CCSU General Education Assessment Retreat

January 2022

❧ Information Literacy Learning Outcome Results ☙

Artifacts from Fall 2021

Office of Institutional Research and Assessment

Central Connecticut State University

Introduction

As part of our Davis Educational Foundation (DEF) grant, Central Connecticut State University (CCSU) faculty participated in assignment alignment workshops for the Information Literacy general education learning outcome (General Education Objective 7). This rubric, created by Association of American Colleges and Universities (AAC&U), was adopted for use by CCSU faculty in 2019. (Rubric attached.)

The rubric features five dimensions on a rating scale of 1 to 4, where 1 represents the lowest assessable performance and 4 represents the highest performance. A score of zero is awarded in cases where a student failed to address the dimension. The rubric is grounded in the following 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]*

The five dimensions of the rubric include:
- Determine the Extent of Information Needed
- Access the Needed Information
- Evaluate Information and its Sources Critically
- Use Information Effectively to Accomplish a Specific Purpose
- Access and use Information Ethically and Legally

In both Spring 2021 and Fall 2021, a number of faculty participated in DEF workshops to align existing assignments to this rubric. Working in teams, faculty helped each other align their respective assignments to ensure that each dimension of the rubric was evident in the assignment. Those assignments were then given to students; upon completion, the assignments were submitted to the Office of Institutional Research and Assessment for scoring by faculty at the annual winter assessment retreat.

In January 2022, a team of four CCSU faculty scored 85 student artifacts using the Information Literacy (IL) rubric. The artifacts were contributed from the faculty participating in the DEF workshops and represented student work throughout the Spring 2021 and Fall 2021 semesters. For scoring purposes, only first-year and senior-level student artifacts were assessed. This model provides important information, allowing for the comparison on where first-year students start and where seniors are prior to graduation.

The IL artifacts scored at this retreat represented 72 first-year students and 13 senior students from five courses taught in the College of Liberal Arts and Social Sciences and one course taught in the School of Engineering, Science, and Technology. This was the first time where the assignments used had been intentionally aligned to the rubric. Each artifact was scored by two different faculty and the scores were averaged.

It is important to note that our general education learning outcome assessment model measures student learning on skills and knowledge that are gained across their courses. As such, this assessment is not reflective of a single instructor nor a single course, but rather a reflection of where students are in their academic journey.

The results presented on the following pages are from our January 2022 assessment retreat, with comparisons between academic groups and demographic data.

Overall Results

As seen in Figure 1, the overall score for first-year students evaluated on their Information Literacy artifacts was 1.6 and represents low-level performance. The score for each individual dimension fluctuated between 1.4 and 1.8, with the dimension addressing ethical and legal use of information needing the greatest improvement.
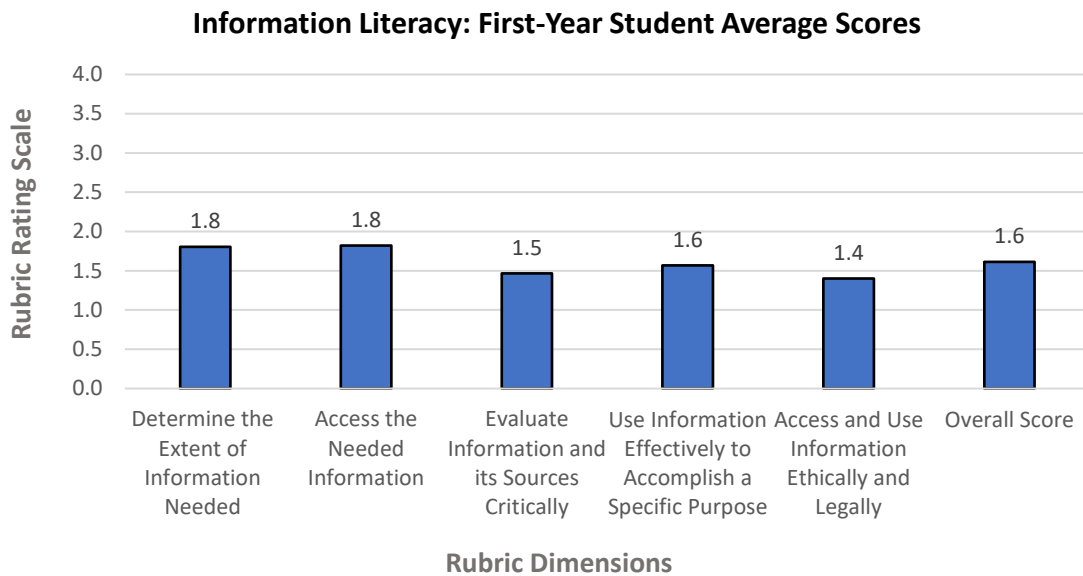
Information Literacy: First-Year Student Average Scores

