusks and found a website on “The Endangered Pacific Northwest Tree Octopus” (<http://zapatopi.net/treeoctopus/>). Th...ST approach to verify that this is a credible site?

2 / 13 correct responses



You are doing a research paper on Apollo 12 astronaut Neil Armstrong. Which of the following is a SECONDARY source?

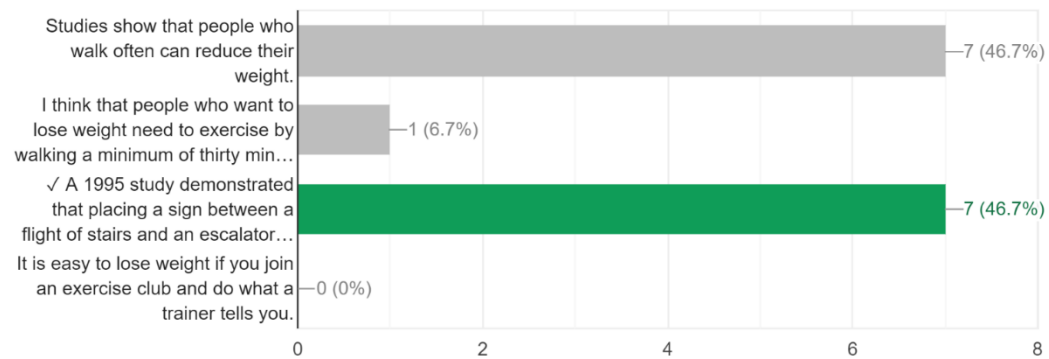
6 / 13 correct responses



Spring 22 / Skripsky

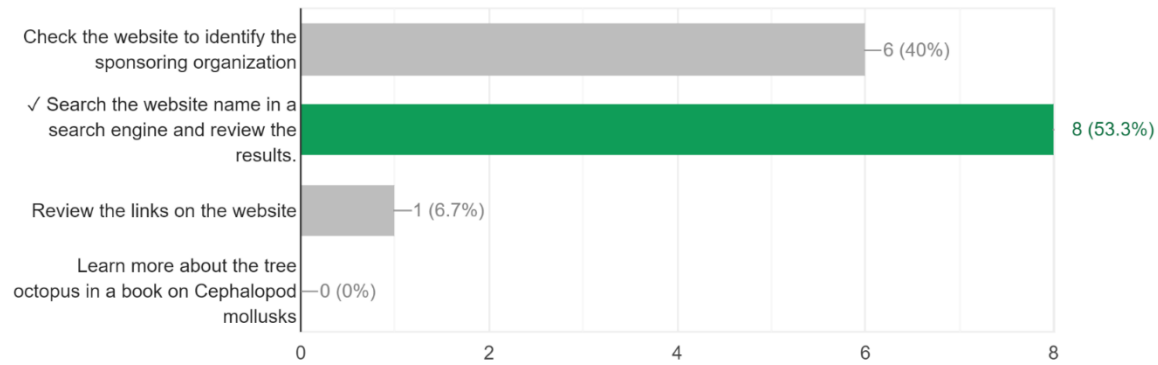
Which sentence most strongly reflects the statement, "Small changes that people make in their lives can have an impact on the fight against obesity?"

7 / 15 correct responses



You are doing a paper on mollusks and found a website on “The Endangered Pacific Northwest Tree Octopus” (<http://zapatopi.net/treeoctopus/>). Th...ST approach to verify that this is a credible site?

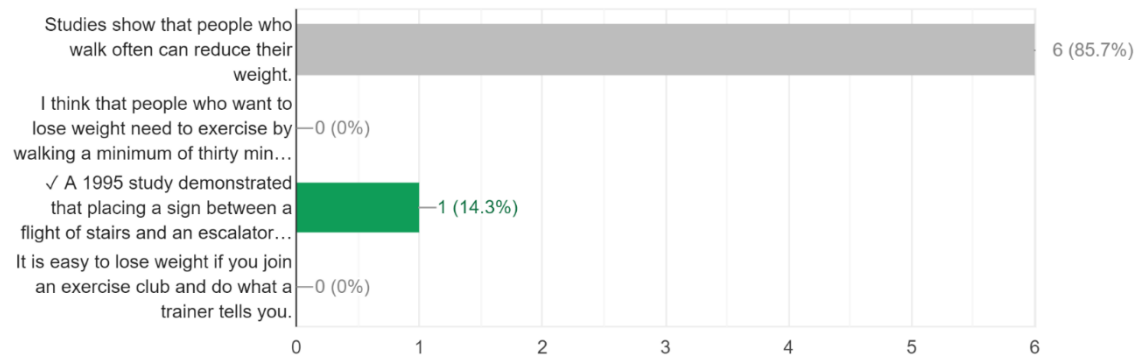
8 / 15 correct responses



Spring 22 / Mangrum

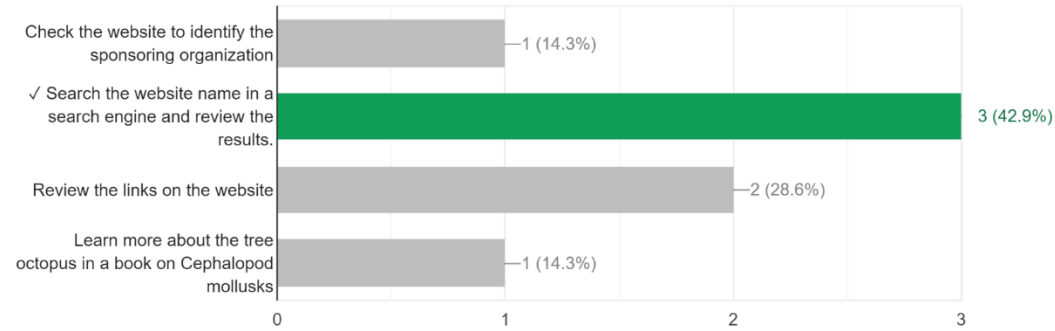
Which sentence most strongly reflects the statement, “Small changes that people make in their lives can have an impact on the fight against obesity?”

1 / 7 correct responses



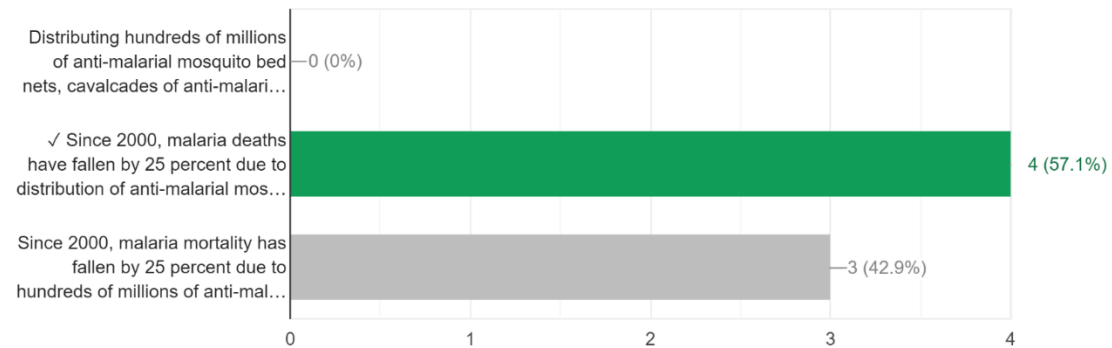
You are doing a paper on mollusks and found a website on “The Endangered Pacific Northwest Tree Octopus” (<http://zapatopi.net/treeoctopus/>). The...ST approach to verify that this is a credible site?

3 / 7 correct responses



You want to use the information in the following quote for your paper on malaria. “In recent years, hundreds of millions of anti-malarial mosquito bed...paraphrases the information to avoid plagiarizing?

4 / 7 correct responses

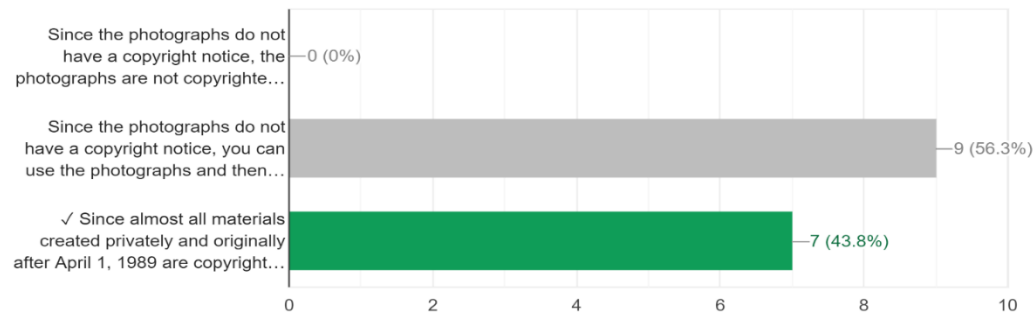


PLO 3: ETHICAL SOURCE INTEGRATION

Fall 21 / Larsen Hoeckley

To earn extra money as a college student you have begun a DJ business. You have created a website about your DJ business. You want to include photos of you can use the photographs. What can you do?

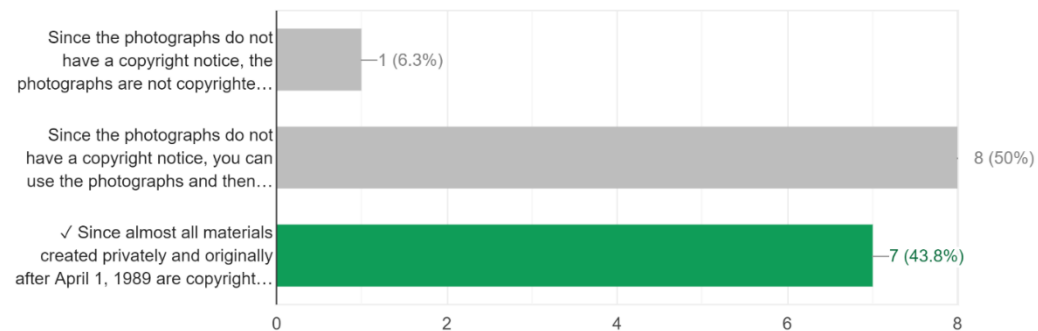
7 / 16 correct responses



Fall 21 / Skripsky

To earn extra money as a college student you have begun a DJ business. You have created a website about your DJ business. You want to include photos of you can use the photographs. What can you do?

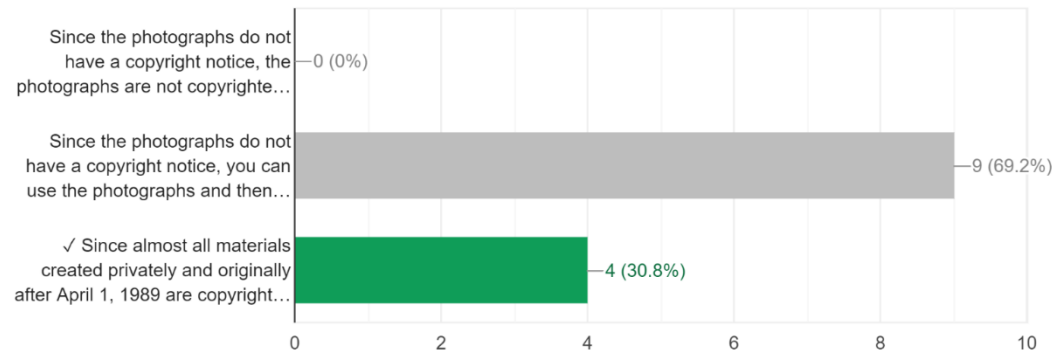
7 / 16 correct responses



Spring 22 / McNamara

To earn extra money as a college student you have begun a DJ business. You have created a website about your DJ business. You want to include photos of you using the photographs. What can you do?

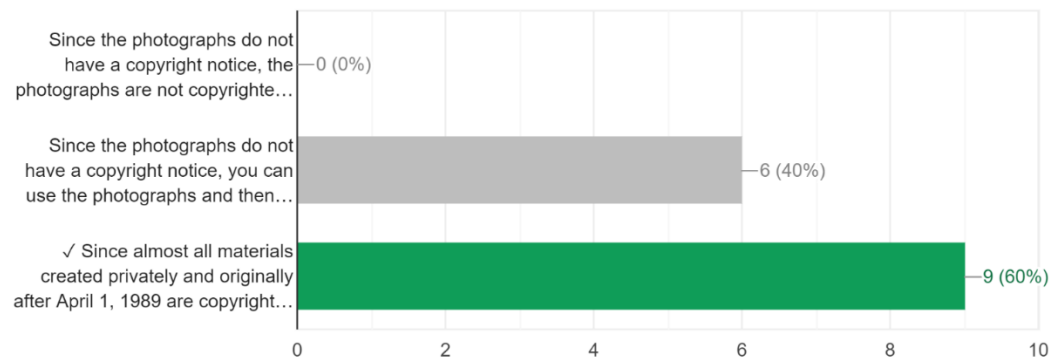
4 / 13 correct responses



Spring 22 / Skripsky

To earn extra money as a college student you have begun a DJ business. You have created a website about your DJ business. You want to include photos of you using the photographs. What can you do?

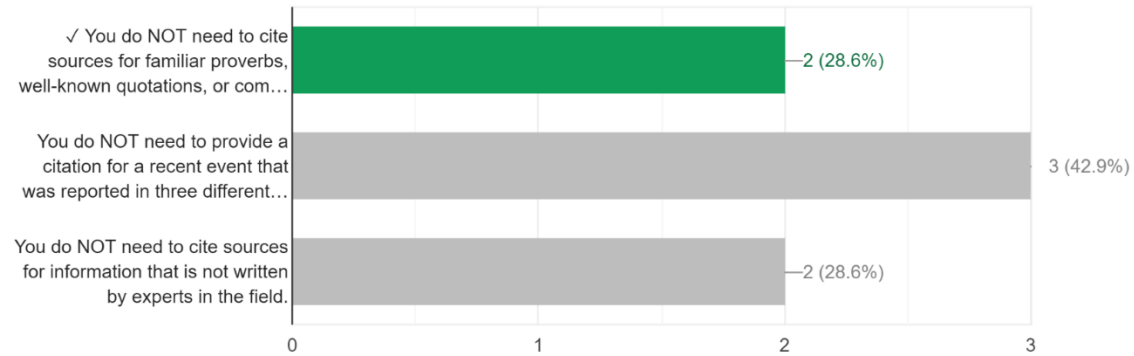
9 / 15 correct responses



Spring 22 / Mangrum

You have been asked to write an eight-page paper for your Reading Imaginative Literature class. You will use MLA format for your paper. The professor correctly indicates when MLA citation is NOT needed.

2 / 7 correct responses



Appendix B5.2 KNS-072 Foundations of Kinesiology (two sections)
Librarian-Faculty Collaboration: Instruction and Most-missed Information Literacy Questions Spring 2022

- Librarians have partnered with Kinesiology faculty to support student research in this course for decades. In Fall 2016, Mayfield Mullen picked up the responsibilities for instruction and began a collaboration with Ogechi Nwaokemeleh. The goal of instruction was two-fold: teaching students about how to develop a research question from the topics provided by the professor; and modeling effective and efficient research strategies in the scholarly literature. Just before COVID disrupted instruction, Mayfield Mullen and Nwaokemeleh began giving students the opportunity to either have the Writers' Corner tutors review their draft paper, or meet with Mayfield Mullen for a one-on-one research consultation with a focus on the quality and integration of scholarly sources into their writing.
- Due to the hybrid nature of this course in the COVID-afflicted fall and spring of the assessment year, Mayfield Mullen created a Google form version of the Pre-Instruction Information Literacy Survey. Ogechi Nwaokemeleh shared the link with her students prior to instruction in Spring 2022; answers were analyzed in Google form analytics before the instruction. Mayfield Mullen was inspired by the ability to target specific deficit areas of student practice in information literacy. This experience convinced her of the efficacy of this tool in its online form, which is still in use with modifications. See below for results.
- Mayfield Mullen's reflections on the instruction afterwards with student comments:

This was the best experience I have ever had with this class. Having them do the Information Literacy Survey online before the class, and then following up with the most-missed questions, and using one of the questions to demo databases and WorldCat -- then I had extra time from Ogechi so I could do an adequate job with that, plus they filled in the topic worksheets and did an evaluation form. I've reached out to students from both sections who asked to set up research appointments. Here are some sample responses from evaluation form:

Section 1 Student Evaluation of Instruction

I now know how to: use resources more efficiently; narrow down my searches; read more effectively. All of this will allow me to do well on my paper and feel more confident.

