

Information Literacy Core Competency Assessment Report

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Purpose of Study

California State University, Fresno, conducts campus-wide student assessment of one of five core competencies (Critical Thinking, Information Literacy, Oral Communication, Quantitative Reasoning, and Written Communication) each year. During the 2023-24 academic year, the Information Literacy Core Competency was assessed. The assessment's primary goal was to evaluate the proficiency of students nearing graduation in the Information Literacy Core Competency, ensuring they possess the necessary skills to effectively locate, evaluate, and use information.

Study Design and Methodology

The Information Literacy Core Competency assessment was conducted by a Task Force consisting of 14 members led by college assessment coordinators Sarah McDaniel (Fresno State Library) and Jennifer Miele (Craig School of Business). The task force membership was made up of faculty members from across campus including Arantes Armendariz (Library), Patrick Durkee (Psychology), Cheryl Gardner (Media, Communications and Journalism), Samantha Hidde Tripp (Library), Constance Jones (Psychology), Kat Koziar (Library), Qiwei Li (Public Health), Shuyi Liu (Library), Christina Luna (Educational Leadership), Jorge Pesantez (Engineering), Monica Summers (Criminology) and Runze Yu (Viticulture and Enology). Maria Jurado (Library Staff) assisted with administrative tasks related to the project.

The Information Literacy assessment included three components: 1) evaluation of 153 papers from upper-division General Education (GE) courses with a standardized rubric, 2) a 2023 study of 50 students' search strategies conducted by the Fresno State Library, and 3) a reference citation check of 50 randomly selected set of papers.

The primary focus of the assessment centered on the first component, which involved evaluating student papers using a standardized rubric. The papers used in this study were selected from students' GE ePortfolios,¹ representing a broad range of upper-division GE courses where students were assigned research papers. Faculty raters were assigned papers to review and score based on a rubric. The initial sample consisted of 153 papers. Each paper was rated by two independent faculty raters to ensure consistency and reliability in scoring. If there was a discrepancy of more than one point between the two faculty members' ratings, a third rater was assigned to resolve the difference, then scores were reconciled by an analyst in the Office of Institutional Effectiveness. Before completing their assigned ratings, faculty raters participated in norming sessions to refine the rubric, align their understanding of the rubric and ensure uniformity in scoring.

Fresno State VALUE Rubric Customization

The assessment coordinators began by adopting the AAC&U VALUE rubric for Information Literacy (Appendix A). This rubric was selected for its comprehensive design and widespread acceptance across educational institutions. This rubric had also been employed during the previous campus-wide

¹ The General Education (GE) ePortfolio (<https://academics.fresnostate.edu/oie/assessment/geportfolio.html>) consists of student work from assignments GE course faculty have designated as meeting the campus GE student learning outcomes.

information literacy assessment conducted in 2018-2019. To gain a deeper understanding of the rubric's structure and application, coordinators met with the AAC&U VALUE Rubric Research Team. They confirmed that the VALUE rubrics are designed for institutional-level use in evaluating and discussing student learning, and that the rubric can be adapted to suit the specific needs of individual campuses.

A small group of faculty librarians met with the coordinators in fall 2024 to begin tailoring the rubric to Fresno State's specific needs. The group applied the rubric to sample student work and conducted a literature review about use of the rubric by other institutions to determine best practices for rubric customization and application to institutional assessment projects. The coordinators then convened an Information Literacy Core Competency Assessment Task Force of 13 faculty members from across campus to conduct the assessment. During an orientation meeting and two norming sessions, this group reviewed the rubric and planned study design, and, based on their feedback, the rubric was further revised to create the Fresno State VALUE Rubric for Information Literacy (Appendix B).

The customized rubric includes the same five dimensions as the AAC&U rubric:

1. Determine the extent of information needed.
2. Access the needed information.
3. Evaluate the information and its sources critically.
4. Use information effectively to accomplish a specific purpose.
5. Access and use information ethically and legally.

Based on the study design, the rubric was simplified to describe three levels of performance (Advanced, Proficient, Developing), whereas the original AAC&U rubric has four levels. The criteria within the rubric were also condensed and reorganized to facilitate consistent and reliable ratings. After the initial norming sessions, the Task Force also conducted a quantitative analysis of rater scores on sample papers to facilitate effective revisions to the project rubric.