Figure 1. Overall scores of first-year students for Information Literacy Rubric, n=72

The results of our senior-level students are shown below in Figure 2. Senior students had an overall score of 2.1, which is 0.5 points higher than first-year students. Student performance across all five dimensions was more consistent than first-year students, with a range of 2.0 to 2.3. "Access the Needed Information" had the highest score of 2.3 and the two dimensions with the lowest scores were the ethical and legal use of information and effectively using information for a specific purpose.
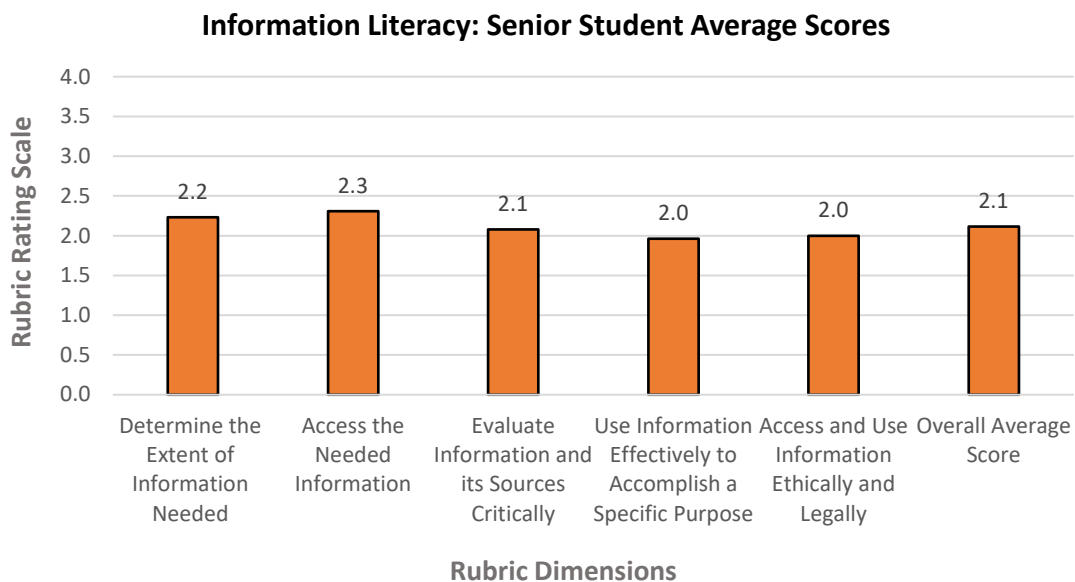
Information Literacy: Senior Student Average Scores

Figure 2. Overall scores of senior students for Information Literacy Rubric, n=13