. . . I learned not only the value of books when researching but ahow to find the right books.

. . . I also learned how to request a book if the library doesn't have it . . .

. . . I also found it interesting how there are so many sources and ways to find articles through Westmont. Westmont makes it easy to find credible articles. Finding research topics is easier now.

. . . It was also very helpful to learn how to navigate the library databases . . .

I learned that the library databases are very useful. I learned that we can use the AND, OR< and NOT arguments to further narrow down my search. I also learned that I can talk to the Kinesiology librarian Dr. [Mayfield] Mullen about my research topic (and I sent an invitation to do so).

I learned how to lessen the amount of findings. On the left hand side you can choose to filter out many things. . . . I also learned to use keywords when searching for things.

I learned how to navigate the Westmont database. I also learned how to use the keyword search which I had not known previously, and was able to narrow my search. I also now understand how to make sure my sources are creditable and to further identify information I need.

I learned different ways to make your online searches more efficient and specific. The different examples we did in class to narrow down topics to search for key words, subjects was very helpful. Looking at date of publication, full-text . . was fun, and also it was helpful to learn how to request pay-walled items.

. . . Differentiating between good and bad sources is important when writing an academic paper. I feel like I have a good grasp on how to further my research.

. . . I learned how to better paraphrase my work. These strategies will help me to further my knowledge and research for papers in the future, saving me time and brain power.

I learned that when you paraphrase, it should be about the same length as the original phrase. I gained a better understanding of how to use the Westmont library resources more effectively. I didn't realize that I had the option of putting "not" when researching for a specific topic, so that was helpful.

. . . I learned about the use of an * to search for the // . . . I learned how to evaluate a source as scholarly or not. Finally, I learned how to use the Boolean operators.

. . . There are many different resources to use and I feel I have a good understanding on how to use them. . . .

Following up with the professor and reporting these comments. Also will be inviting her to share the student work with us for assessment purposes.

Section 2 Student Evaluation of Instruction

. . . I learned about how many databases are available, which is wonderful, but also overwhelming. I found the concept of using quotation marks to make a keyword helpful. I also learned about how you have to go into research with an open mind.

. . . I learned that copyright is abused if you reuse the source or publish it. I learned that distinguishing between what the article says versus what I say and paraphrasing can help me understand the material better.

. . . I also learned how to access specific words in the article, which I think is very helpful.

. . . I learned about WorldCat which lets me find ebooks and print books.

. . . Using different databases like ProQuest, JSTOR< WorldCat can be useful as they provide different works.. . .

. . . I learned how to highlight the key ideas in my topic and use that towards research. . . . I learned how / branch out my question to help further my understanding of what I am trying to research.

. . . She did a great job of explaining how to search for a book because I had never done that. This definitely helpful me feel better prepared for the research paper.

[Having already had library instruction in two other courses] Having someone to help me as I was looking for sources was also very helpful. . .

. . . how much a couple of words can change the results.

. . . I also learned it wouldn't be a good source if you can't understand the title. Lastly, you need to know a little about the author to know if it is a reliable source.

. . . how to get access to sites, articles, and books.

I learned that the library databases have a section for this class. I also learned that there are many databases to look through in the past I mainly looked at JSTOR and Google Scholar. Some may be better to use for this topic.

. . . I have had previous experience with using research data bases, however I have always had trouble searching through so much information. Today I learned effective ways to narrow my search, including how to indicate the [time?] periods I would like sources from, and how to distinguish my topic from other like topics . . .

. . . I was able to specifically search for what I wanted by figuring out my key words. I also learned how to search for books and policies behind downloading them.

I learned to take your time and not to use any cite you find. . . . I didn't realize how much the library wants to help out that will be extremely important.

Survey Results

Frequently missed questions

Question	Correct responses
Which sentence most strongly reflects the statement, "Small changes that people make in their lives can have an impact on the fight against obesity?"	19 / 43
AUTHOR 1: "Although many scientists who worked to create this weapon and many of the military who would have to use it opposed its use to some degree, the general public backed Truman in his decision to call for unconditional surrender. In a June 10th Gallup Poll, 82% of Americans surveyed stated that the Japanese were a more heartless country than the Germans (18%). Many felt that destroying one of Japan's cities with this new weapon would simply be retaliation for the devastating attack of Pearl Harbor which brought the United States into the war in December of 1941. With only 20% of Americans surveyed believing that the war would end by the end of 1945, the idea that a single weapon would bring a quick and definite end to the war in Japan also confirmed the belief held by Truman and his Cabinet that the atomic bomb should be used." AUTHOR 2: "During World War II, President Truman had to make many difficult decisions regarding military matters, including, most importantly, the decision to utilize the new atomic bomb. In order to make these decisions, he looked to military authorities, his cabinet members, scientists and the views of the American public. Most of the American public, 80%, believed that the war would not end within the year 1945. Despite the objections of others, Truman felt he had the firm backing of the general United States population and his Cabinet; he believed that the use of the atomic bomb would be justified in order to end the war quickly." Which author discusses this statement: "The majority of Americans believed that the war would not end within the year 1945."?	20 / 43
You have been given an assignment in your literature class to paraphrase the ideas in a passage from an American author. You are having problems with the assignment because you do not know exactly what it means to paraphrase. From the choices below, choose the sentence that best describes the process of paraphrasing.	19 / 43
To earn extra money as a college student you have begun a DJ business. You have created a website about your DJ business. You want to include some of the photographs of your work as the DJ at weddings on your website. You go to a wedding photographer's website and find some photos of yourself playing music and announcing the wedding party. You do not see a copyright notice and it would be easy to copy the photos to your site. You are undecided as to whether or not you can use the photographs. What can you do?	20 / 42
You are doing a paper on mollusks and found a website on "The Endangered Pacific Northwest Tree Octopus" (http://zapatopi.net/treeoctopus/). The assignment requires reliable sources. What is the BEST and FASTEST approach to verify that this is a credible site?	13 / 43

Appendix B6: BIO-130 Cell Biology Annotated Bibliography Library Instruction & Paper Collection, 2020-present

In Fall 2020, biology faculty member Laura Drake Schultheis approached Theresa Covich, Biology liaison, requesting in-depth instruction in source evaluation and integration for the major research assignment. In addition to a bibliography with 25 entries, students were also required to do a metacognitive reflection on the research and writing process.

Covich Instruction for BIO-130 Fall 2020: labs were still remote, and the instructor came up with a new information literacy assignment and asked the library for a 3-hr instruction on Zoom.

- strategic searching using library databases (PLO 1)
- Zoom breakout rooms for each plank of the *ACRL Framework*; collaborative GoogleDoc to capture comments
- Begin discussing student interests & possible topics, broadening and narrowing searches, etc.
- Follow up with 1:1 30-min research consultations on Zoom
- BIO instructor shared metacognitive reflections and papers with the library for future assessment.
- Fall 2021, Fall 2022: similar assignment but now two library instruction sessions—PLO 1 and PLO 3—during lecture (instead of lab) time.
- Kept 1:1 30-min research consultations and kept collecting for assessment

Mayfield Mullen advised that we begin collecting the annotated bibliographies for future program- or institutional-level assessment, starting fall 2020. Mayfield Mullen, Covich, and Schultheis attempted in Spring, Summer, and Fall of 2022 to schedule an assessment of the bibliographies with faculty colleagues in the Natural and Behavioral Sciences as part of the Information Literacy ILO assessment. It was hoped that this would test the validity of the revised Information Literacy Rubric for Student Writing outside of the social sciences and humanities. This phase of the ILO assessment did not occur, but the instructional collaboration continues, as does collection of the annotated bibliographies.

Librarian assessment of annotated bibliographies: Lauren Bedoy, Theresa Covich, Jana Mayfield Mullen, Diane Ziliotto (with thanks to Chena Underhill's for assistance with development of codebook and data analysis)

BIO-130 Cell Biology Metacognitive Reflection Prompt – Laura Drake Schultheis

What was the most challenging part about choosing your topic?

Did your topic change throughout the course of your research? What was the reason for this change?

What was the most challenging part about your literature search? What obstacles did you run into? What helped you overcome these obstacles?

What did you enjoy about the literature search?

Have you ever been graded on a literature search before (as part of a larger assignment, or by itself)? Do you think having it be a part of your grade improves your research process?

What main piece of advice do you have for someone else embarking on an extensive literature search such as the one you conducted?

Do you feel that your understanding of what a review paper is has improved since the semester began? Explain.

Metacognitive Reflection Codebook

Code	Description																		
Research																			
Evaluate	Determine the fitness and relevance of a source.																		
Integrate																			
databases	The student uses multiple databases/ search engines to find relevant sources																		
variety search	The student searches a variety of scholarly literature (different sources). Student does more than 1 search to find these articles.																		
organization	The student emphasizes organization strategies as important in their success																		
Reading	Students persevere in extensive reading to evaluate sources.																		
perseverance	The student acknowledges the recursive, unpredictable, or time-intensive nature of research; patience; problem solving																		
access difficulties	Students had difficulties accessing the full text of sources that they wanted																		
synthesis	Student expresses an awareness that they should be putting their sources together to work towards some central goal																		
narrowing-diff	Student had a difficult time determining the the appropriate scope of the project.																		
narrowing	Student narrowed the scope of topic during the research process.																		
filtering	Students use database limiters to find relevant sources.																		
Search terms	Students use keywords, subject terms (MeSH), boolean operators, and other controlled vocabularies to find relevant sources																		
librarian	Student emphasizes librarian guidance as helpful in the research process																		
assignment structure	Student expresses awareness that the scaffolded assignment (graded/ required steps before writing) changes process (positively).																		
joy of learning	Student enjoys learning about the content of the sources.																		
scholarly conversation	Student looks in works cited and publication contexts to expand their source pool.																		

Total number of times coded words mentioned

Databases 5
variety search 7
Organization 8
Reading 6
Perseverance 10
access difficulties 1
Synthesis 6
Narrowing-diff 12
Narrowing 9
Filtering 7
Search terms 8
Librarian 4
assignment structure 15
joy of learning 13
scholarly conversation 4

5/15 students expressed that they used multiple databases/ search engines to find relevant sources.

7/15 students expressed that they searched a variety of scholarly literature (different sources). Students did more than 1 search to find these articles.

8/15 students emphasized organization strategies as important in their success.

6/15 students indicated that they persevered in extensive reading to evaluate sources.

10/15 students acknowledged the recursive, unpredictable, or time-intensive nature of research; patience; problem solving

1/15 students expressed that they had difficulties accessing the full text of sources that they wanted

Of the 10 students who got credit for perseverance,

6/15 students expressed an awareness that they should be putting their sources together to work towards some central goal

12/15 students expressed that they had a difficult time determining the appropriate scope of the project.

9/15 students expressed that they narrowed the scope of the topic during the research process.

7/15 students indicated that they used database limiters to find relevant sources.

8/15 students indicated that they used keywords, subject terms (MeSH), boolean operators, and other controlled vocabularies to find relevant sources.

4/15 students emphasized librarian guidance as helpful in the research process

15/15 students expressed an awareness that the scaffolded assignment changed their process positively.

13/15 students expressed a joy of learning about the research content.

4/15 students expressed that they looked in works cited and publication contexts to expand their source pool.

Of the 5 people who used databases, 4 also got credit for variety search.

Of the 8 people who got credit for using search terms, 2 got credit for using filtering.

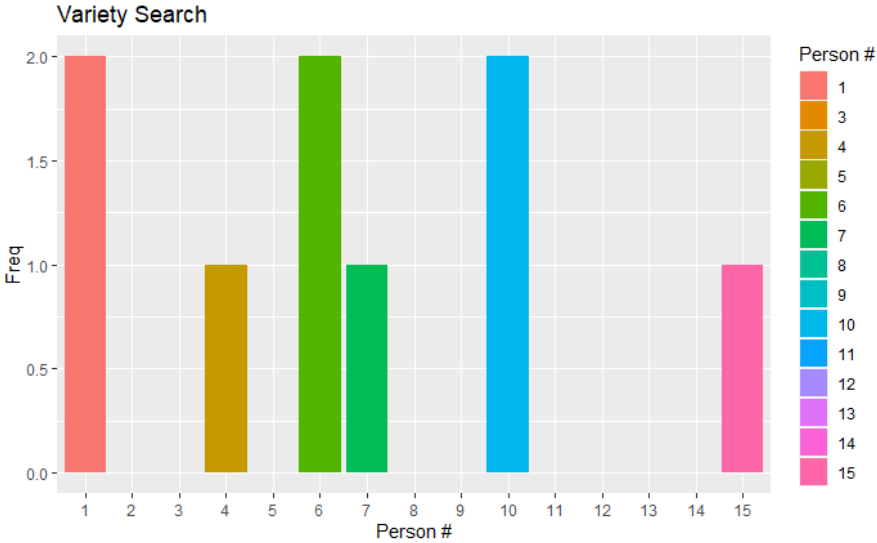
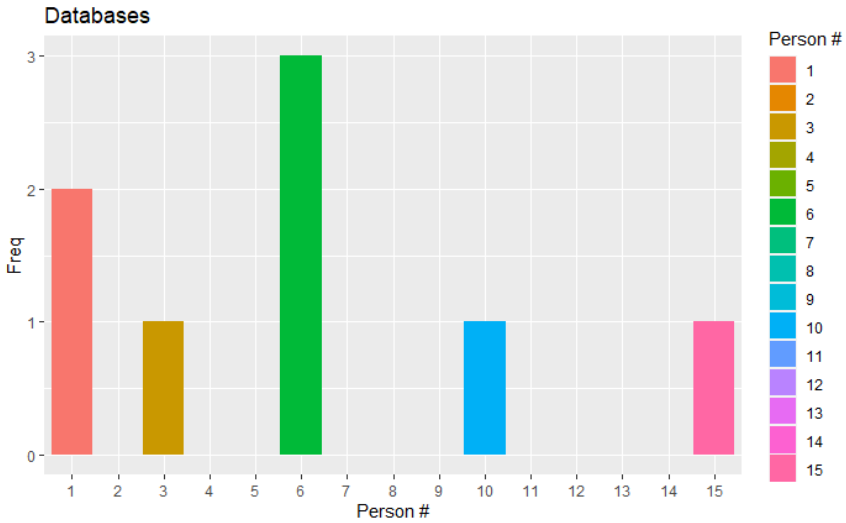
Of the 7 people who got credit for using filtering, none of them got credit for using search terms.