Rating Process and Fresno State VALUE Rubric Application

Faculty members of the task force applied the rubric to an initial sample of 153 student papers. These papers were randomly assigned among the task force members to ensure an unbiased review process. Each paper was rated by two independent faculty members, ensuring reliability in the scoring process. In cases where there was a discrepancy of more than one point between the two raters' scores, a third rater was introduced to arrive at more consistent scoring. The Office of Institutional Effectiveness assisted the co-chairs with sampling, rater assignment, and procedures for reconciling ratings.

Before the evaluation process began, faculty participated in norming sessions. These sessions were critical for aligning faculty understanding of the rubric and ensuring that the scoring process remained uniform across all reviewers. During these sessions, it became apparent that some papers included in the initial sample might not be suitable for this study. For example, certain research assignments did not require students to use external sources, making them inappropriate for evaluating information literacy with the study rubric. Faculty raters were given the option to flag papers for potential exclusion from the study, and were asked to provide a brief rationale for their recommendation. These flagged papers were later reviewed by the assessment coordinators, who documented all justifications and made final decisions about each paper's inclusion in the study.

The ratings were submitted through a Google form, which collected scores for each of the five rubric dimensions. In addition to the rubric ratings, faculty were also asked to make explanatory notes, and to indicate whether a paper should be excluded from the project.

After completing the paper evaluations, raters were asked to reflect on their experience by answering a set of summary questions. These included prompts such as summarizing their experience applying the rubric, noting any surprises about students' information literacy skills, identifying patterns observed, and recommending any changes to the curriculum or student support based on their observations. Raters were also invited to provide feedback on the project design, noting any advantages or limitations they encountered. This reflection process allowed faculty to contribute their insights on information literacy, the rubric, and the student sample, enriching the overall assessment process.

Challenge Measuring Dimension 2

From the earliest planning stages, the group recognized a significant challenge with measuring the second dimension, "Access the needed information," effectively using the rubric. Because the study design focused on a broad sample of student papers from across the university, it was difficult to evaluate students' search process in sufficient detail to assign a rating. The sample did include selected papers that included a description of students' search strategies, but for the most part, instructors' assignments did not require students to include this information in the final paper.

To address this gap, the committee agreed to rely on a 2023 Searching Observational Study conducted by the Fresno State Library. The library recruited fifty students to complete a facilitator-guided searching exercise, and recorded students' search strategies using students' search notes (worksheets), screen and audio recordings. In the library study, volunteer raters (librarians and library staff), used a rubric to determine proficiency in three dimensions: search vocabulary, search strategy and searching resilience (Appendix D). Volunteer raters for the Searching Study attended a one-hour training and norming session to understand the purpose of the study and how to rate student worksheets and recordings using the rubric. Two raters were assigned to review each assessment and assign scores using the rubric, and a third rater was assigned in cases where there was a significant discrepancy in scores. The Office of Institutional Effectiveness assisted with the data analysis for this study. The full report on the Searching Observational Study is available on the Office of Institutional Assessment website.²

Additional Measure for Dimension 5

An additional measure was also conducted to assess dimension 5, "Access and Use Information Ethically and Legally." Fresno State's Faculty Director of Assessment, Dr. Douglas Fraleigh, volunteered to conduct a supplemental assessment to get a deeper look at students' ethical use of information.

The Director of Assessment randomly selected fifty papers from the compendium of papers compiled from the GE ePortfolios for the study and conducted a citation check for one reference in each of the fifty papers. This was done by (1) attempting to locate the original research source cited, and (2) when located, analyzing whether the student provided either an accurate quotation from the original source or paraphrased the original source in an ethical manner. The focus here was on whether the research source cited by the student existed and whether the information taken from the source was used ethically. It was not an assessment of whether the student's citation correctly adhered to a style

² <https://academics.fresnostate.edu/oie/assessment/soap/index.html>

manual. The use of a proper citation format was not a criterion for proficiency, assuming the source could be located.

The Director of Assessment developed a rubric to assess student work. The rubric comprised two dimensions: (1) Locating the Cited Source, and (2) Ethical Use of Information with three levels (Advanced, Proficient, Developing). (Appendix D).