Data Disaggregated by Gender

When looking at the results of first-year students by gender, the scores overall and for each dimension were very similar for females and males (Figure 3).
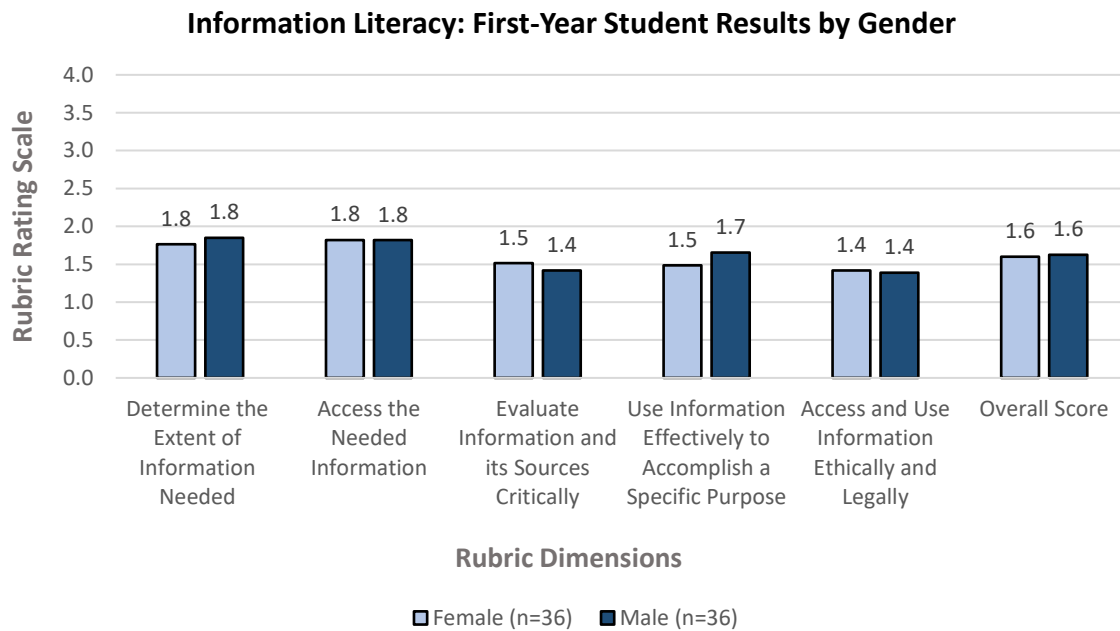
Information Literacy: First-Year Student Results by Gender

Figure 3. Scores of first-year students by gender

For senior-level students, results by gender were also very similar for the overall score and four of the five dimensions. The greatest variance was found for "Access the Needed Information" where females had a score that was 0.5 points higher than males. Also of interest is that for four of the five dimensions, female students scored slightly higher than male students, however the number of students in this sample is smaller than we would like (see Figure 4).
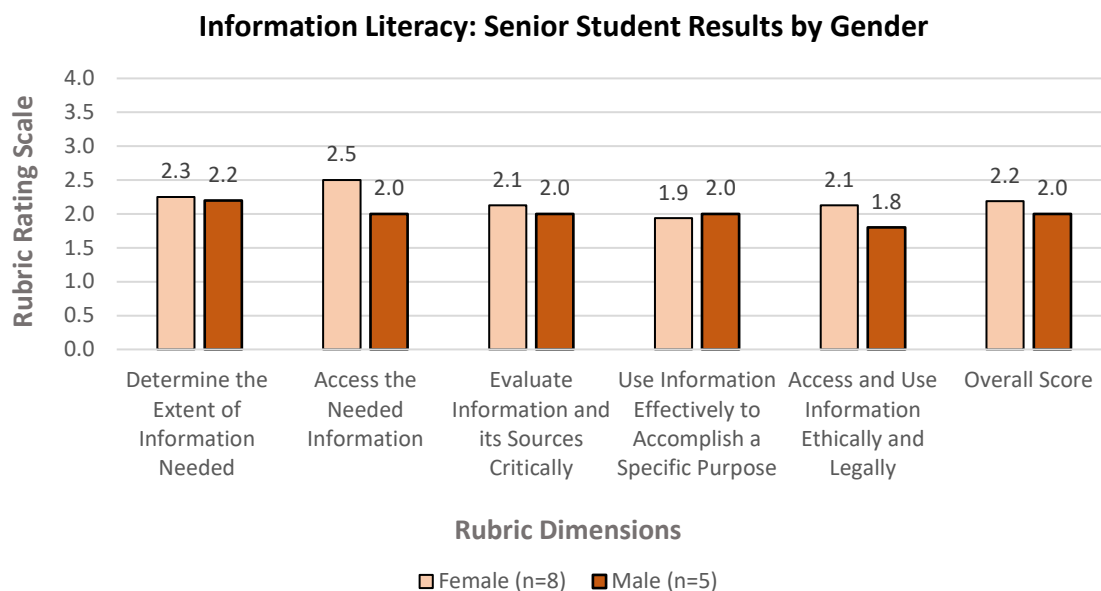
Information Literacy: Senior Student Results by Gender

Figure 4. Scores of senior-level students by gender

Data Disaggregated by Race/Ethnicity

Results based on race/ethnicity for first-year students showed an overall similar performance within each dimension and for the overall score (see Table 1). A maximum differential of 0.3 points was evident for the dimension where students had to determine the extent of needed information while the remaining dimensions differed by 0.2 points or less. When the results of first-year students are disaggregated by race/ethnicity, it is clear that all students performed best on the dimensions related to determining the extent of information needed and accessing the needed information. From these data it is apparent that students struggled more to demonstrate proficiency in the three remaining dimensions. Results for senior-level students are not presented due to the small sample size.