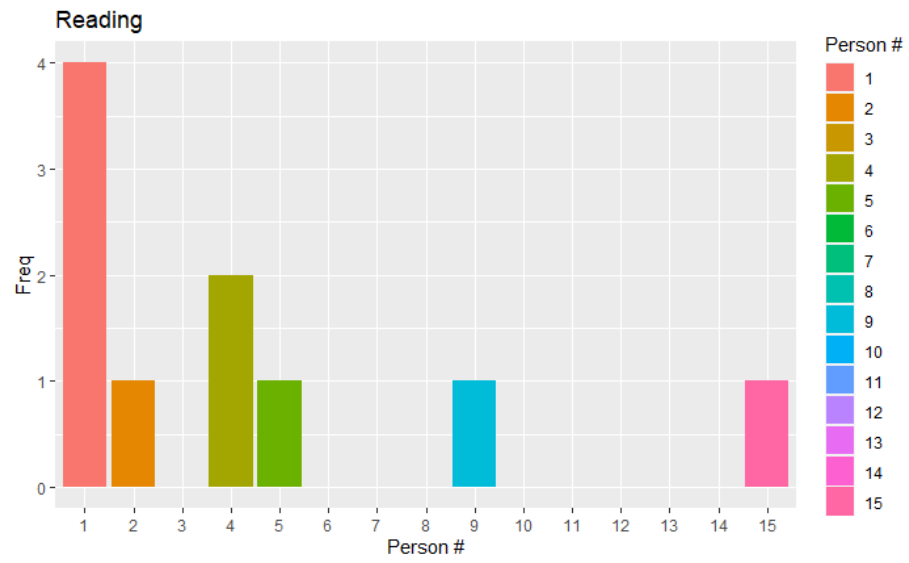
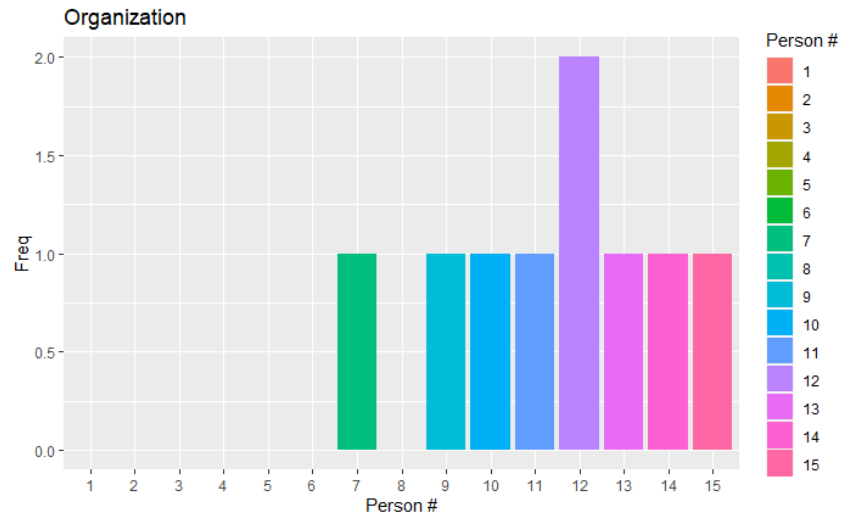
Of the 4 students who expressed that they looked in works cited and publication contexts to expand their source pool, 1 got credit for perseverance.

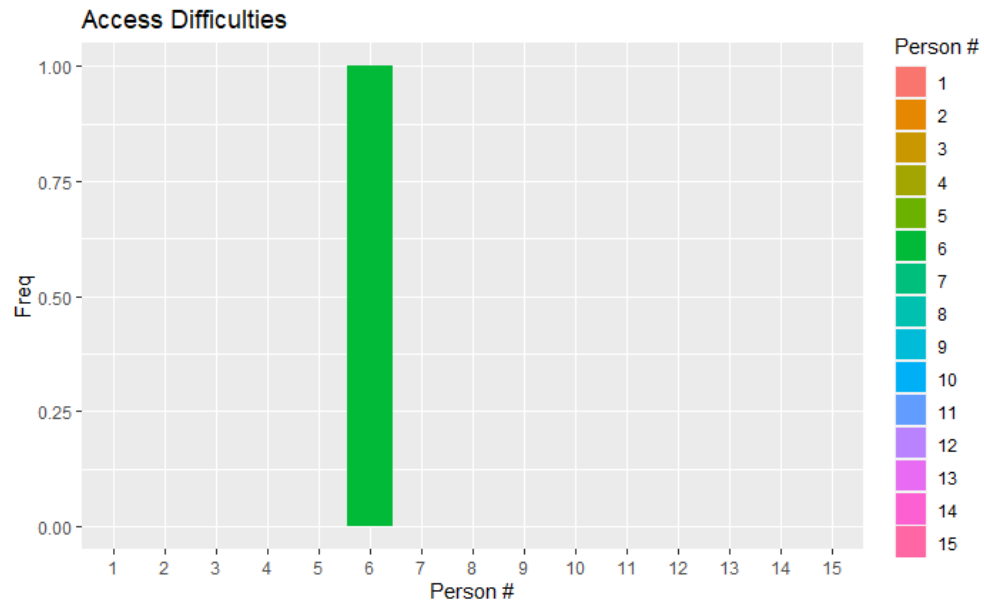
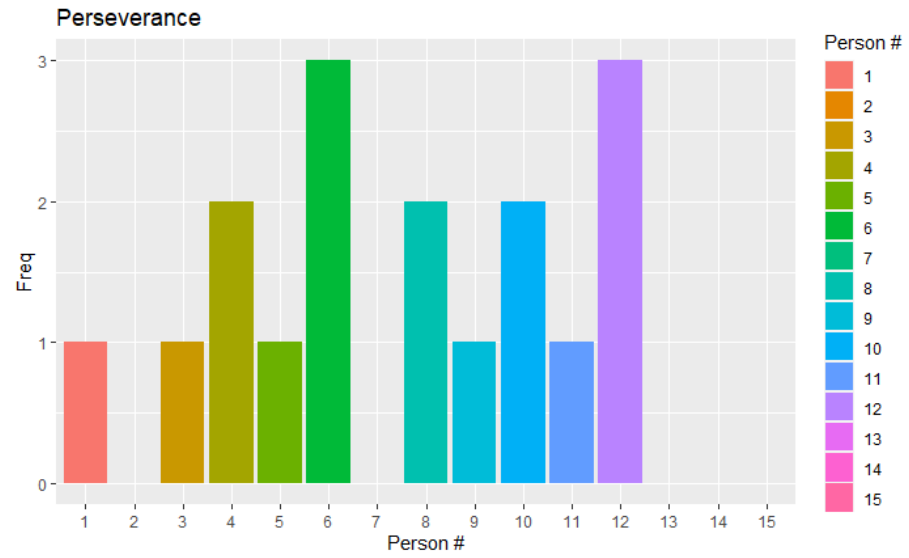
Of the 10 students who got credit for perseverance, 8 expressed that they had difficulties with the scope of the project.

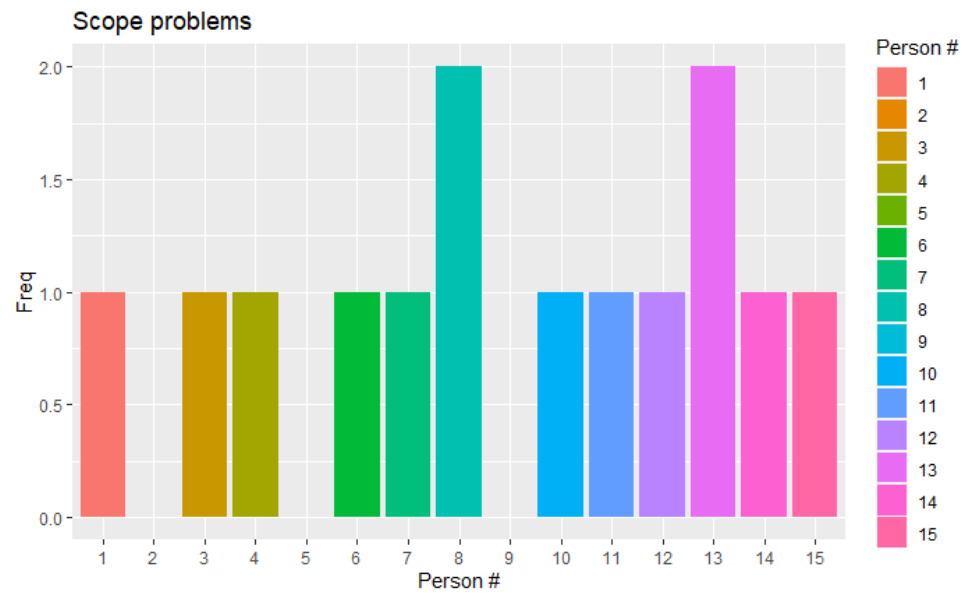
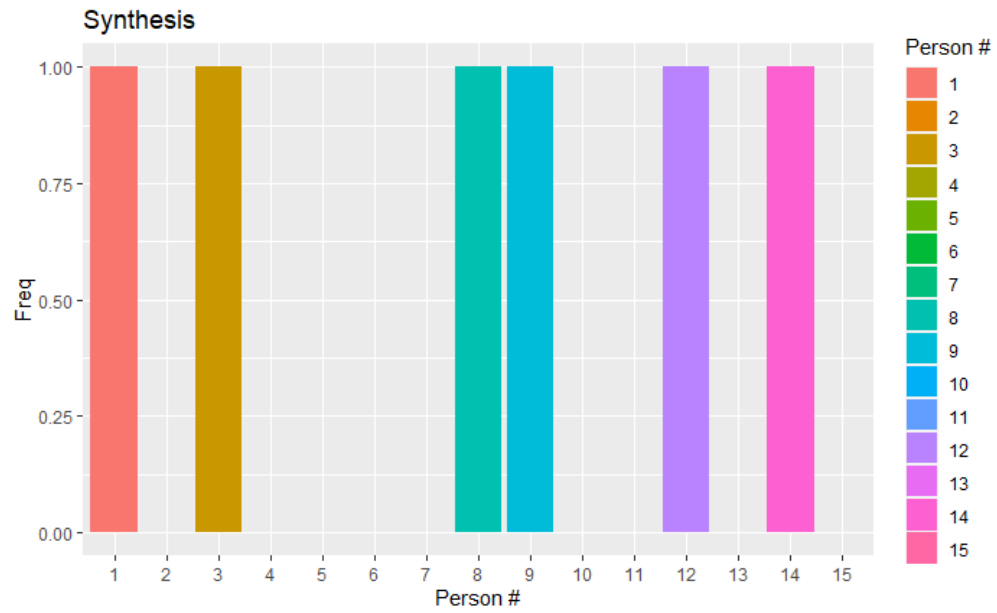
Of the 12 students who expressed that they had difficulties with the scope of the project, 7 got credit for narrowing the scope of their project.

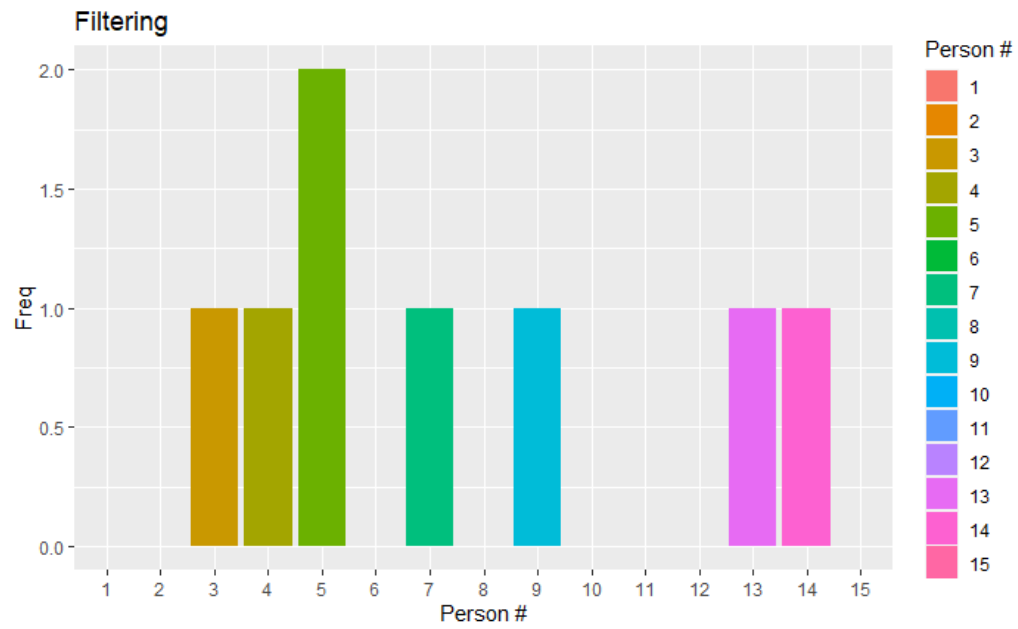
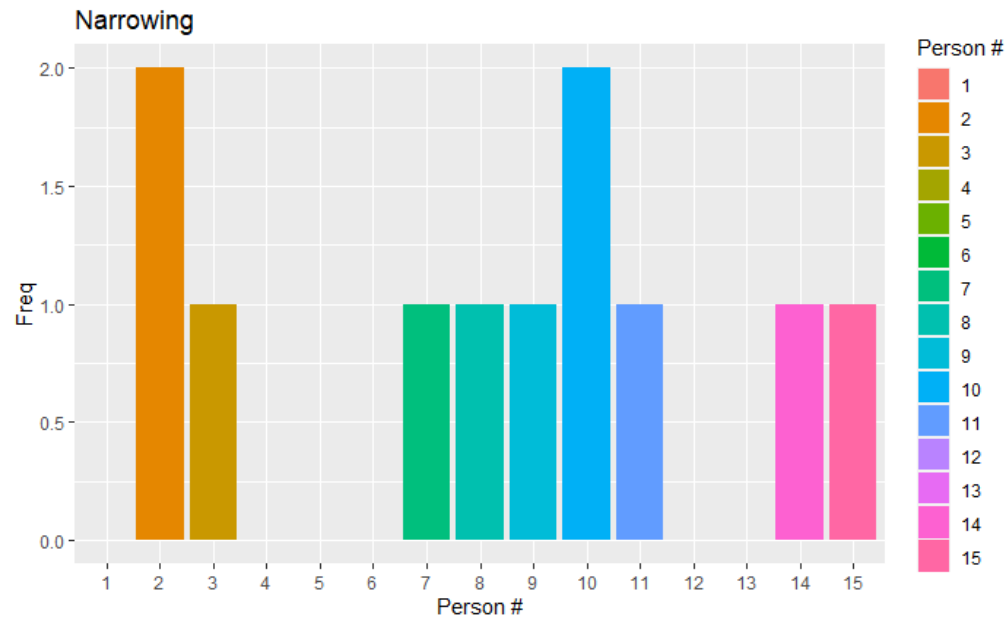
The graphs below show the frequency with which individual students were given credit for different attributes.