Results/Discussion

Benchmark

The 2023-24 benchmark **was for 85% of students nearing graduation demonstrating proficiency or higher in each of the Fresno State VALUE rubric dimensions for information literacy.** By the time students near graduation, they should have had multiple opportunities to develop and refine their information literacy skills across various courses and disciplines. Setting a benchmark of 85% allows for a high standard of proficiency while acknowledging that some students may still be developing these skills. An 85% benchmark provides room to identify and address gaps in instruction or resources for the remaining 15% of students, offering a realistic goal, while still promoting a high level of achievement.

Fresno State Value Rubric Results: Data Analysis

Two methods were used to evaluate the data from the main rubric study, Averages Method (Table 1) and Outliers Removed (Table 2). For the Averages Method, the average rating was calculated across all raters for each student and each dimension, whether there were two or three raters involved (when there were discrepancies between ratings, a third rater was assigned to evaluate the paper). In the Outliers Removed Method, the outlier rating for each dimension was excluded, and the rating on which two raters agreed was retained. In cases where three raters each provided different scores, the average score of two was assigned.

(Tables continue on page 5)

Table 1 - Fresno State VALUE Rubric Results – Averages Method

- "Averages Method," the average rating was calculated across all raters for each student and each dimension, whether there were two or three raters involved. These average scores were then rounded to the nearest whole number (1, 2, or 3) according to the rubric. Students with scores of 2 or higher were categorized as "Proficient." The percentages presented in the table represent the proportion of students rated as Proficient or Advanced.
- For the column "Stat. Sig.," independent sample t-tests with $p < 0.05$ were used to test for significant differences among the demographic groups.
- Note: Dimension 2 (Access the Needed Information) was measured and assessed using a supplemental study conducted by the Fresno State Library.

	1 Determine the Extent of Information Needed		3 Evaluate Information and its Sources Critically		4 Use Information Effectively to Accomplish a Specific Purpose		5 Access and Use Information Ethically and Legally	
	Proficient (%)	Stat. Sig.	Proficient (%)	Stat. Sig.	Proficient (%)	Stat. Sig.	Proficient (%)	Stat. Sig.
Total Sample N=153 ³	77	n/a	77	n/a	78	n/a	73	n/a
Gender								
Female (N=100)	81	No	81	No	81	No	77	No
Male (N=48)	71	No	67	No	73	No	65	No
First Generation								
First Gen (N=90)	78	No	74	No	78	No	72	No
Non-First Gen (N=49)	84	No	86	No	80	No	76	No
Underrepresented Minority (URM)								
URM (N=78)	77	No	68	Yes	71	Yes	65	Yes
Non-URM (N=53)	83	No	89	Yes	87	Yes	81	Yes
Pell Grant Eligible								
Pell Eligible (N=76)	80	No	76	No	78	No	75	No
Non-Pell Eligible (N=73)	75	No	77	No	79	No	71	No

³ The original sample consisted of 153 students whose papers were selected from GE ePortfolios for upper-division GE courses; enrollment in these courses was our best proxy for "final three semesters at the university." Student ID (SID) numbers were compiled retrospectively for students in the sample. Any students who could not be identified with full confidence (e.g., no longer enrolled, identical names) were included in global totals but not in the more granular demographic analysis.

Table 2 - Fresno State VALUE Rubric Results – Outliers Removed

- "Outliers Removed," the outlier rating for each dimension was excluded, and the rating on which two raters agreed was retained. In cases where three raters each provided different scores, the average score of two was assigned to the student. Students with a score of 2 or higher were categorized as "Proficient." The percentages in the table reflect those students who were rated as Proficient or Advanced.
- For the column "Stat. Sig.," independent sample t-tests with $p < 0.05$ were used to test for significant differences among the demographic groups.
- Note: Dimension 2 (Access the Needed Information) was measured and assessed using a supplemental study conducted by the Fresno State library.