Table 1. *First Year Student Results by Race/Ethnicity**

	Hispanic/Latino (n=14)	Black or African American (n=6)	White (n=42)	Two or More Races (n=8)
Determine the Extent of Information Needed	1.9	1.6	1.9	1.8
Access the Needed Information	1.9	1.7	1.9	1.7
Evaluate Information and its Sources Critically	1.5	1.4	1.5	1.3
Use Information Effectively to Accomplish a Specific Purpose	1.5	1.6	1.6	1.4
Access and Use Information Ethically and Legally	1.5	1.3	1.5	1.3
Overall Average Score	1.7	1.5	1.7	1.5

*The sample sizes for Asian, Non-Resident Alien, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Unknown were too small and their data were not included in the table for privacy concerns.

Data by Distribution of Scores

Looking at the data by percentage of students in each rubric rating category, the largest percentage of first-year students had a score between 1.00 and 1.99 for three of the five dimensions, as shown in Figure 5. Most students performed best on "Access the Needed Information," achieving a score between 2.0 and 2.99. It is noteworthy that one or more first-year students had a score between 3.00 and 3.99 for four of the dimensions.
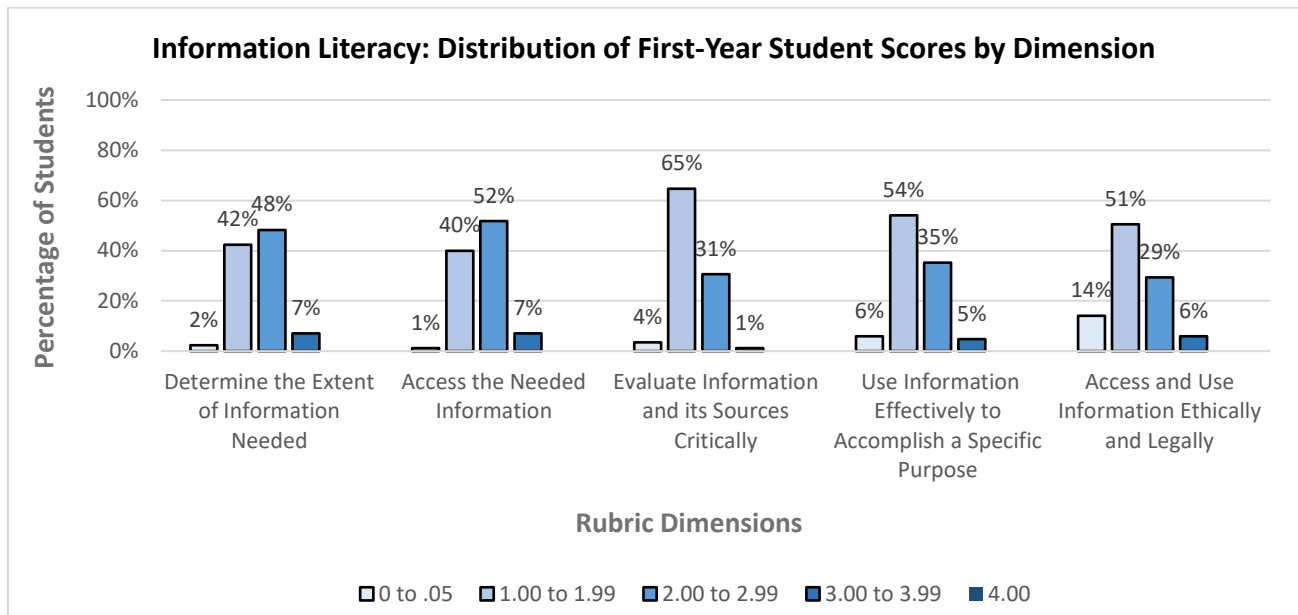