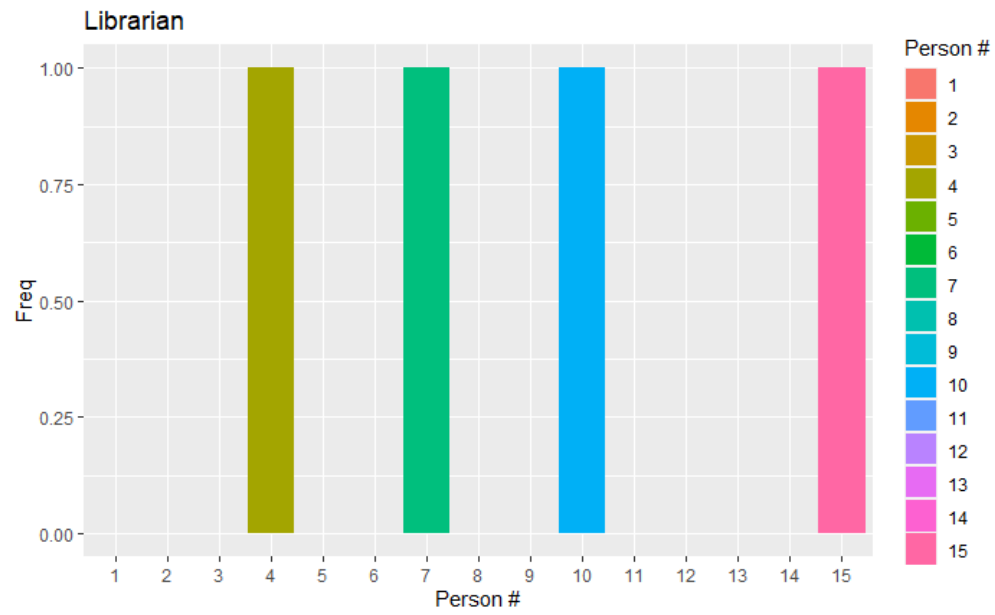
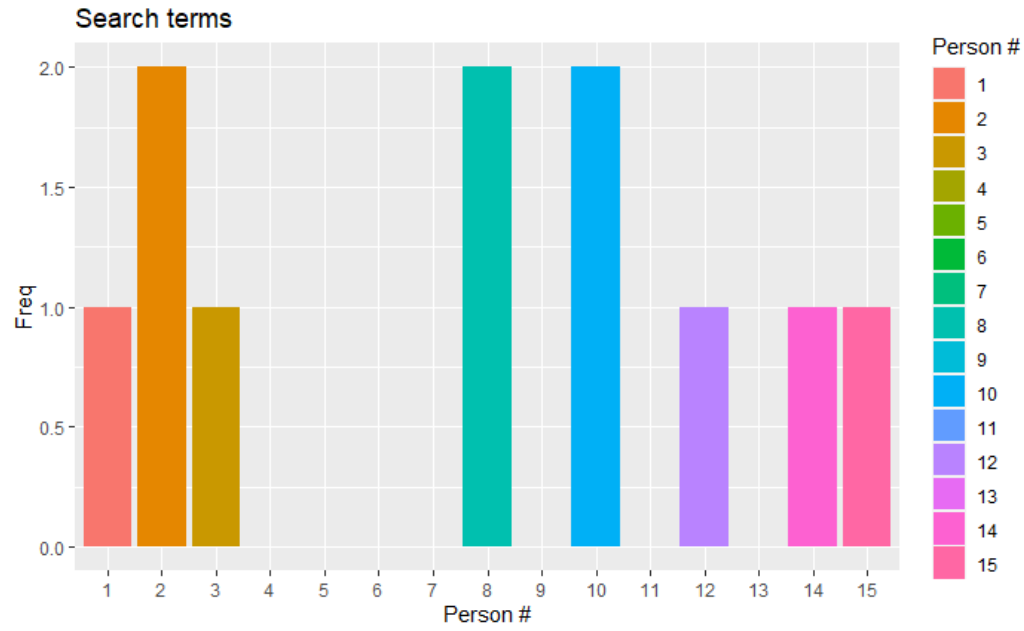


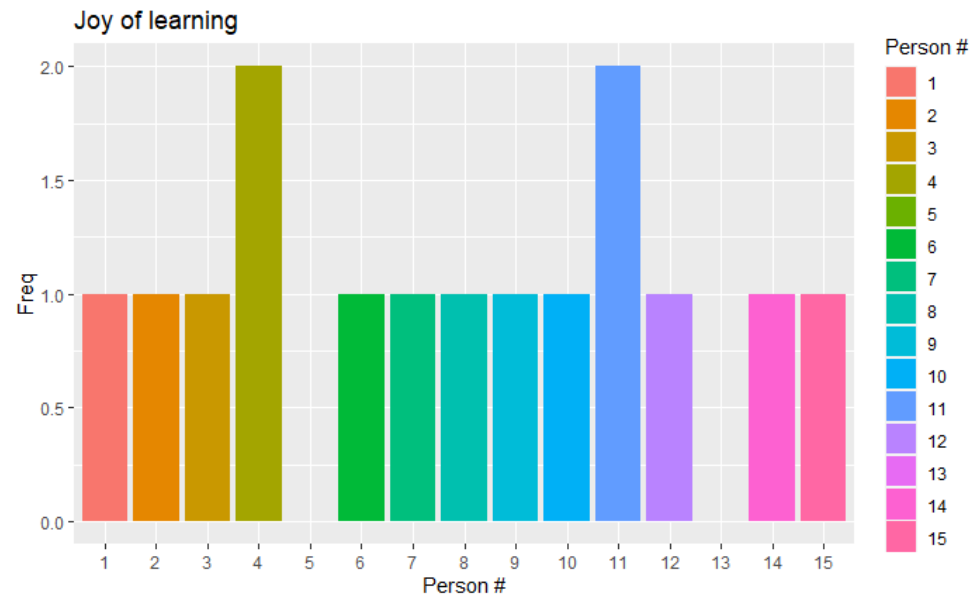
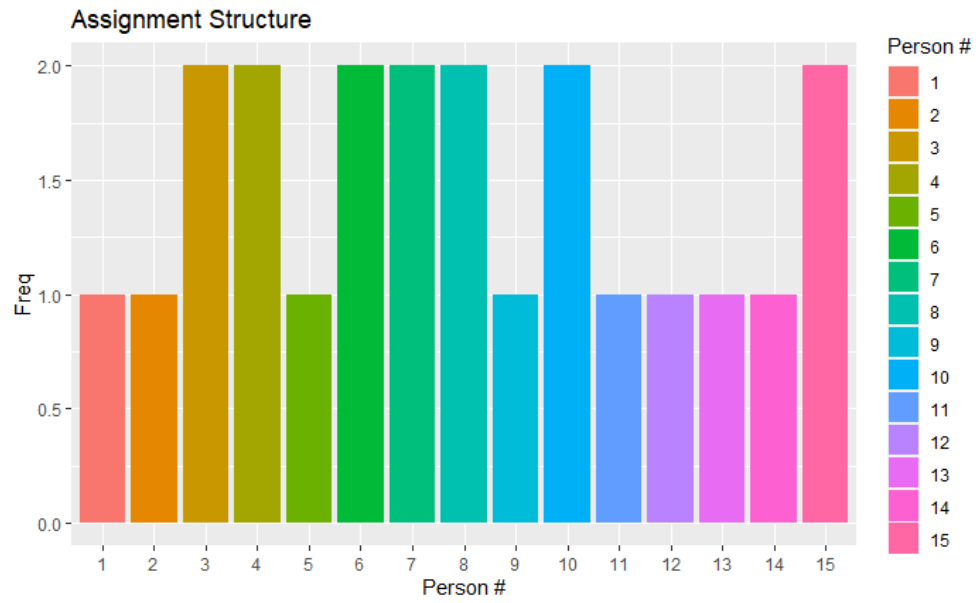


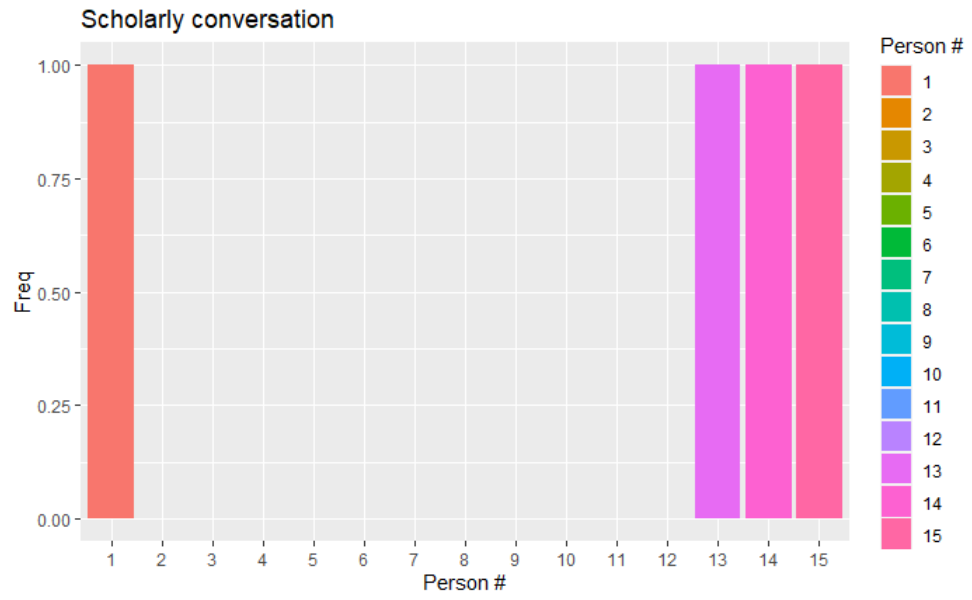












Appendix B7.1: Underhill ENG-002 Writing Assessment Data Analysis Presentation to Assessors



Information Literacy Debrief

5/25/2022

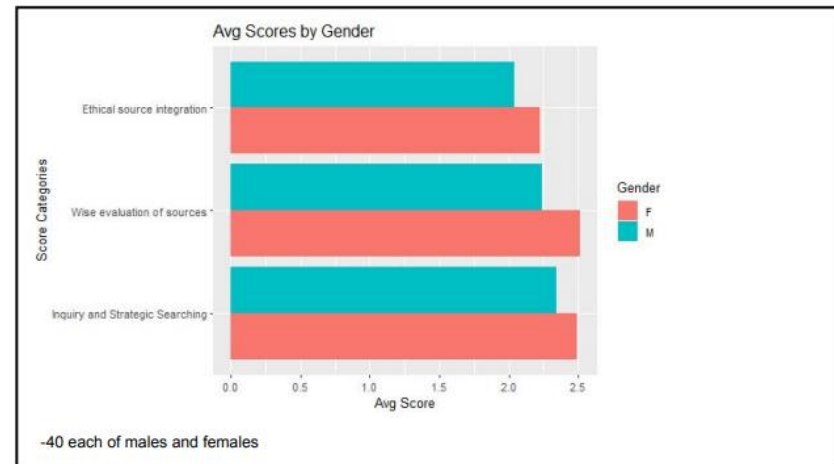
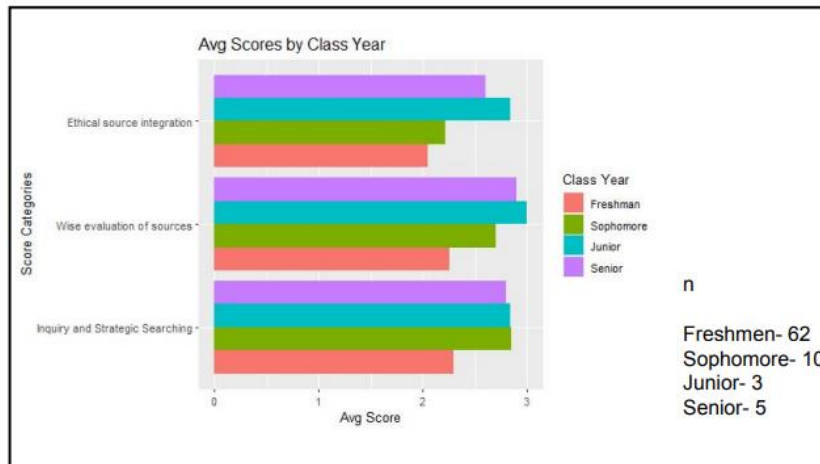


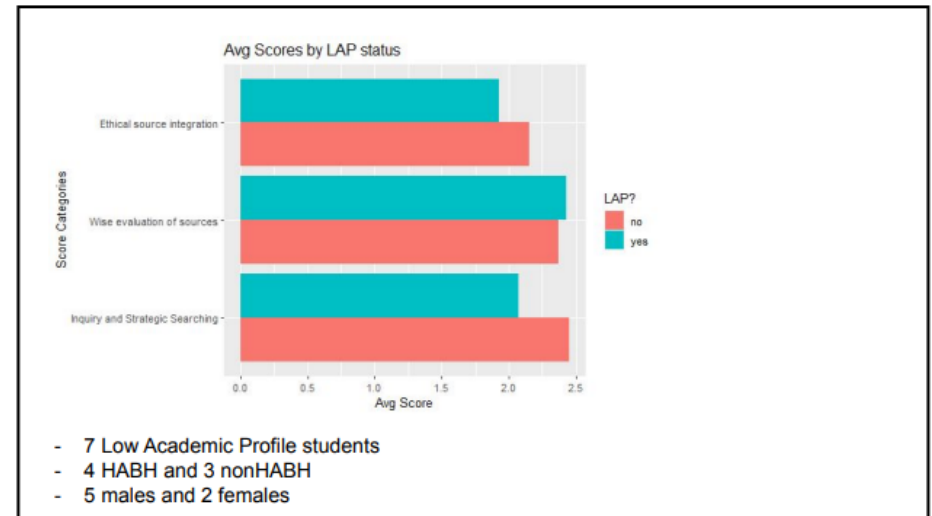
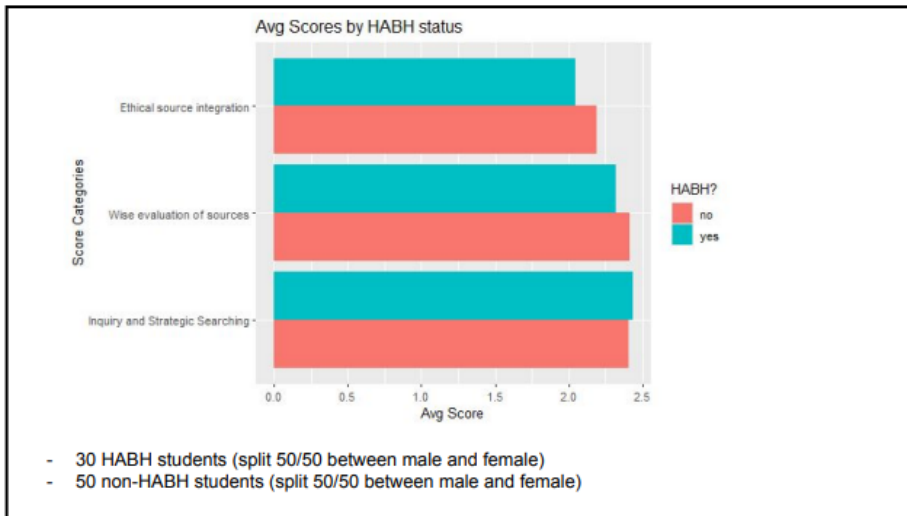
Summary Stats

Table 1- Average Scores for Information Literacy Assessment by Group

Group	n	Inquiry and Strategic Searching	Wise Evaluation of Sources	Ethical Source Integration
Male	40	2.342	2.242	2.038
Female	40	2.492	2.513	2.229
HABH	30	2.433	2.322	2.044
nonHABH	50	2.407	2.41	2.187
Male HABH	15	2.344	2.3	2
Female HABH	15	2.522	2.344	2.089
Male nonHABH	25	2.34	2.207	2.06
Female nonHABH	25	2.473	2.613	2.313
LAP	7	2.071	2.429	1.929
First Gen	10	2.283	2.15	2.017
Overall	80	2.417	2.377	2.133

***Scores lower than the overall average are highlighted in red. Groups with all three scores lower than the average are also highlighted in red.





This is just the beginning...

What other questions do you have?

What other graphs/tables would you like to see?

Appendix B7.2: ENG-002 Information Literacy Assessment Workshop De-Brief

Notes from Zoom meeting recording

May 25, 2022, 2-3:30 pm

Jana Mayfield Mullen

Present: Lauren Bedoy, Theresa Covich, Rebekah McNamara, Andrew Mullen, Tatiana Nazarenko, Pauline Remy, Sarah Skripsky, Chena Underhill, Sonya Welch, Diane Ziliotto

Priority: underscore priorities for English and library teaching. What will disappear if we don't strike while the iron is hot?