	1 Determine the Extent of Information Needed		3 Evaluate Information and its Sources Critically		4 Use Information Effectively to Accomplish a Specific Purpose		5 Access and Use Information Ethically and Legally	
	Proficient (%)	Stat. Sig.	Proficient (%)	Stat. Sig.	Proficient (%)	Stat. Sig.	Proficient (%)	Stat. Sig.
Total Sample N=153	74	n/a	73	n/a	77	n/a	67	n/a
Gender								
Female (N=100)	77	No	77	No	80	No	71	No
Male (N=48)	71	No	63	No	73	No	58	No
First Generation								
First Gen (N=90)	76	No	72	No	77	No	64	No
Non-First Gen (N=49)	80	No	80	No	80	No	73	No
Underrepresented Minority (URM)								
URM (N=78)	72	No	63	Yes	69	Yes	59	Yes
Non-URM (N=53)	81	No	87	Yes	87	Yes	77	Yes
Pell Grant Eligible								
Pell Eligible (N=76)	76	No	72	No	75	No	67	No
Non-Pell Eligible (N=73)	73	No	73	No	79	No	67	No

Averages Method Results

The benchmark for this study was set at **85% proficiency or higher**. The results below reflect the percentage of students rated as "Proficient" or "Advanced" across the evaluated dimensions using the Averages Method, where scores of 2 or higher were categorized as proficient.

The results show that the overall student population did not meet the 85% proficiency benchmark across the assessed dimensions. Significant differences were observed between underrepresented minority (URM) and non-URM students, indicating areas where targeted interventions may be necessary. Other demographic groups, such as gender and first-generation status, showed differences in performance, though these were not statistically significant.

The total sample did not meet the 85% benchmark in any of the assessed dimensions. Across the four key dimensions:

- 77% of students were proficient in Determining the Extent of Information Needed.
- 77% were proficient in Evaluating Information and its Sources Critically.
- 78% were proficient in Using Information Effectively to Accomplish a Specific Purpose.
- 73% were proficient in Accessing and Using Information Ethically and Legally.

URM students showed lower proficiency levels compared to non-URM students, particularly in the dimensions of **Evaluating Information and its Sources Critically** (68% vs. 89%), **Using Information Effectively to Accomplish a Specific Purpose** (71% vs. 87%), and **Accessing and Using Information Ethically and Legally** (65% vs. 81%). These differences were statistically significant ($p < 0.05$), highlighting disparities in information literacy proficiency between URM and non-URM students. Female students consistently performed better than their male counterparts in all dimensions, though none of the differences were statistically significant. Proficiency rates for females ranged from 77% to 81%, while for males, the range was lower, from 65% to 73%.

While first-generation students performed slightly lower than non-first-generation students across most dimensions, these differences were not statistically significant. Proficiency rates for first-generation students ranged from 72% to 78%, while non-first-generation students scored between 76% and 86%.

Students who were Pell Grant eligible demonstrated slightly higher proficiency in some dimensions than non-Pell eligible students. However, these differences were not statistically significant. Pell eligible students ranged from 75% to 80% proficiency, compared to 71% to 79% for non-Pell eligible students.

Averages Method versus Outliers Removed

The two methods, Averages Method and Outliers Removed, yielded different results in terms of proficiency percentages across dimensions and demographic groups. The Outliers Removed method results in generally lower proficiency rates, especially for female and URM students. These results suggest that removing outliers provided a more conservative representation of student proficiency, but it also revealed wider disparities in performance among certain demographic groups, particularly in the URM vs. non-URM comparison.

Rater Reflection Summary (Appendix E)

Two volunteers were recruited from the Task Force to synthesize faculty rater feedback on their experiences with the study. The summary notes key challenges faculty members encountered with the

AACU and Fresno State Rubrics, especially that they could be more specific for purposes of reliability and validity. Raters also noted that while it was difficult to rate student assignments outside their own disciplines, they found the experience of working across disciplines to design the study rewarding. The faculty members recommend additional attention to information literacy instruction across the curriculum to improve student proficiencies.

Dimension 2 Results – Library Study

The 2022-23 library study of the searching dimension used a benchmark of 70% for each dimension. This study looked at students at all stages of their undergraduate academic careers, rather than just those nearing graduation, so the 70% benchmark was deemed appropriate. After reconciling scores across raters, the Library Assessment Coordinator worked with the Office of Institutional Excellence (OIE) to determine that 84% of all students were Proficient in Search Vocabulary (1.2); 78% of students were proficient with Search Strategy (1.3); and 80% of all students were Resilient in their searching (1.4). An analysis by demographic group (First-Generation; Sex; and Underrepresented Minority) was also conducted. While all demographic groups achieved the 70% benchmark in most dimensions, only 67% of First-Generation Students were proficient with Search Strategy (dimension 1.3), representing one potential area for supplemental instruction.