Figure 5. Percentage of first-year students based on rating scale

Figure 6 shows that the largest percentage of seniors had a score between 2.00 and 2.99 on four of the five dimensions. For "Use Information Effectively to Accomplish a Specific Purpose," 46% of students had a score between 1.00 to 1.99, followed by 38% with a score between 2.00 and 2.99. For all dimensions, seniors scored higher than first-year students. In fact, a greater number of seniors had a score between 3.00 to 3.99 compared to first-year students; most notably, 31% achieved this level for "Access the Needed Information."
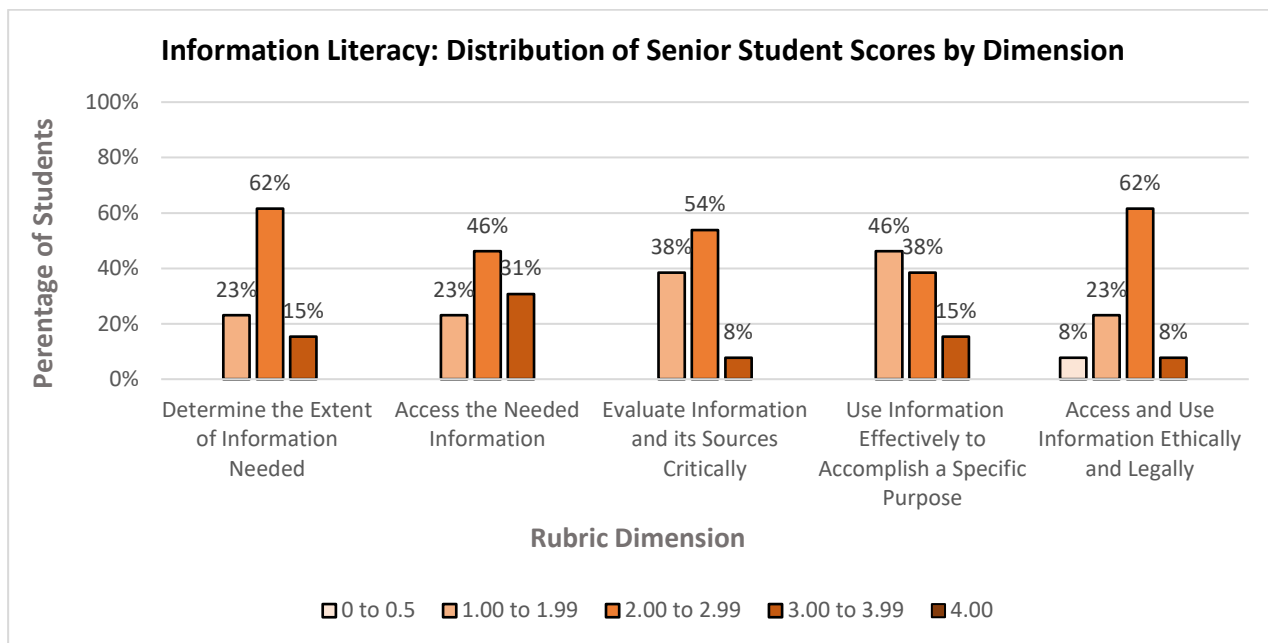

Information Literacy: Distribution of Senior Student Scores by Dimension

Figure 6. Percentage of seniors based on rating scale

Conclusion

It is our hope that you find these results both informative and valuable. As with any assessment, the results can be used to validate current practices, applaud successful outcomes, and/or identify areas for further attention.

Some faculty have found the following questions helpful as they review these data:

- Where did our students demonstrate success in Information Literacy?
- Which Information Literacy dimensions are clear areas for continued growth?
- How might these data be used to inform teaching and further students' Information Literacy learning?

To conclude, it is important to note that these scores reflect multiple factors at work and should be viewed within that context. As we continue to seek improvements on the various factors that go into scoring, our ultimate goal is to have CCSU undergraduate students demonstrate enhanced performance for our Information Literacy Learning Outcome, providing them with a solid foundation for future intellectual and personal pursuits.

To this end, faculty participation is key. As more faculty participate in these assessments, we will be able to ensure a more balanced population of students are assessed when it comes to student level and demographics.

Please contact Martie Kaczmarek, Assessment Coordinator, OIRA, if you would like additional information. Email: mkaczmarek@ccsu.edu or call 860-832-2304.

Information Literacy: Distribution of Senior Student Scores by Dimension