Theresa: Start with:

- wide disparity of student work
 - Yes, it exists. Instructors see this, too. Even more disparity we couldn't capture. Most high-need students did not turn in final papers. Had to replace them with other students.
 - Sample is affected by students who test out of ENG-002
 - Library instruction model is similar across sections, maybe 4/32 class days
 - Diane does Inquiry & Strategic Searching; Theresa, Source Integration.
 - Context of library instruction: have moved away from skills-based information literacy towards
- Also had Info lit pretests – can look at numerical data this summer
- Scoring metacognitive reflections – coding those for useful criteria – never looked at those before

Chena's Slides:

- Preliminary first glance – please ask questions
- Basic groups broken out by score
 - First gens and males had lower scores
- Female HABH had highest ISS score – not sure what that means, but interesting
- Class year – Freshmen lower than all others in all three areas
- Haven't done "how statistically significant is this?" yet
- HABH – doesn't include Asians because they often do better
 - Hispanic
 - A
 - Black
 - Hawaiiin / Pacific Islander / American Indian
- Only 7 Low Academic Profile students – did a tiny bit better in the wise evaluation of source, but better in two other areas
- What else would you like to see? Put them in the chat and Chena will try to complete them during the meeting

Theresa:

- ENG-002 faculty – see what’s happening
- Non-English faculty perspectives helpful
- Best Practices for ENG-002 document
- Next steps
 - Because of concerns about citations and reading sources – assessment of Annotated Bibs next year
 - Using student writing rubric with other disciplines
 - Collection of Cell Biology papers

Tatiana and Sonya – Impact of being undecided versus having a declared major. 62 students are freshmen; most likely most of them are undecided. Chena thought a retrospective in 4 years after they’ve declared one.

Diane – troubles with citations and inconsistencies – double-checked reference lists – didn’t use library databases – last minute? A lot of questions that can’t be answered. All the instructors had me in – not a captivating subject. Is it something I’m doing wrong? Do they need more repetition? We need to talk and figure this out. All ENG-002 faculty deserve a reward for hard work after seeing scores. Wound up with more questions than anything else.

Rebekah – helpful to have Diane and other librarians come in to class to give different perspectives. One student – inquiry clearly shaped by research consultation – would love to have that student come into class and testify to the process.

Sonya – [echoing Rebekah] She has a student come in and testify to the benefits of using resources to reduce the stigma of using college resources. This is very valuable.

Theresa - Students who did not make good use of the sources they had; recycling and cutting corners due to time scarcity (real of manufactured). One-on-one conferences; working with Writers’ Corner or librarian. It’s more work to plagiarize yourself vs. creating something new.

Lauren – beautiful annotated bibliography; student brought up insights from the sources; but didn’t actually cite them or make it clear where they came from.

Rebekah - not surprised that source integration was the lowest – true in my own classes.

Sarah – it is actually harder to recycle than start from scratch – maybe need to tell that to students directly. A student tried to do that – considered plagiarism. Often hesitant to say that at the beginning – don’t want to come across as harsh. I tend to like carrots. Also – at lunch we talked about how time management for students was uneven – used time wisely in the Inquiry phase but not the last step of source integration. Faculty could encourage students to pace themselves well. Sarah puts research paper due at mid-semester to avoid the end-of-semester crush of other assignments. When you see that a student can grapple well with one source – time management

Tatiana – where do students who do not take ENG-002 learn Information Literacy?

Chena – didn't take ENG-002 – learned it on my own. PoliSci – knew that Lauren was available but didn't go to her.

Diane – Augustinian scholar graduated in 2022 – never had any form of library instruction – faculty assumed we knew it all. She used Google. Diane made appointment in her last semester.

Tatiana - can go into recommendations – to Senate and then Faculty.

Jana – we have developed relationships with faculty over the last few years and consistently worked in Foundations courses (KNS-072) – refined that this year with a lot of research consultations. Another area that's changed – move from drop-ins at Research Help Desk to research consultations with individuals or small groups. Harder to get through to students at different levels. Information anxiety can impede learning. Work on timing in collaboration with faculty.

Chena – we do a really good job during Student Orientation of letting students decide what they want to engage with. What if we had a 15-minute space to . . .

Tatiana – Among the recommendations – Writing-intensive courses review by Sarah Skripsky – could we ask that there is always Information Literacy instruction in lower-level writing-intensive courses?

Sarah – Would have to ask librarians if they had time for this.

Diane – Voluntary workshops offered in the past, but no one came.

Sarah – Those were not directly tied to a specific class, right?

Diane – Realized they needed to be tied to a course AND the professor has to require it.

Sarah – could you do a variation with two sessions offered in the evening – professors require it – open to others – or maybe invite other classes?

Theresa – Faculty development workshop – Comm faculty would like workshops that don't take up class time but are not voluntary. Offer three options – might have to do make-up.

Jana – Molly Riley did these workshops in Spring 2016 as part of Closing the Loop for ILO 2014-2015. Did two evening sessions on Source Integration for Bruce Fisk – required and everyone came. Idea didn't completely die – faded away. Lost librarians and never recouped. Could be resurrected – faculty have to incentivize.

Tatiana – put in recommendations.

Sarah – Discipline-specific sessions – have successful senior testify

Jana – could have library tutor

Tatiana – Could we ask for beefing up of tutors in Recommendations?

Theresa – timing matters – introduced at point of need. BIO-005 – new problems with students being overwhelmed by reading short paragraphs – students struggling much more with reading. This needs to be addressed. *Teaching Effective Source Use* – skills needed to quote and paraphrase well. Finding main point of paragraph or article, comparing, putting

Student skills – student reading – instructors and librarian are stretched – what else can we do structurally? Before COVID – Summer program – BIOLA pilot program.

Sonya – Enjoy workshops conversation. Can we connect this with First Gen students? Christen Foell – would have liked workshop before finals – could we promote this through the First Gen lens?

Chena – you want faculty to help get students there – but on the other hand, if everyone has to come the students who most need assistance may get edged out – how do you strike the balance?

Lauren - have a librarian come for 5 minutes at the beginning of class - brief introduction.

Chena – better if faculty expects students to go – you have a need, go do it – works well in History.

Rebekah – this is the resource you use – not a “you have to” but “this is how you do it.” I don’t invite librarians in classes where there is not research paper. Thinking about how a short librarian visit could be invited in – that Information Literacy plays out in different ways. Could the library support this?

Sonya – Ways to empower students that they can control? Open-ended questions – what would be the outcome if you do this? What would be the outcome if you don’t?

Sarah – having students come to the Research Help Desk – worksheet – practicing.

Diane – Scavenger Hunts have been frowned upon, but they can be fun and expose students to librarians. It’s a lot of work for faculty and usually takes class time.

Chena – should match RHD statistics with what we’re doing here.

Sarah – what about information literacy that students need for non-academic purposes like buying a car?

Rebekah – real-world application – vocational field explorations for seniors – maybe encourage them to go to librarian for career research.

Sarah – librarians might help lower classmen think about deciding on a major?

Diane – public librarians used to help people with practical research questions – now it's been replaced by Google and AI. Used to have Career Center in the library – forced students to come in and use the building. Now it's Writers' Corner, IT, Disability Services.

Sonya – public library on Twitter – check out cooking supplies (special pans). Creative. Different ways to use the library.

Theresa – circle back to Rebekah's question about librarians' time and availability. Could utilize our Research Help Desk shift – let faculty know when that is and they could send students to the desk. Or if class is too big for one-on-one research consultations – can also do small group.

Took ENG-002 Source Integration – Survey of Western Music; Foundations of History. But self-conscious that students may already have had it. Survey of Western Music – said it sunk in a little more. Less concerned.

Sonya – How can we convey the message that the skills students learn in English Comp continue to be applicable? We emphasize its importance to incoming students.

Theresa / Sarah – we can tell students how the skills they are learning continue to be relevant in future courses as well as the rest of life. Challenge of transferring is the different ways different disciplines talk about their work. Can reinforce them. Thank you for reducing the stigma around taking ENG-002! Students who came in with LAP and had to take ENG-002 did better in the senior samples for Writing ILO than those who came in with high scores and tested out. Good to see that ENG-002 does make a difference.

Tatiana – 50% of incoming students were taking ENG-002.

Theresa – as we have more face-to-face – what would like to see?

Sonya – I would love to hear from Andrew.

Andrew – One of Sonya's comments resonated strongly with me and may be one of the most important comments. "How work from ENG-002 is followed up with in other classes." A lot of talk about ENG-002 and about what the library can and can't do – but not something that can be addressed with more workshops – this is a campus cultural issue.

One of Lisa DeBoer's students – memorable events – every lecture talked about sources from which she was lecturing. Left profound impression – professors were getting materials from sources and embedding it in their lectures. That kind of deep cultural modelling of I'm using sources and integrating them into my work. Not primarily a library issue – part of of me wants to say it's a faculty issue. Faculty and students have to own and internalize – reference skills matter and are applicable to everyday life. More than three ad hoc workshops that address a little bit. Does that make sense?

Small question for Chena – calibration rates. Was there generally a fair degree of calibration?

Chena: There were 14 papers that went to rescoring; mostly one category. Decent. Gave you the raw data – can send you a more refined version.

Theresa – uneven source use.

Sarah – why were there only 7 LAP – can we do more scoring?

Theresa – That was all we had.

Chena – Anna Darby pulled rosters – only 9 LAP in all the sections. We were surprised. Only 4 possible transfers – only 2 in samples; 1 didn't turn in the assignment.

Appendix B7.3a

2021-2022 ENG-002 Information Literacy ILO: Assessment of Student Writing Data Analysis **Summer 2022**

Chena Underhill, Library Tutoring Coordinator / Electronic Resources Coordinator

INTRODUCTION

In the summer of 2022 data collected as part of the Information Literacy ILO review was analyzed. Participants in scoring were Lauren Bedoy, Theresa Covich, Jana Mayfield Mullen, and Diane Ziliotto, librarians; Andrew Mullen, Education; Tatiana Nazarenko, Educational Effectiveness; Kay Mangrum, Rebekah McNamara, and Sarah Skripsky, English; Pauline Remy, Modern Languages; Jim Taylor, Philosophy; and Sonya Welch, Student Services.

The following sections, in no specific order, provide a wide range of findings and comments.

In total, a written work from eighty students was collected during the 2021-22 school year. Each paper was graded by either two or three members of the faculty and staff. One-hundred and seventy-four grades were assigned to the eighty papers, with fourteen papers graded three times and sixty-six papers graded twice. Papers were evaluated for performance on three criteria: **Inquiry and Strategic Searching (ISS), Wise Evaluation of Sources (WES), and Ethical Source Integration (ESI).**

Twelve faculty and staff members graded a subset of the written works. Two of the twelve graders were male. The departments in which they work include the Library, English, Education, French, Philosophy, and Student Support.

GENDER

Two of the twelve faculty and staff members that graded papers were male. In total, males provided thirty-two of the one-hundred and seventy-four grades. The table below summarizes the differences between grades assigned by male and female graders by criteria:

		ISS	WES	ESI

	n	AVG	STDEV	AVG	STDEV	AVG	STDEV
Female	142	2.486	0.797	2.401	0.823	2.204	0.855
Male	32	2.156	0.723	2.250	0.762	1.844	0.767
TOTAL	174	2.425	0.792	2.374	0.814	2.138	0.849

As the AVG columns suggest, males and females gave reasonably similar scores. These were tested to determine if they differ significantly. The average male scores were significantly different from the female scores for the ISS ($p = 0.033$) and ESI ($p = 0.030$) criteria but were not significantly different for the WES (0.343) criteria. Across all three criteria, the average score given by males was lower than that given by females. These findings could suggest that males tended to give lower grades than females; perhaps males had higher expectations for student performance on the three criteria.

DEPARTMENT

As mentioned, faculty and staff from seven different departments served as graders of the student essays. The table below summarizes grades assigned by departments:

		ISS		WES		ESI	
	n	AVG	STDEV	AVG	STDEV	AVG	STDEV
Education	16	2.000	0.730	2.063	0.854	1.750	0.775
French	16	3.125	0.619	2.813	0.981	2.813	1.047
Library	39	2.385	0.673	2.487	0.790	2.154	0.779
English	64	2.516	0.836	2.359	0.804	2.172	0.788
Student Services	16	2.000	0.817	2.063	0.680	2.063	0.929

Philosophy	16	2.313	0.704	2.438	0.629	1.938	0.772
Admin.	7	2.429	0.535	2.143	0.900	1.714	0.756
TOTAL	174	2.426	0.792	2.374	0.814	2.138	0.849

As the AVG columns suggest, there was some variability in the average score assigned by department with Education, Student Services, and Admin. assigning the lowest average grades and French assigning the highest average grades. Statistical analysis suggests significant differences exist between the average grades assigned in the ISS criteria ($p < 0.001$) and the ESI criteria ($p = 0.010$). Average grades assigned in the WES criteria did not differ significantly ($p = 0.093$).

For the ISS criteria, the grades assigned by the Education department were significantly lower than those assigned by the French department. The French department grades were significantly higher than those assigned by the Library, Student Services, and Philosophy. The English department, which scored the most papers, did not differ significantly from any of the other departments. Likely due to the small sample size, the average grades assigned by the Administration did not differ from the other departments either.

For the ESI criteria, the grades assigned by the Education department were again significantly lower than those assigned by the French department. The French department grades were significantly higher than Philosophy and close to significantly higher than Admin. ($p = 0.055$). Grades assigned by Library, English, Student Services, and Administration did not differ significantly from the other departments.

As mentioned, average grades for the WES criteria did not differ significantly.

It is interesting to note that grading on the WES criteria did not differ significantly for either gender or department. These two variables (gender and department) may be confounded as the only grader for the Education department, which was one of the primary departments that differed significantly from others, was male. If indeed males tend to assign lower grades, then the addition of a female grader from the Education department might have “softened” the grades assigned and the significant finding by department may have changed. Basically, the departmental differences could simply be caused by the difference between male and female graders.

On the whole, these findings could indicate that different departments have different expectations for students on the ISS and ESI criteria, with larger differences in expectations on the ISS criteria specifically. This might be addressed in the future through additional conversations amongst faculty and staff graders regarding expectations.

GRADER

Taking an even more granular look at the grades assigned, the table below provides statistics by name of the person who graded the paper:

		ISS		WES		ESI	
	n	AVG	STDEV	AVG	STDEV	AVG	STDEV
Mullen	16	2.000	0.730	2.063	0.854	1.750	0.775
Remy	16	3.125	0.619	2.813	0.981	2.813	1.047
Ziliotto	16	2.313	0.602	2.375	0.806	2.125	0.719
Mayfield	7	2.000	0.577	2.000	0.817	1.857	0.900
Mangrum	16	2.438	0.727	2.188	0.544	2.188	0.403
Bedoy	16	2.625	0.719	2.813	0.655	2.313	0.793
McNamara	16	3.188	0.911	3.125	0.885	2.563	1.031
Skripsky	16	2.313	0.602	2.188	0.403	2.375	0.619
Welch	16	2.000	0.817	2.063	0.680	2.063	0.928
Taylor	16	2.313	0.704	2.438	0.629	1.938	0.772
Covich	16	2.125	0.719	1.938	0.772	1.563	0.629
Nazarenko	7	2.429	0.535	2.143	0.900	1.714	0.756
TOTAL	174	2.426	0.792	2.374	0.814	2.138	0.849

As the AVG column suggests, there was some variability in grades assigned by individual grader. Statistical analysis indicates graders significantly differed in how they assigned grades for each of the three criteria: ISS ($p < 0.001$); WES ($p < 0.001$); and ESI ($p < 0.001$).

For the ISS criteria, the average score from Mullen was significantly lower than that from Remy and McNamara. Remy was also significantly higher than Mayfield Mullen, Welch, and Covich. Ziliotto was significantly lower than McNamara. Mayfield Mullen was significantly lower than McNamara. Mangrum and Nazarenko did not differ significantly from anyone. McNamara was also significantly higher than Skripsky, Welch, Taylor, and Covich.

For the WES criteria, the average score from McNamara was significantly higher than that from Mullen, Mayfield Mullen, Mangrum, Skripsky, Welch, and Covich. Otherwise the averages did not differ significantly.