Additional Measure for Dimension 5 Results

Table 3 - Additional Measure for Dimension 5 Results

- Students with scores of 2 or higher were categorized as "Proficient." The percentages presented in the table represent the proportion of students rated as Proficient or Advanced.

	1 Locating the Cited Source Proficient (%)	2 Ethical Use of Information Proficient (%)
Total (N=50)	90	84

(Tables continue on page 5)

Table 4 – Additional Measure for Dimension 5 Typical Comments for Paper Ratings

	1		2	
	Locating the Cited Source		Ethical Use of Information	
Rating	Number of Students	Comments	Number of Students	Comments
Advanced	29	• Good, complete citation made source easy to find • Helpful to include URL or DOI, made retrieval efficient • Good to include time stamp from video, able to find relevant part of the video quickly	32	• Accurate word for word quotation from original source • Paraphrase consistent with author's ideas • Very good paraphrase, changed author's words and accurately expressed author's ideas
Proficient	16	• Lack of page number in citation makes it difficult to find quotation when source is not in electronic format • Citation should not just be the URL, reviewer was able to find the source, but the author should have been cited in the body of the paper and the URL included in the works cited • Citation not complete, but student provided enough information to locate the article • Student cited JSTOR, not the author. But student provided enough information to locate the article • Student cited an incorrect date, slowing the retrieval of the article	10	• The student quoted the author in their paper, but there were minor discrepancies between the original source and the paper • The student made an effort to use their own words (rather than the author's), but they should have used more of their own words when paraphrasing • The student tried to paraphrase, but probably should have used a direct quotation. The source was using terms of art and it was not clear than synonyms would convey the same meaning • The student's sentence was awkward, but their words aligned with the author's ideas
Developing	5	• Author cited in paper was not listed in works cited page and source could not be located from author's name alone • No works cited page • Reviewer could not locate the cited source despite effortful inquiry	8	• The reviewer could not find the source, could not discern whether the paraphrase was accurate • The paper used a complete sentence from the original source, but did not put the sentence in quotation marks.

The more granular review of ethical use of sources cited in fifty student papers indicated that the students are largely using information resources in an ethical manner. Forty-five students (90%) were rated proficient or above in providing sufficient information to locate their source and twenty-nine of these were rated advanced. Forty-two students (84%) were rated proficient or above in ethical use of information resources and thirty-two of these ratings were advanced. These results exceeded the 85% benchmark for source location and nearly met the benchmark for citation.

When this same dimension was assessed using the more holistic Fresno State VALUE Rubric, students did not meet the proficiency benchmark in areas such as applying citation guidelines correctly and choosing between paraphrasing, summarizing, or quoting, and maintaining the original context. So it is reassuring that on closer examination students were able to cite sources that clearly exist, even though some citations required additional searching to locate. Whereas minor discrepancies in quotations or paraphrasing were noted, overall, students demonstrated reasonably accurate paraphrasing that aligned with the cited source's meaning. By taking a magnifying glass to this important dimension, the supplemental study provides actionable information for programs and instructors to use in designing assessments. There are several suggestions to help the students improve on these results of these aspects of Ethical Use:

- It is important to learn how to include complete citations, not only because adherence to a style manual is a learning outcome in many disciplines, but also so that a reader can easily locate the original source. Students should be made aware of resources to help with citations and also informed that for many library resources, the citation can be accessed in typical formats (e.g. APA, MLA, and Chicago) and copied and pasted.
- Students should be reminded that they need to cite the author and the source and not the database (e.g. JSTOR or Gale Academic). The same principle applies for the URL or doi for their source. It is helpful to include this information in their works cited page, but the author and a proper source citation should also be provided.
- Students should be reminded that when proofreading their papers, they should be sure that all sources cited in the text must also be included in the works cited page.
- Students should be given additional instruction in the art of paraphrasing and the guidelines for ethical paraphrases. This can be a difficult skill for students to master and it would be helpful to regularly reinforce instruction and practice.