For the ESI criteria, the average score from Remy was significantly higher than that from Mullen and Covich. McNamara was significantly higher than Covich. Otherwise the averages did not differ significantly.

Of final note, the standard deviation for the ESI criteria was the most varied with some graders giving scores that varied widely (Remy and McNamara with STDEVs above 1.0) and others with a tight grouping of scores (Mangrum with a STDEV of 0.403). While hazarding to guess why this might have happened on the ESI criteria is beyond me, the STDEVs of the ISS and WES criteria are certainly more similar than that on the ESI and so worth noting.

CRITERIA

The average score assigned by the graders was used to test if the average scores by criteria differed significantly. As mentioned, each paper was scored by either two or three graders. As eighty students submitted papers to be scored, the average score on each criteria from these papers was used in the following analysis. The table below reports the summary statistics by criteria:

	n	AVG	STDEV
ISS	80	2.417	0.661
WES	80	2.377	0.670
ESI	80	2.134	0.684
TOTAL	240	2.309	0.680

As the AVG column suggests, there was some difference in averages between the different criteria. Statistical testing indicates there was a significant difference between the average scores of the three criteria ($p = 0.017$). Further analysis indicates that the average score on the ISS criteria is significantly higher than that on the ESI criteria; students demonstrated significantly better skill on the Inquiry and Strategic Searching

criteria than they did on the Ethical Source Integration criteria. Scores on the Wise Evaluation of Sources criteria did not differ significantly from scores on either of the other criteria.

SUMMARY

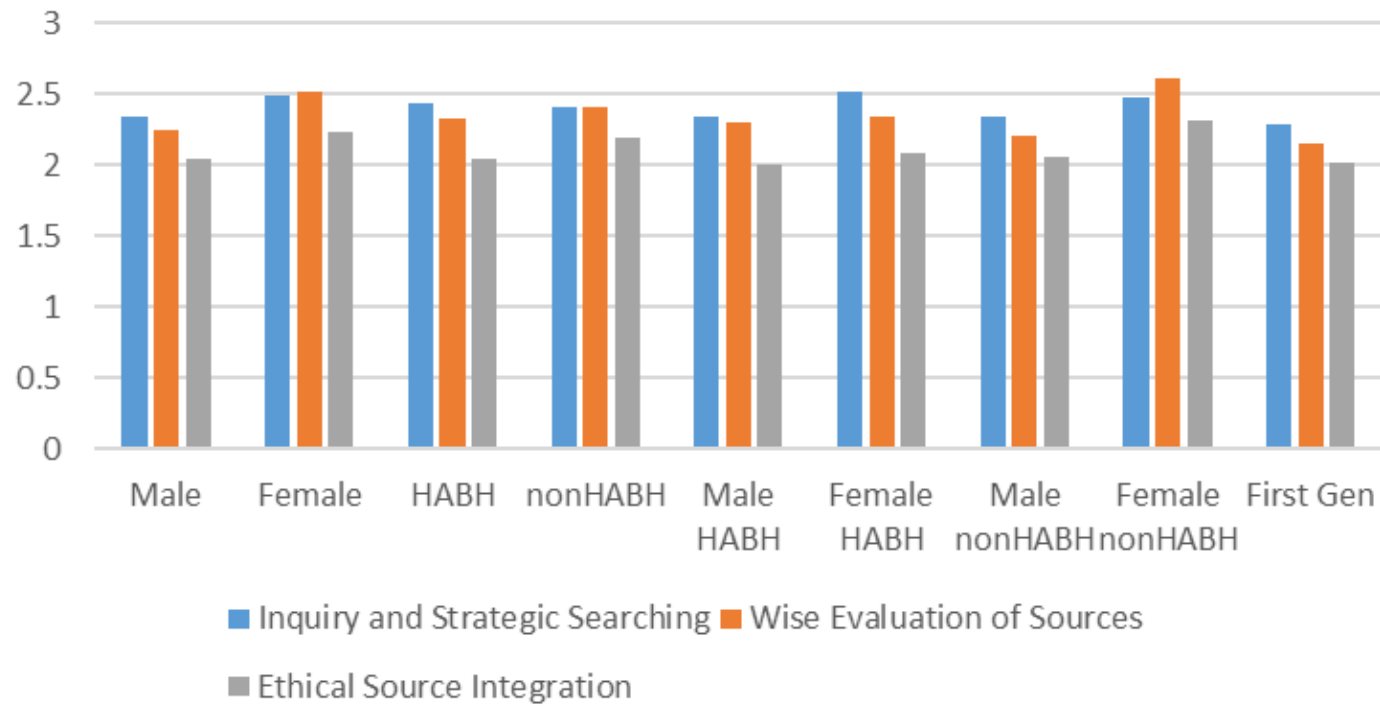
As noted in earlier sections of the report, there were significant differences identified between the gender of the graders, the departments, and also the individual graders. Perhaps with additional collaborative training and/or balancing the gender of graders, these significant differences would cease to be present.

The final analysis using the average score assigned by the graders indicated that students did significantly better on the ISS criteria

Appendix B7.3b Another Look at the Preliminary Data: Average Scores for ENG-002 Information Literacy Assessment by Group

Group	N	Inquiry and Strategic Searching	Wise Evaluation of Sources	Ethical Source Integration
Male	40	2.342	2.242	2.038
Female	40	2.492	2.513	2.229
HABH	30	2.433	2.322	2.044
nonHABH	50	2.407	2.41	2.187
Male HABH	15	2.344	2.3	2
Female HABH	15	2.522	2.344	2.089
Male nonHABH	25	2.34	2.207	2.06
Female nonHABH	25	2.473	2.613	2.313
First Gen	10	2.283	2.15	2.017
Overall	80	2.417	2.377	2.133

Information Literacy Average Scores by Group



Appendix C1: Closing the Loop – Program Learning Outcome Revision

LIBRARY INSTRUCTION PROGRAM LEARNING OUTCOMES (revised 2014-15)

PLO 1 Students will ask research questions and develop claims that are meaningful and manageable at an undergraduate level.

PLO 2 Students will find relevant sources for their research needs using effective and appropriate strategies.

PLO 3 Students will assess the quality of each source through a rhetorical framework (audience, purpose, genre) and evaluate its relevance to their research claim.

PLO 4 Students will effectively integrate sources into their own writing (summarizing, paraphrasing, quoting) while acknowledging the ideas and intent of the original author/s.

FINAL REVISION: LIBRARY PLOS 2022

o PLO 1 – Inquiry and strategic searching

§ Develops manageable research claim or question (scope)

§ Effectively searches scholarly databases, library catalog, Google scholar, journals

§ Recursively and deliberately searches scholarly literature

o PLO 2 – Wise source evaluation

§ Incorporates appropriate variety of sources

§ Cites authoritative and credible sources

§ Demonstrates attentive reading and discerning use of relevant sources

o PLO 3 – Ethical source integration

§ Incorporates sources in support of claim or to answer research question

§ Thoughtfully and ethically summarizes, paraphrases, and quotes sources

§ Critically engages with or synthesizes sources

Appendix C2: Closing the Loop – Metacognitive Reflections, ENG-002, and Best Practices

On Fri, Feb 3, 2023 at 3:32 PM Theresa Covich <tcovich@westmont.edu> wrote:

Dear Cheri,

Apologies for my delayed response. I waited to confirm with library colleagues today to make sure we were all on the same page with this clarification:

Student reflections that we read in 2021-22 focused on more recent stages of the writing process rather than the full process starting with inquiry and strategic searching, developing a research question, and refining the scope of a paper. Given the importance of students' learning to do research and use sources in ENG-002, we are asking for at least one question that specifically addresses at least one component of the Westmont ILO for Information Literacy:

Graduates of Westmont College will be able to strategically research, wisely evaluate, and ethically integrate sources in various contexts.

For example:

- Did your topic or research question change throughout the course of your research? Why?

Additional questions might include:

- Why did you use the sources you did? How do you know they are relevant and credible?

- How did you use library resources (databases, books, spaces, etc) and services (research help, ILL, askalibrarian@email.com, 1:1 consultation, etc)?

We encourage faculty to develop additional questions based on the information literacy ILO rubric, and we librarians are happy to consult at any point of course or assignment design.

Blessings,

Theresa

Theresa Covich, Ph.D.

Instructional Services Librarian

Activate Windows



Reading in College

Appendix C3: Reading Handout

#1 Look for Guide Posts

Class Material. As you set out, look for connections between what you're reading and material from recent lectures, syllabus, and other aspects of the course.

Read titles and headings ahead of time to help you see how parts fit together. Many textbooks also have a **summary paragraph** at the beginning or conclusion of a chapter which will help you identify what the most important points in the chapter will be.



#2 Find and Mark the Trail

Active reading requires attention and focus. Limit distractions. Look for the most important points and mark key distinctions. Underlining or highlighting can help—but make sure you add something more. How does this author make and support a claim? What is the scope of the claim? How does this fit in ongoing academic conversations?

Annotate! As you make connections between what you're reading and what you're discussing in class, write down your thoughts in the margins—or, even better, in a separate document. Not only will it help you focus, but when you go back to your reading later, it will be easier to refresh your memory. This is especially helpful if you'll have to write a paper down the line.

#3 Scout It Out

Ask yourself questions to break down the main points of the reading

WHY?

- Why is this topic important?
- Why do we study Christological heresies?
- Why do politicians disagree on climate change policy?

HOW?

- How is this speaker so effective?
- How does a specific scientific law or math formula apply?
- How does this sociological phenomenon function?

WHAT ELSE?

- What further connections could be made?
- What are the dangers of interpreting data incorrectly?
- What ethical issues does this biological technology raise?

#4 Share Your Knowledge

Guide others on the trail of ideas. Can you tell someone else fairly and accurately what the author says? Even if the reading was confusing or unclear, you might still develop **well informed** questions from thinking deeply with the text.

Always Keep the End in Mind

Identify expectations ahead of time! Different classes will have different expectations regarding the reading. Ask yourself or your professor:

- How might the reading tie into a future test or discussion?
- Will this professor expect me to write a paper related to the reading?

credit: E. Evans, C. Underhill, T. Covich, J. Delgado, S. Skripky. 2025 printing

Appendix C4.1 Faculty Survey on Student Reading



Jana Mayfield Mullen <jmayfield@westmont.edu>

Even at this busy time of year, could you give us ONE SENTENCE?

1 message

Jana Mayfield Mullen <jmayfield@westmont.edu>
To: All Faculty <fac@westmont.edu>

Thu, Jan 5, 2023 at 3:33 PM

Happy New Year--and something to think about before **Thursday, January 12** -- a week from today.

It may not sound like the most inspiring topic for the new semester's **First Faculty Forum**. But the Information Literacy ILO Team is going to be sharing some thoughts about "Helping Our Students to Read More Effectively."

Even at this busy time of year, would you consider replying to this email with ONE SENTENCE about something that has frustrated **you** about students' assigned outside reading; or something that **students** have struggled with; or just a question you have about reading and college-level reading expectations.

It's late notice, obviously, but even as we've already sketched out what **we're** doing, we'd like to make sure we're addressing your real issues. We'd like to get as much of our griping and lamenting out of the way as possible, so that we can focus on **solutions** or Future Directions. :)

Thank you!

Jana Mayfield Mullen, Ph.D., M.L.I.S., M.Div.
Voskuyl Library Director

o: 805-565-6144
c: 805-455-2328
955 La Paz Road • Santa Barbara, CA 93108

Be strong and take heart, all you who hope in the Lord. Psalm 31:24



Faculty Forum January 12, 2023:

"Teaching Our Students to Read More Effectively."

[This was a handout on tables]

ONE SENTENCE about something that has frustrated **you** about students' assigned outside reading; or something that **students** have struggled with; or just a question you have about reading and college-level reading expectations.

Responses from faculty in the sciences:

Students assume they aren't really expected to read the book in science classes.

I'm concerned about the relatively low percentage of students who complete their assigned readings outside of class time unless there is a grade/assessment associated with it.

Many students just don't seem all that excited about reading in general, and don't seem to have the motivation or perseverance to stick with a reading and really read it.

Reading should be an ACTIVE, not passive process.

I think often students want to quickly read an article and understand everything but don't realize that some additional reading is needed to understand a research article.

Scholars are expected to identify, analyze and come to some sort of judgment on the validity of claims in the material they read, and that's probably not a well developed skill.

Sometimes their written work seems to demonstrate an ability to summarize the key points of an article well, but when we actually begin to discuss it can feel as if they actually don't understand what the article was about at all.

Responses from faculty in the social sciences:

My frustration lies with the hand-holding that needs to be done combined with the irresponsibility of the student to read and follow the syllabus.

Some students just simply do not read assigned material and think that they can still do well in the class.

I want to work more effectively with students whose first language is not English, and who simply cannot make sense of college-level material.

"Wait, so you're saying we should probably read the chapter before *and after* the lecture?"

Students seem to "eyeball" the assigned readings rather than read in-depth (for details or deep comprehension/internalization of the info)

I continue to have students who say they are doing the reading, but then don't seem to have taken much from it.

In my experience, many students simply do not complete the assigned readings and many do not seem to know how to differentiate the key points from less important sub-points.

One thing I notice with students' reading is that they often locate themselves in a reading, first ("Do I agree with this? Does this match my experience? Do I like what this author is saying?"), before focusing on trying to understand what an author is intending to communicate.

How can I help students read complex material without getting lost in the weeds?

Responses from faculty in the humanities:

For me, the biggest challenge with student reading is how few of them do it.

Even our Augustinians tend not to do all the assigned reading for every class session.

I am frustrated that my intro level students often do not look up unfamiliar words in the dictionary; in fact, the more they NEED a dictionary, the less likely they appear to consult one.

How might we MOTIVATE students to do more thoughtful reading? (How much of that coaching/mentoring might be about time management and eliminating particular distractions from their reading time/space?)

My impression in recent years has been that students show a decreasing aptitude for *learning* by reading; they seem to need someone to explain what they have read in order to understand it fully.

I'm concerned that students are not able to read and retain important information from assigned readings that are from more sophisticated texts.

It often frustrates me that students seem to lack strategies for troubleshooting their own comprehension problems when reading difficult material. They just give up too easily.

Many of my students don't know how to follow the author's line of argumentation; they'll think that a view an author is explaining and *critiquing* is the author's own view.

The inability to cotton on to the organization of any article makes following the argument difficult, because they can't discern what's a main point, what's a subsidiary point, and what's the evidence to argue for a point.

Skimming intelligently for main ideas, identifying thesis statements, checking headings and section titles, and buckling down on conclusions—they don't know how to do that.

Appendix C4.2 January 12, 2023 Faculty Forum Table Talk

Table 1 – Reported by Theresa Covich

Participants: Chris Hoeckley, Kya Mangrum, Stephanie Cowell, Lisa DeBoer

What does attentive reading look like in your discipline? How did you learn it?

Chris H, phil: it's hard to imagine not reading every word. I typically suggest that understanding will emerge slowly and reading might require initial perusal, interactive reading w pen and paper or annotating, and a final what's this all about—students are not ready to read one piece three times. Not sure I'm doing well here but I'm not sure there is an alternative to very close reading.

What are you doing to support student reading? / How do you model and promote attentive reading practices?

Lisa: Art 21 FYS: every reading assignment comes with a little practice assignment (ungraded)--outline, etc. I ask at the end of term, as you approach this reading [on copying in Byz art] ask if you're reading for info, for understanding, for confirm, for disputation, [and-?]. Fun exercise to survey who is reading for what and to break this out. Reading for confirmation is what a lot of students do when they are reading for "research." Very different interactions with the same text. Understanding stance is essential.

How can the library best collaborate and support you in your efforts to cultivate these reading habits?

Kya: Library lessons in ENG-002 courses. Develop new partnerships--reading for different purposes (skimming, reading non-linearly, etc). Little videos would be cool too. [I'db--that would be helpful...how to read a textbook within a division, 2 min videos]
How to make the best use of your textbook in the humanities...
Active outline idea by video--need not be live.

Learn how to read a research article. How to evaluate the information. Scholarly conversation.

Lisa: Challenges in the past 2-3 years--I've been adding more and more helps and it's almost become counterproductive. For instance, putting all the pictures that I'm covering on the tests in the walls of the classroom, and I encourage them to move them around and study. They thought "I've seen it, I know."--taking pictures of the wall with their phones. False sense that they knew. So I stopped doing that and took some study aids out of Canvas. Gives students a false sense that they had studied.

Table 2 – Reported by Annelise Henderson

Participants: Steve Julio, Greg Affman, Scott Lisea, Jesse Covington, Ron See

Jesse thinks there should be a campus wide cell phone jamming contraption that turns cell phones off for a certain period of time

What does attentive reading look like in your discipline? How did you learn it?

SJ Bio. bane of his existence is how to get students to read a research article

-people need confidence that they can read and understand

RS Psy. "data blitz" students choose an article within a topic that they want to read along given guidelines and have a mini conference to share about them (to learn how to read a research article)

SL Rel. have to synthesize notes and add to it afterwards

JC Pol. detail oriented, learned how to read for it from outside disciplines; thinking intentionally about exegesis/hermeneutics

What are you doing to support student reading? / How do you model and promote attentive reading practices?

JC: assign articles about how to read, ask to see students' notes

SL: assign reading, talk in class, write about it (in that order), steer conversations using socratic dialogue

SJ: don't know whether to include reading as supplement and summarize in class, or reading as primary? (reading first or second?)

GA: read before and after class encouraged but not enforced
RS: questions in class to promote reading accountability and calling on students cold

How can the library best collaborate and support you in your efforts to cultivate these reading habits?

SJ: guilty of not thinking about this
RS: Lauren giving in class instruction at the beginning of the semester
JC: goal: help students cultivate capacity to pay attention for an extended period of time (research on how to extend attention?)
SL: you CAN'T actually multitask (library hosting things to help extend attention span)

Table 3 – Reported by Lauren Bedoy

Participants: Lesa Stern, Jim Taylor, Polly Matsuoka, Doug Fuentes, Ben Carlson, Kristi Cantrell

Lesa Stern wants us to send her a PDF of the handout (Information Literacy Student Writing rubric and ILOs).

What does attentive reading look like in your discipline? How did you learn it?

Jim Taylor - learning how to identify the important terms and if they mean something different from how they are normally used. Look to the author to provide answers, look at context.

Lesa Stern - at the beginning of a research project, skim and look for words. Read deeply when you know what you're going after. Plug in template - 10 things from the lit review. I literally show them how to take notes at the different stages. Find out what your topic is and save some time. Library treasure hunt.

Polly Matsuoka - brought articles to read in class that weren't on syllabus. Jigsaw out and have them present to the class. In case they're not reading the assigned reading. One chapter in each unit in class. Concepts and words on big poster paper. Do this with shorter books they wrote a paper on. Often do this the last class before an exam.

Lesa - I wonder if physics and engineering is more detailed and comm is the big picture. I wonder if different disciplines are different.

Doug Fuentes - bad result so now make them navigate the readings besides just "read this"

Lesa-I give them a 5 page color coded lit review. Find the conceptions of the key variables Then they compare their version to Lesa's version. Shocked how they can't figure out what the main point is.

What are you doing to support student reading? / How do you model and promote attentive reading practices?

Jim - what is the main point of this paragraph and how do they connect?

Kristi Cantrell - different types of reading, textbooks, journal articles, really important aspect of a good textbooks is there will be lots of problems embedded in the text. Big thing with scientific textbook. I don't assign them questions, but we do pop up questions after a certain topic Point to a graph. Low bar, no stress, I just want you to learn. If it's an amazing textbook there are problems embedded.

Polly - I tell them to read before lecture, read after, and then read while studying for exams, so they read it three times!

How can the library best collaborate and support you in your efforts to cultivate these reading habits?

Lesia- free printing! Because they can mark up the text. When they are learning they've got to be able to see the whole argument. Learning and interacting with paper is better.

Lauren - students can come to the research help desk and we librarians can help them figure out how to approach their reading.

Table 4 – Recorded by Holly Shelton

Participants: not recorded

What does attentive reading look like in your discipline? How did you learn it?

Still unsure how to effectively learning research articles

Never had explicit instruction; had to figure it out on your own

Choose interesting books! - catch attention with themes that are relevant

Pushing through approach; attaining vocabulary as a tipping point (first gen student extra challenges?)

Resonated with a call to take ownership; reading as beyond just what “should be done”

What are you doing to support student reading? / How do you model and promote attentive reading practices?

Approaching readings with questions to guide (zone out without questions)

Students often only have one strategy of reading (word for word), so giving other strategies; good to know what is the big picture vs. details (differences within a course along with across courses)

Giving a purpose (finding quotes for a project)

“This will work if you scan it before class to find themes.” (textbook) and then encouraging students to read in detail after lecture

Wondering about students lacking intrinsic motivation for reading; sometimes left a room when higher level students are discussing articles so that students are less intimidated and can own the conversation.

How can the library best collaborate and support you in your efforts to cultivate these reading habits?

Series facilitated by librarians with professors talking about reading in a certain disciplines (perhaps videos for an archive)

Center for student success coordination to address the issues in the summer?

Perhaps provide tools & resources for students to identify habits that help with reading success that could be a Canvas module

Table 5 – Recorded by Sarah Skripsky
Participants: Marianne Robins, Dave Tell, Jana Mayfield Mullen

What does attentive reading look like in your discipline? How did you learn it?

Marianne Robins (History): Primary and secondary source reading are quite different. Lots of modeling and practice needed. Latin studies may have helped her with slow reading and paying close attention to grammar and meaning.

What are you doing to support student reading? / How do you model and promote attentive reading practices?

Marianne Robins (History): “Reading is 90% of what I teach.” Tells students she doesn’t expect students to know how to read well at start of term. Has 10 short papers assigned as reading responses (lots of practice, must go through “bad paper/s” to get to good ones). Some group work on reading response: verbal, then written. Lots of visual aids (uses apple vs. star icons to flag different kinds of reading). Asks students to print their readings for slower reading, better focus. Has scaled back amount of accountability (used to be detailed reading notes, now accepts scans of annotated readings). Frames reading as “liberation”: celebrating understanding. Uses textbook as “skeleton” and primary sources as “muscles and skin”. Summary points from textbook (skeleton) discussed/ established at start of class session. Creating/reviewing a skeleton of ideas or “stringing beads together” is much more meaningful than reviewing lists of key terms with definitions (not connected).

Dave Tell (COM): at KU, leads an institute that uses digital tools to enable old-fashioned reading practices. Uses Scaler as an idea mapping tool: students map relationships between ideas. Also interested in using Voyant (gives big ideas, themes): students could plug in additional detail.

How can the library best collaborate and support you in your efforts to cultivate these reading habits?

Jana Mayfield Mullen: plans to attend one of Dave’s classes to see how he uses Scaler to help his students read.

Table 6 – Reported by Sonya Welch
Participants: Not recorded

What are you doing to support student reading? / How do you model and promote attentive reading practices?

- Reading guides to help them track their reading.
- Prompt a head of time to help funnel attention.
- Taking time in class, to have students write down their answers before they share verbally. Sometimes they need time in class for students to process their thoughts.
- On the end of semester evaluation: How many hours do you spend on homework each week?

How can the library best collaborate and support you in your efforts to cultivate these reading habits?

- Creating workshops on reading strategies as student take notes on their reading.

Table 7 – Reported by Diane Ziliotto

Participants: John Rodkey, Ruth Lin, Rebecca McNamara, Sarah Jirek, Stephanie Cowell, Brandon Haines

What are you doing to support student reading? / How do you model and promote attentive reading practices?

Rodkey: Choose a Sci-Fi book and write a paper: what kind of OS must be in place for this story to work? Gives tech students a chance to write, sometimes for the first time in a tech setting and in their time at Westmont. Gives them a chance to see that their knowledge of operating systems can have an effect on their writing.

Sarah: First assignment: look up a qualitative social science research article. Go through the article structure and focus on the methods section. I give the students my blessing to skim the discussion section, but they must know the methods of that article. Purpose: how to read a social science article and pick it apart, especially when the focus is on a particular aspect of the research process.

Rebecca: I work with the librarians for research instruction and for help showing the students how to integrate their resources into their papers. I often share anecdotal options/modeling at the same session. I show the students manuscripts and other items that writers have interacted with so that students can have concrete examples (such as an annotated copy of Stephen King’s “The Shining” that Stanley Kubrick marked up prior to directing the movie..

How can the library best collaborate and support you in your efforts to cultivate these reading habits?

Sarah: Transfer students: many are very very unprepared. Concerns about plagiarism. I don’t know where to start - time management, reading issues, research issues.

Rodkey: recommends getting a chatbot account, play with it so faculty can recognize AI-generated compositions..

Sarah: Can the library generate ideas and run them by the faculty??? I ask because I don’t even know what to ask you guys for.

FF 1/12/23 Table 8 – Reported by Tatiana Nazarenko

Participants: Tim Loomer, Kim Denu, Guang Song . . .

What does attentive reading look like in your discipline? How did you learn it?

R1: Sometimes when students read linearly they can get bogged down.

R2: Focus on concepts and skip specifics can be helpful. Sometimes the other approaches. Figure out the end and work back. Find my common knowledge desires and work back.

R3: Consider difference between technical and narrative. Technical reading can be quick. Narrative may need to be done differently.

R4: We have not had pedagogical training on how to teach reading. Do we expect students to figure it out for themselves

Sustaining Library-Faculty-Administrator Collaborations for Information Literacy

The Two-Shot Instruction Model & Assessment at a Small Liberal Arts College



Westmont College
Santa Barbara, California

Collaborations: taking flight together



Wright Brothers



Westmont College Background

- Undergraduate, residential, Christian liberal arts college
- Located in Santa Barbara, CA
- 2022-23 student population of 1,293
 - (1202 students on campus; 91 off campus)
- 47.8% of student population self-report as students of color
- 25% of faculty self-identify as people of color

Westmont Institutional Learning Outcomes

- Christian Understanding, Practices, and Affections
- Global Awareness
- Diversity
- Critical Thinking
- Quantitative Reasoning
- Competence in Written Communication
- Competence in Oral Communication
- Information Literacy**



Our Collaboration Story . . .

. . . about library partners and their willingness to extend Information Literacy assessment collaborations across campus during COVID distractions and other challenges at a small liberal arts college, including:

- Digging into the Data
- Recruitment: Dos & Don'ts, and Potholes to Avoid
- Reaching Beyond the Humanities & Social Sciences: Lessons Learned



What brought us together?

Westmont College's Institutional Learning Outcome
for



Information Literacy

Graduates of Westmont College will be able to strategically research, wisely evaluate, and ethically integrate sources in various contexts.

Westmont Storytellers

- Theresa Covich, *Instructional Services Librarian*
- Tim Loomer, *Director of Research, Planning, and Implementation*
- Jana Mayfield Mullen, *Voskuyl Library Director*
- Tatiana Nazarenko, *Dean of Curriculum and Educational Effectiveness*
- Sarah Skripsky, *Professor of English & Writing across the Curriculum (WAC) Coordinator*

History of Library & Faculty Assessment Collaborations

2014-15 1st Information Literacy ILO Assessment

- Rubric for Student Writing
- Research process survey
- Two assessments: ENG-002 papers & senior social science and humanities capstone papers

2016-17 ENG-002 2-shot library instruction with Source Integration writing assessment

2020 BIO-130 annotated bibliography library instruction & paper collection begins

Activate Windows

History, Continued

2021-22 2nd Information Literacy ILO assessment

- Revision of ILO language & program PLOs to integrate ACRL Frameworks for Information Literacy
- Pre-Instruction Information Literacy Survey
- Metacognitive Reflection coding
- ENG-002 2-shot instruction & assessments
- BIO-130 instruction & metacognitive reflection assessment

Instructional & Assessment Partnerships: Part 1

ENG-002: Composition

(target assignment:
academic research paper)

Voskuyl Library's Program Learning Outcomes, 2022

PLO 1 – Inquiry and strategic searching (Librarian Instruction in ENG 002, Visit 1)

- ❖ Develops manageable research claim or question (scope)
- ❖ Effectively searches scholarly databases, library catalog, Google scholar, journals
- ❖ Recursively and deliberately searches scholarly literature

PLO 2 – Wise source evaluation

- ❖ Incorporates appropriate variety of sources
- ❖ Cites authoritative and credible sources
- ❖ Demonstrates attentive reading and discerning use of relevant sources

PLO 3 – Ethical source integration (Librarian Instruction in ENG 002, Visit 2)

- ❖ Incorporates sources in support of claim or to answer research question
- ❖ Thoughtfully and ethically summarizes, paraphrases, and quotes sources
- ❖ Critically engages with or synthesizes sources

PLO 1 – Inquiry and strategic searching (Librarian Instruction in ENG 002, Visit 1)

- ❖ Develops manageable research claim or question (scope)
- ❖ Effectively searches scholarly databases, library catalog, Google scholar, journals
- ❖ Recursively and deliberately searches scholarly literature

Visit Preparation: Prior to the visit, the ENG 002 instructor may share students' research questions in progress with the librarian. Doing so provides rhetorical context via samples suitable for "point of need" instruction. Questions from 2022 included:

- ❖ How might the homeless population be influenced by churches within cities?
- ❖ How has the increase in societal pressure in education impacted the mental health of college students?