Closing the Loop: Recommendations

The following areas may guide long-term efforts by units across the University who are interested in collaborating to develop students' information literacy skills. These areas will be revisited in the Library's planning and assessment efforts.

Improving Results for All Students.

The Office of Institutional Effectiveness statistical analysis by Gender, First-Generation, Underrepresented Minority, and Pell Grant Eligible statuses revealed that most upper-division students at Fresno State are near the 85% benchmark in most dimensions of information literacy. The differences in proficiency by Gender, First-Generation and Pell Grant Eligible statuses were, by and large, not statistically significant. Differences in proficiency by Underrepresented Minority status were statistically significant for three of the four dimensions evaluated: Evaluate Information and its Sources Critically, Use Information Effectively to Accomplish a Specific Purpose, and Access and Use Information Ethically and Legally. One can hypothesize that some Fresno State students have had less opportunity to develop these skills previously due to challenges in the broader educational environment, including a lack of school libraries and higher student-teacher ratios. Departments and colleges may wish to address differential preparation by requiring all students to participate in information literacy sessions and assignments in a variety of academic and co-curricular contexts, thereby scaffolding skill development and opportunities for feedback and support so that every student has the opportunity to be successful.

Information Literacy Across the Curriculum.

Raters noted that instructors' expectations and assignments related to information literacy varied widely across departments and colleges. More unified instructional support for information literacy across the curriculum, similar to efforts for Writing Across the Curriculum, could assist in establishing common expectations across the university. This could also be accomplished by pairing information literacy more effectively with related core competencies such as writing. It is notable that although information literacy is a core competency, it has not been encoded into the curriculum or articulated in a consistent way in the curricula of some departments. Embedding information literacy competencies and training into key courses across disciplines could ensure that students develop these skills progressively. For example, creating assignments and modules focusing on evaluating sources and ethical use of information could target areas where proficiency was lower, particularly in dimensions 3 and 5.

Faculty Development on Incorporating Information Literacy into Courses.

Ensure that faculty across departments have opportunities to discuss integration of information literacy into their courses. Students need guidance in learning how to evaluate sources for credibility, relevance, and accuracy. Faculty play a crucial role by teaching students how to critically assess the reliability of websites, articles, and digital content, ensuring that students are well-equipped to navigate the complexities of the online information ecosystem. These opportunities for student learning can be embedded in a range of assignments and activities at every level of the curriculum. Faculty may benefit from discussion of the academic research and effective models for curricula, syllabi, assignments and activities. These discussions could be beneficial within disciplinary communities of practice, colleges or departments, faculty development offerings and with K-12 teachers.

Library Collaboration.

Faculty can partner more closely with the library to embed workshops, tutorials, and one-on-one research consultations into the curriculum at appropriate stages. Subject librarians can collaborate with faculty in their respective disciplines. Substantial additional support from the library would require evaluating resource to ensure adequate materials and staffing to provide effective support. Information literacy support and assessment is a core function of academic libraries, and librarians stand prepared to collaborate with the rest of campus in these endeavors.

The Library Assessment Coordinator will initiate the following campus-level efforts by October, 2025.

1. Collaborate with writing and/or communication faculty to pilot Faculty Information Literacy Workshops addressing strategies for advancing the development of students' information literacy skills. Workshop topics will include information literacy in the disciplines, assignment design, assessment strategies, and collaborations with librarians. Workshop curriculum will be designed to be extensible to other campus conversations such as departmental discussions and campus-wide faculty development offerings.
2. Develop a web-based information literacy toolkit for campus faculty that contextualizes and promotes library supports such as syllabus consultation, web-based tutorials, and library instruction sessions. This toolkit will be expanded in the future to incorporate additional content such as model research assignments, information literacy rubrics, and learning activities.

Appendix A - AACU VALUE Rubric

Association of American Colleges and Universities. (2013). *Information Literacy VALUE rubric*. <https://www.aacu.org/initiatives/value-initiative/value-rubrics/value-rubrics-information-literacy>

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 16 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can be shared nationally through a common dialog and understanding of student success. In July 2013, there was a correction to Dimension 3: Evaluate Information and Its Sources Critically.