Activate Windows

PLO 1 – Inquiry and strategic searching (Librarian Instruction in ENG 002, Visit 1)

- ❖ Develops manageable research claim or question (scope)
- ❖ Effectively searches scholarly databases, library catalog, Google scholar, journals
- ❖ Recursively and deliberately searches scholarly literature

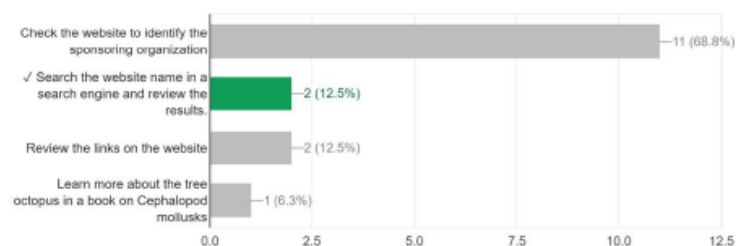
Preliminary Assessment Tool: Information Literacy Survey (pre-test during or prior to Visit 1; 19 multiple-choice questions):

- ❖ Allows students to demonstrate existing knowledge
- ❖ Helps to identify weaknesses in understanding (e.g., website credibility evaluation, paraphrasing vs. direct quotations, savvy Boolean searching)
- ❖ Provides a springboard for honest questions during the teaching session
- ❖ Helps to identify areas of focus for follow-up instruction

Pre-Instruction Survey on Information Literacy – Most missed question

Adapted from TRAILS (Tool for the Real-time Assessment of Information Literacy Skills: open source, developed for 12th grade by Kent State University)

You are doing a paper on mollusks and found a website on “The Endangered Pacific Northwest Tree Octopus” (<http://zapatopi.net/treeoctopus/>). The...ST approach to verify that this is a credible site?
2 / 16 correct responses



Voskuyl Library’s Program Learning Outcomes, 2022

PLO 3 – Ethical source integration (Librarian Instruction in ENG 002, Visit 2)

- ❖ Incorporates sources in support of claim or to answer research question
- ❖ Thoughtfully and ethically summarizes, paraphrases, and quotes sources
- ❖ Critically engages with or synthesizes sources

Visit Preparation: Ask students to bring a writing sample in progress OR at least one relevant source (e.g., journal article) they have read in advance:

- ❖ Times librarian visit at a motivating “point of need” in the writing process
- ❖ Allows students to contextualize another “shot” of instruction within the work they are drafting and revising (their own research and writing in progress)
- ❖ Provides a springboard for honest questions during the teaching session
- ❖ Helps to identify areas of focus for follow-up instruction

**Primary Assessment Tool for ENG 002:
Rubric-Based Assessment of Final Research Papers
(measuring all 3 PLOs)**

PLO 1 – Inquiry and strategic searching

- ❖ Develops manageable research claim or question (scope)
- ❖ Effectively searches scholarly databases, library catalog, Google scholar, journals
- ❖ Recursively and deliberately searches scholarly literature

PLO 2 – Wise source evaluation

- ❖ Incorporates appropriate variety of sources
- ❖ Cites authoritative and credible sources
- ❖ Demonstrates attentive reading and discerning use of relevant sources

PLO 3 – Ethical source integration

- ❖ Incorporates sources in support of claim or to answer research question
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- ❖ Critically engages with or synthesizes sources

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Digging into the Data

Data Gathering, Analysis, and Findings

Prior to data collection

- Decided on a randomized cluster sampling approach with students from ENG-002 (AY21-22)
- 80 students were selected: 50% male/female with 30 HABH students (also 50% male/female)
- Note: HABH = Hawaiian/Alaskan Native, Black or African American, & Hispanic/Latino (think URM)
- This assured reasonable sample sizes to test for male/female and HABH/Non-HABH differences

Scores assigned by faculty and staff were analyzed

- Males (2 of 12) tended to assign lower scores to student papers across all criterion
- Student Services & Education departments assigned lowest average scores; French highest
- Finding: Despite training on the rubric together, some inherent differences arose

Analysis of student groups

- There is some evidence to suggest male/female students differed significantly when looking at the scores from all three criterion together (average of 7.23 v 6.62)
- HABH and non-HABH did not differ significantly
- First generation and non-first generation did not differ significantly
- Finding: Small sample sizes likely prevented statistical significance from being identified

Summary Student Data

	n	ISS	WES	ESI	TOTAL
Male	40	2.342	2.242	2.038	6.621
Female	40	2.492	2.513	2.229	7.233
HABH	30	2.433	2.322	2.044	6.800
non-HABH	50	2.407	2.410	2.187	7.003
HABH-male	15	2.344	2.300	2.000	6.644
HABH-female	15	2.522	2.344	2.089	6.956
non-HABH-male	25	2.340	2.207	2.060	6.607
non-HABH-female	25	2.473	2.613	2.313	7.400
First generation	10	2.283	2.150	2.017	6.450
non-First generation	70	2.436	2.410	2.150	6.995
LAP	7	2.071	2.429	1.929	6.429
TOTAL	80	2.417	2.377	2.133	6.927

Final Thoughts on Data

Expanding the rubric scoring system may be beneficial

- Expanding the scoring options may result in improved accuracy
- Consider: +/- scores to accompany the numeric score
- Consider: A five- to seven-point rubric may be beneficial

Increasing sample size may be beneficial

- Small sample sizes make statistical significance challenging to identify, especially with small effect sizes
- Consider: Analyzing data collected over a two- or three-year period to increase sample size

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Table Talk (5 mins)

What types of training do you do with your assessors to improve interrater reliability?

What do you do if meaningful differences persist between assessors' scoring?

Instructional & Assessment Partnerships: Part 2

BIO-130 Cell Biology

Voskuyl Library's Program Learning Outcomes 2022

PLO 1 – Inquiry and strategic searching

- ❖ Develops manageable research claim or question (scope)
- ❖ Effectively searches scholarly databases, library catalog, Google scholar, journals
- ❖ Recursively and deliberately searches scholarly literature

PLO 2 – Wise source evaluation

- ❖ Incorporates appropriate variety of sources
- ❖ Cites authoritative and credible sources
- ❖ Demonstrates attentive reading and discerning use of relevant sources

PLO 3 – Ethical source integration

- ❖ Incorporates sources in support of claim or to answer research question
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- ❖ Critically engages with or synthesizes sources

Association of College & Research Libraries Framework for Information Literacy for Higher Education (2015)

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Scholarship as Conversation
- Searching as Strategic Exploration

BIO-130 Cell Biology: Embedded Information Literacy (IL) Instruction

Fall 2020: labs were still remote, and the instructor came up with a new information literacy assignment and asked the library for a 3-hr instruction on Zoom.

- strategic searching using library databases (PLO 1)
- Zoom breakout rooms for each plank of the ACRL Framework; collaborative GoogleDoc to capture comments
- Begin discussing student interests & possible topics, broadening and narrowing searches, etc.
- Follow up with 1:1 30-min research consultations on Zoom
- BIO instructor shared metacognitive reflections and papers with the library for future assessment.

Fall 2021, Fall 2022: similar assignment but now two library instruction sessions—PLO 1 and PLO 3—during lecture (instead of lab) time.

- Kept 1:1 30-min research consultations and kept collecting for assessment

Lessons Learned



Recruitment Challenges

- Information Literacy ILO Task Force
- Assessment Workshops: Faculty, Library, Administrators
- Extending assessment to BIO-130



The Information Literacy Institutional Learning Outcome (ILO) Task Force



ENG-002 Composition: Information Literacy ILO Assessment Team (Rubric Scoring of Research Essays)



3 English professors
1 philosopher
1 Education professor
1 French professor
4 librarians
1 library paraprofessional
2 administrators

BIO-130 Cell Biology Faculty



Instructor Fall 2020, 2021



Instructor Fall 2022

Assistant Professors of Biology

Table Talk (5 mins)

How do you recruit faculty for instructional partnerships and assessment at your institutions?

How do you cope with the difficulties of hiring and retaining key staff for support of assessments?

Closing the Loop

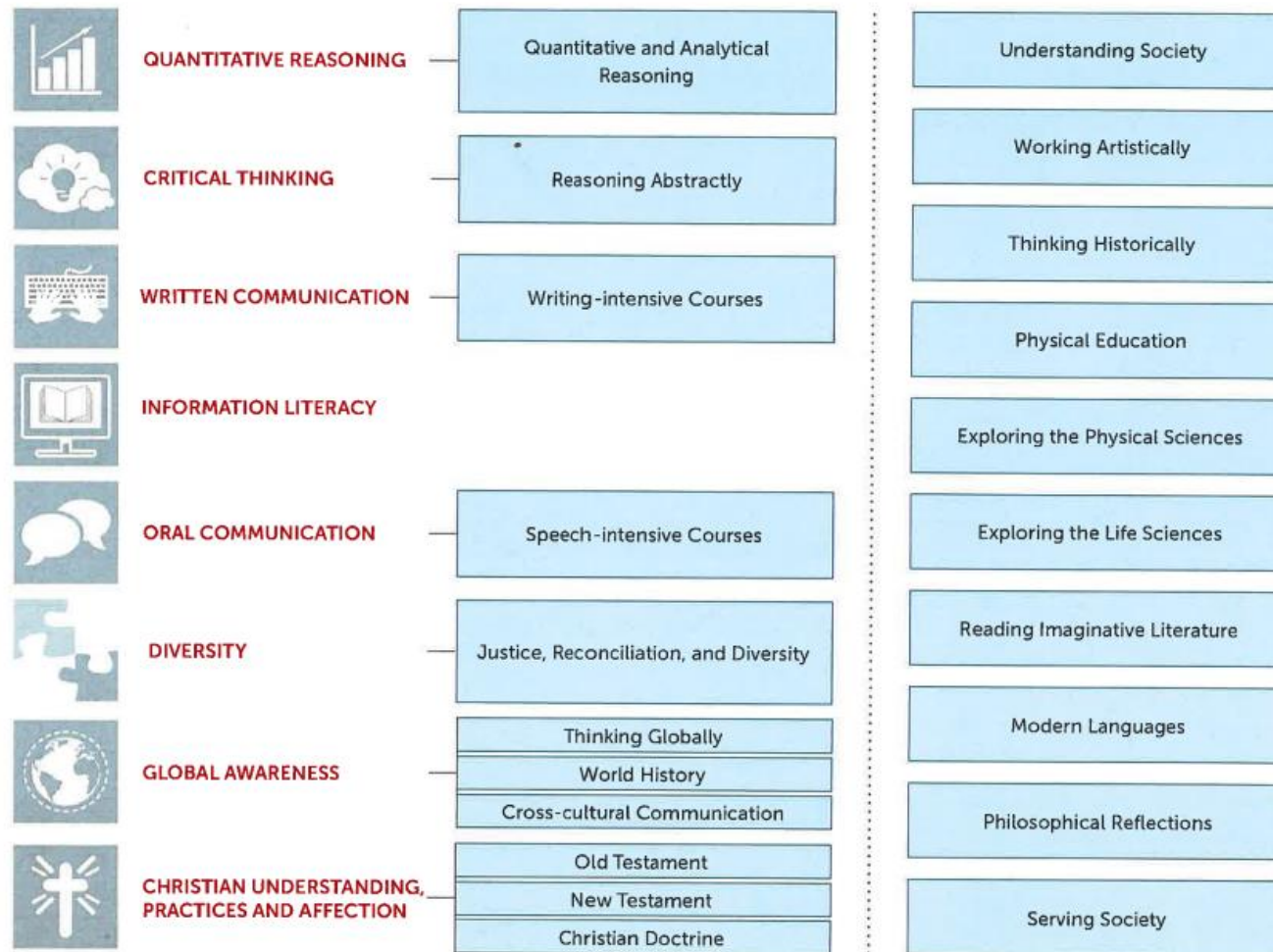
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- Application of findings in the English Composition assessment
- Faculty conversations & workshops
- Follow-up assessment and intervention in individual courses

What other stories might we want to pursue/study in our next assessment?

Appendix D1: Westmont ILOs and Course Assessment Chart



D2: Fall 2021 Research-Intensive Course Survey

Department or program	Research Intensive courses	Comments
Art	Art 128 Art 131	Art 128: Semester project involves researching five contemporary artists, assessing their relationship to art's history, developing an argument about their relationship to earlier artists or movements, and taking a position on how the student wishes to relate (or not) their own art or art criticism to art's history. Art 131: Semester project involves researching the criticism devoted to an artist or artform and evaluating that body of criticism using the concepts from key texts we analyze in class.
Biology	BIO-005 Lab	Introduces lab research methods; finding, evaluating, reading scientific literature
Chemistry	CHM 102L CHM 198	In 102L students complete a major literature-based project in which they research and write a report on the synthesis of a molecule of interest (e.g. pharmaceutical, etc.) In 198 students search the literature for precedent, reaction conditions and background on their project. Searching the scientific literature is not concentrated in one course, but is distributed across our curriculum with most upper-division labs requiring some interaction with the literature. E.g., in 113L students give a protein structure and function presentation which requires them to use the primary literature In 115 students give a presentation on a metabolic disorder which requires them to use the primary literature. In 122L and 133L lab reports are expected to include an introduction that includes references to recent primary literature related to the experiment. In 160 students propose a novel synthesis of a recently isolated natural product. This requires extensive literature searching to find the molecule and provide precedent for proposed transformations.
Communication Studies	COM140 COM196 COM110 COM125 COM103 COM130 COM197	In identifying classes, we used the criteria that research-intensive classes mean: "any class in which 1/3 or more of the course grade is from an assignment, or cluster of assignments, requiring students to find primary or secondary sources and work with them to build up an argument."
Computer Science		
Economics & Business		
Education		Students read and are exposed to research and assignments that support best teaching practices for K-12 students throughout the arc of the liberal studies major and education program, but courses do not require an intensive research component.
English		
History		HIS 099: an introduction to historical research and writing methods. the entire semester is dedicated to researching and writing a single research paper. students are introduced to different genres of sources, etc. the professor chooses the overall topic of the class. it is offered in spring and usually taken by first and second year students.

		HIS 198: senior capstone course offered in fall. a semester-long research project on a topic of the student's choosing.
Kinesiology		KNS-072: foundations of kinesiology. Research paper required.
Mathematics		
Modern Languages		
Music	MU 121	This is a WSI course that includes several writing assignments, including a 2000 word research paper that explores a topic encountered in music of the Western European tradition. Students are required to examine primary sources (e.g. musical scores) to develop their position and to explore secondary sources to determine whether the evidence they have presented conforms to or represents a departure from the prevailing historical view.
Philosophy	None	Our students write a number of philosophical essays that don't require research in the form of doing a literature search, looking up information, or using outside sources. Rather, they engage in philosophical thinking about philosophical issues, topics, or questions that requires engaging and interacting with the resources we provide them. But the emphasis is on the quality of our students' analysis, reasoning, and argumentation rather than on their interaction with other philosophical works.
Physics and Engineering	PHY-198	Students perform semester-long (sometimes longer) research projects under the guidance of a faculty mentor and have the opportunity to present their results at the Spring Research Symposium and Celebration of Summer Research.
Political Science	POL-130 POL-131 POL 105 POL 109 POL 110 POL 113 POL 040 POL 112 POL 124	POL-130 Classical Political Theory: Students write a traditional research paper. POL-131 Modern Political Theory: Students write a traditional research paper. 105, 109, 110, 113: Students write traditional research papers in these courses POL 040 Empirical Political Research: Students survey the literature, develop a theory and write a proposed research design. POL 112: Students write a position paper requiring them to propose policies to specific global issues after researching extensively on existing UN, regional, and domestic policies; students also write an analytical paper. POL 124: Students write a traditional research paper.
Psychology		History and Systems; senior capstone
Religious Studies		Senior capstone
Sociology/Anthro.		
Theatre Arts	120, 121	TA 120 – Students use primary sources to create a 2,500 word survey of four important (or not so) Shakespearean productions of the last 25 years, from the local, regional, national, or international stage. Source materials may include reviews, interviews, drawings, designs, program material, archival material, photographs, and video of the performances in question. Students must revise once and can rewrite until they receive the grade they want. TA 121 – Students use primary and secondary sources to develop a 2,500 word essay that investigates an important 17 th , 18 th , or 19 th century actor. The student locates and uses primary sources for significant contexts, important means and methods, and guiding principles for an actor's work, and – through the help of secondary sources – creates a narrative interpretation that develops the central artistic contributions of the actor in question. Students must revise once and can rewrite until they receive the grade they want.

Appendix E: Library PLO 2 Source Evaluation Writing Rubric



PLO 2 – Wise source evaluation

- Incorporates appropriate variety of sources
- Cites authoritative and credible sources
- Demonstrates attentive reading and discerning use of relevant sources

Rubric for scoring annotated bibliographies submitted in ENG-002 (2023-2024)

PLO	0	0.5	1-beginning	2-developing	3-competent	4-proficient
<p>Incorporates appropriate variety of sources.</p> <p>Cites authoritative and credible sources.</p>	<p>Mostly hallucinated (AI-generated) or fabricated non-existent sources</p>	<p>Some hallucinated (AI-generated) or fabricated non-existent sources</p>	<p>Mostly untrustworthy, biased, irrelevant sources.</p>	<p>Some sources lack variety or depth and/or are of questionable authority and credibility.</p>	<p>The majority of sources are relevant to the topic and are authoritative and credible.</p> <p>Cites appropriate sources though some may lack variety and depth.</p>	<p>Sources are relevant, authoritative, and credible.</p> <p>Variety of citations demonstrates critical exploration of sources to strengthen or inform argument.</p>
<p>Annotation demonstrates attentive reading and discerning use of relevant sources.</p>			<p>Annotation does not acknowledge the source's argument or context.</p>	<p>Annotation demonstrates little evidence of evaluating the ideas and contexts of the sources.</p>	<p>Annotation demonstrates some evidence of evaluating the argument, method, and contexts of sources.</p>	<p>Annotation demonstrates ample evidence of engaging in the scholarly conversation within or across academic disciplines.</p>