Definition

The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. (Adopted from the National Forum on Information Literacy)

Framing Language

This rubric is recommended for use evaluating a collection of work, rather than a single work sample, in order to fully gauge students' information skills. Ideally, a collection of work would contain a wide variety of different types of work and might include research papers, editorials, speeches, grant proposals, marketing or business plans, PowerPoint presentations, posters, literature reviews, position papers, and argument critiques to name a few. In addition, a description of the assignments with the instructions that initiated the student work would be vital in providing the complete context for the work. Although a student's final work must stand on its own, evidence of a student's research and information gathering processes, such as a research journal/diary, could provide further demonstration of a student's information proficiency and, for some criteria on this rubric, would be required.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Determine the Extent of Information Needed	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.
Access the Needed Information	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.
Evaluate Information and Its Sources Critically*	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources after considering the importance (to the researched topic) of the multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using multiple criteria (such as relevance to the research question, currency, and authority).	Chooses a variety of information sources. Selects sources using basic criteria (such as relevance to the research question and currency).	Chooses a few information sources. Selects sources using limited criteria (such as relevance to the research question).
Use Information Effectively to Accomplish a Specific Purpose	Communicates, organizes, and synthesizes information from sources to fully achieve a specific purpose with clarity and depth.	Communicates, organizes, and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
Access and Use Information Ethically and Legally	Students correctly use all of the following information use strategies: use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution. Demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly three of the following information use strategies: use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution. Demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly two of the following information use strategies: use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution. Demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly one of the following information use strategies: use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution. Demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

*Corrected Dimension 3: Evaluate Information and Its Sources Critically in July 2013



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Appendix B: Fresno State VALUE Rubric

	Advanced (3)	Proficient (2)	Developing (1)
1 Determine the Extent of Information Needed	- Effectively defines the scope of the research question or thesis. - Effectively determines key concepts. - Types of information (sources) selected directly relate to concepts and/or answer the research question.	- Defines the scope of the research question or thesis completely. - Determines key concepts. - Types of information (sources) used relate to concepts and/or answer the research question.	- Has difficulty defining the scope of the research question or thesis. - Has difficulty determining key concepts. - Types of information (sources) selected do not relate to concepts or answer the research question.
2 Access the Needed Information	- Accesses information using effective, well designed search strategies. - Retrieves information from most appropriate information sources. - Demonstrates ability to refine search.	- Accesses information using a variety of search strategies. - Retrieves information from relevant information sources. - Demonstrates ability to refine search.	- Accesses information randomly. - Retrieves information that lacks relevance and quality.
3 Evaluate Information and its Sources Critically	- Selects a variety of information sources appropriate to the scope and discipline of the research question. - Selects sources after considering the importance to the researched topic of at least two of the following criteria: relevance to the research question, currency, authority, audience, and bias or point of view.	- Selects a variety of information sources appropriate to the scope and discipline of the research question. - Selects sources using at least one of the following criteria: relevance to the research question, currency, authority, audience, and bias or point of view.	- Chooses few information sources. - Selects sources using limited criteria.
4 Use Information Effectively to Accomplish a Specific Purpose	- Communicates, organizes, and synthesizes information from sources to fully achieve a specific purpose with clarity and depth. - Demonstrates knowledge of types of information valued in a discipline.	- Communicates and organizes information from sources. - Synthesizes information from multiple sources to achieve the intended purpose.	- Communicates information from sources. - The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
5 Access and Use Information Ethically and Legally	Correctly uses 4+ of the following information use strategies: - use of citations and references; - choice of paraphrasing, summary, or quoting; - using information in ways that are true to original context; - distinguishing between common knowledge and ideas requiring attribution; - demonstrating an understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information (e.g., citation practices).	Correctly uses 2-3 of the following information use strategies: - use of citations and references - choice of paraphrasing, summary, or quoting; - using information in ways that are true to original context; - distinguishing between common knowledge and ideas requiring attribution; - demonstrating an understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information (e.g., citation practices).	Uses 0-1 of the following information use strategies: - use of citations and references - choice of paraphrasing, summary, or quoting; - using information in ways that are true to original context; - distinguishing between common knowledge and ideas requiring attribution; - demonstrating an understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

Appendix C - Searching Proficiency Rubric

We are looking for evidence of the following student learning outcomes (SLOs): vocabulary appropriate to the search tool (SLO 1.2); search strategy (SLO 1.3); and resilience to alter search strategies based on results (SLO 1.4)

	Advanced	Proficient	Developing
Vocabulary (1.2)	Achieves proficiency <i>AND</i> one or more of the following: • Uses multiple keywords for each concept; <i>or</i> • Explores search results to find new keywords and sub-questions; <i>or</i> • Uses “Subjects” (controlled vocabulary) effectively	• Divides the research question into two or more concepts using keywords <i>OR</i> • Divides the research question into two or more sub-questions	Does not achieve proficiency, even when prompted.
Strategy (1.3)	Achieves proficiency <i>AND</i> one or more of the following: • Draws on prior knowledge (life experience or course work) to plan the search strategy; <i>or</i> • Navigates to full-text resources and expands the search using content and database features	Uses one or more techniques appropriate to the search tool, for example: • Uses AND, OR, and “” effectively in the search; <i>or</i> • Uses limits (e.g. date, scholarly articles); <i>or</i> • Navigates to detailed records to gather more information; <i>or</i> • Uses the Advanced Search screen	Does not achieve proficiency, even when prompted.
Resilience (1.4)	Achieves proficiency <i>AND</i> : • Revises the search multiple times based on search results and new ideas	Revises the search strategy at least once: • Regroups with new search vocabulary or strategy when not satisfied with the results; <i>or</i> • Revises the search vocabulary or strategy to improve results	Does not achieve proficiency, even when prompted.

Appendix D: Ethical Use of Information Rubric

	Advanced (3)	Proficient (2)	Developing (1)
1 Locating the Cited Source	The source exists and it could easily be located from the citation information provided.	The source exists. Although the citation did not directly lead to the source, it was possible to locate the source through additional searching.	The source could not be located from the information provided.
2 Ethical Use of Information	The information is accurately quoted (and enclosed in quotation marks) or the paraphrase was done using the student's own words while retaining the original source's meaning.	There was a minor discrepancy in the quotation, or the paraphrase was reasonably accurate and consistent with the source' meaning.	There was one or more of the following difficulties: (a) there was a serious discrepancy in the quotation, b) the paraphrase did not significantly change the author's words, (c) the paraphrase did not reflect the original meaning, or (d) the source could not be located.

Appendix E - Rater Reflection Reflective Summary

The following summary was compiled from rater survey responses by two volunteer faculty raters, sam hidde tripp, Fresno State Library, and Constance Jones, Department of Psychology.

Overall raters appeared to have a nice time with the assessment. The project as a whole was reported as well-paced and well defined, with each rater understanding their role and tasks clearly.

Two points of tension, however, were the rubric and the need to separate a student's writing skills from their information literacy skills. Both were anticipated, as practice ratings before the official assessment also ran into need for clarification on the rubric as well as for self-reflection while rating to make sure raters were judging the appropriate skill.

For the rubric, the dissatisfaction and confusion came from certain aspects that appeared to overlap in addition to feeling like there may not have been enough context to judge a paper accurately. The rubric had already been adapted, eliminating one section, but raters provided thoughtful suggestions to future adjustments. One included adjusting the scoring (developing / proficient / advanced) to be more clear, as there was some confusion to each score's scope.

While the writing skills are technically separate, it may be helpful to include some sort of writing aspect in future assessments, if time and energy allow. Since writing is such an integral part of communicating information, perhaps including some writing assessment within the context of synthesizing information or thesis development could help raters make appropriate connections between writing and information literacy skills without it getting too muddled. This could also be included into the citations section, as another observation was student reliance on copy/pasting quotes rather than paraphrasing (which overlaps with writing and information literacy).

Surprises encountered during the rating process were personal and unique to each rater, especially when one was given that seemed far removed from their subject specialties. Raters appeared to appreciate the opportunity to engage outside of their field while also acknowledging that personal bias when it comes to style could have affected their ratings (both positive or negative).

The samples appear to highlight a need to teach information literacy more explicitly in the classroom. Raters agreed on the need and importance of library and librarian integration as early in our students' education as possible to build and maintain these skills.