

El Camino College

Institutional Learning Outcome #4: Information Literacy



Spring 2018

Executive Summary

- Instructors feel they have less time to teach and assess information literacy.
- Instructors are requiring students to use more information literacy skills.
- Students who have completed more than 15 units performed better on the SAILS assessment than those with less than 15 units.
- Equity gaps are a concern for African American and Asian students.

Introduction

El Camino College assessed its fourth Institutional Learning Outcome (ILO) during the Spring 2018 semester. The approved ILO statement is as follows:

ILO #4 – INFORMATION LITERACY

Students determine an information need and use various media and formats to develop a research strategy and locate, evaluate, document, and use information to accomplish a specific purpose. Students demonstrate an understanding of the legal, social, and ethical aspects related to information use.

- Evaluate and choose credible sources for information.
- Understand when and how to give citations in the format appropriate for their field of study.
- Research data and draw conclusions based on an analysis of that data.

Methodology

The 2018 assessment followed a similar format as the 2013 assessment, the last time Information Literacy was assessed college wide.

Faculty were given a survey regarding their perceptions of students' ability to navigate sources and information. The survey was sent to selected faculty teaching sections of courses with Student Learning Outcomes (SLOs) aligned to the ILO. The survey was almost identical to the one offered faculty in 2013, allowing for comparisons over time.

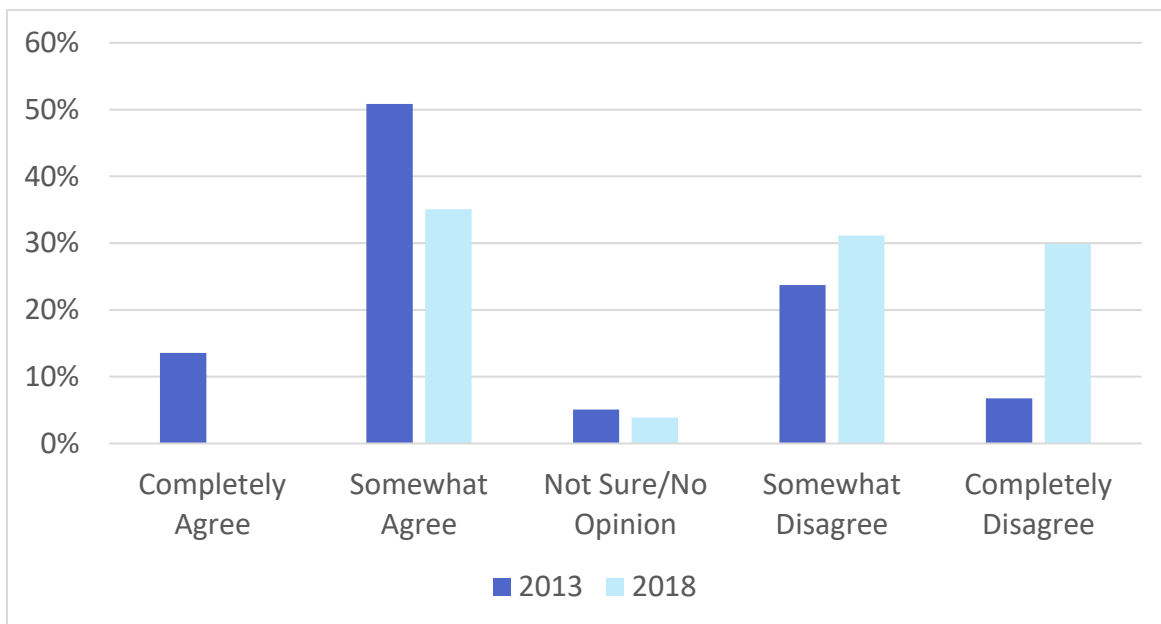
Sections of students were given the Standardized Assessment of Information Literacy Skills (SAILS) assessment, a nationally validated assessment of information literacy. Questions are academic scenarios with multiple choice answers for solutions. El Camino College Assessment of Learning Committee representatives, faculty, and librarians worked together to select the questions most relevant to community college students. The selected students were given a web address to take the assessment in class using their phone, tablet, or computer.

Results

Faculty Survey

Compared to 2013, faculty were less confident in students information literacy skills at the beginning of the semester. While 63% of faculty respondents agreed the students had sufficient information literacy skills to complete assignments in 2013, by 2018 61% disagreed with that statement (Figure 1).

Figure 1: At the beginning of the semester, my students have sufficient information literacy to complete assignments.



Unfortunately, instructors feel there is less time to teach and assess information literacy skills compared to the responses from 2013. Figure 2 shows a 10% decline in agreement with the statement “I have time to teach information literacy.” The percentage of instructors who claim to have time to assess information literacy saw a small reduction, but the percentage of people who claim not to have enough time grew 6%.

Figure 2: I have time...

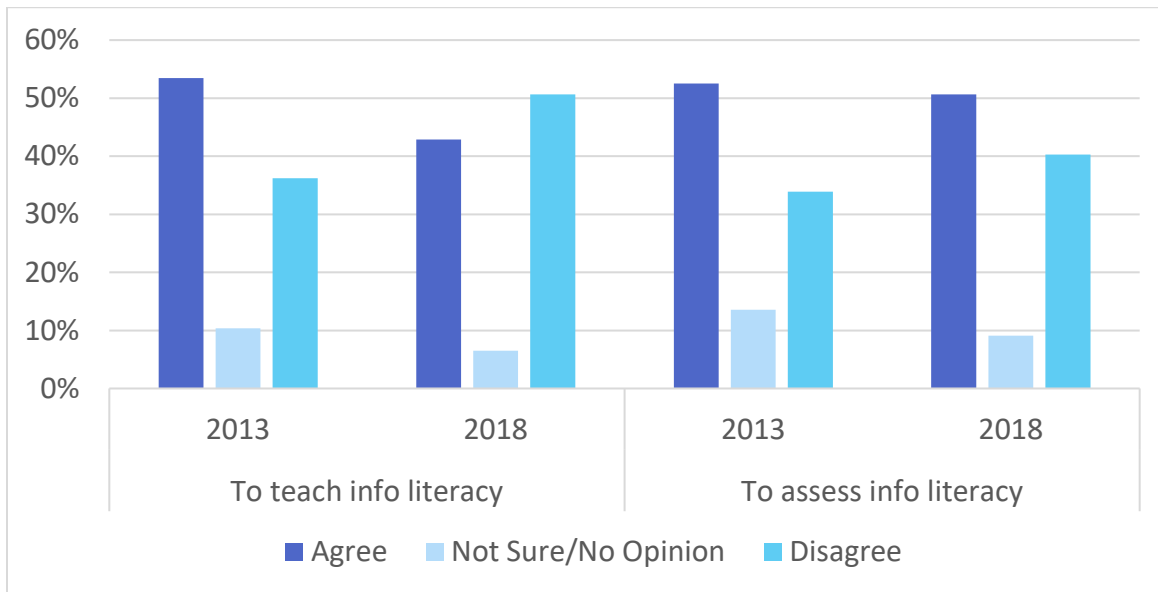
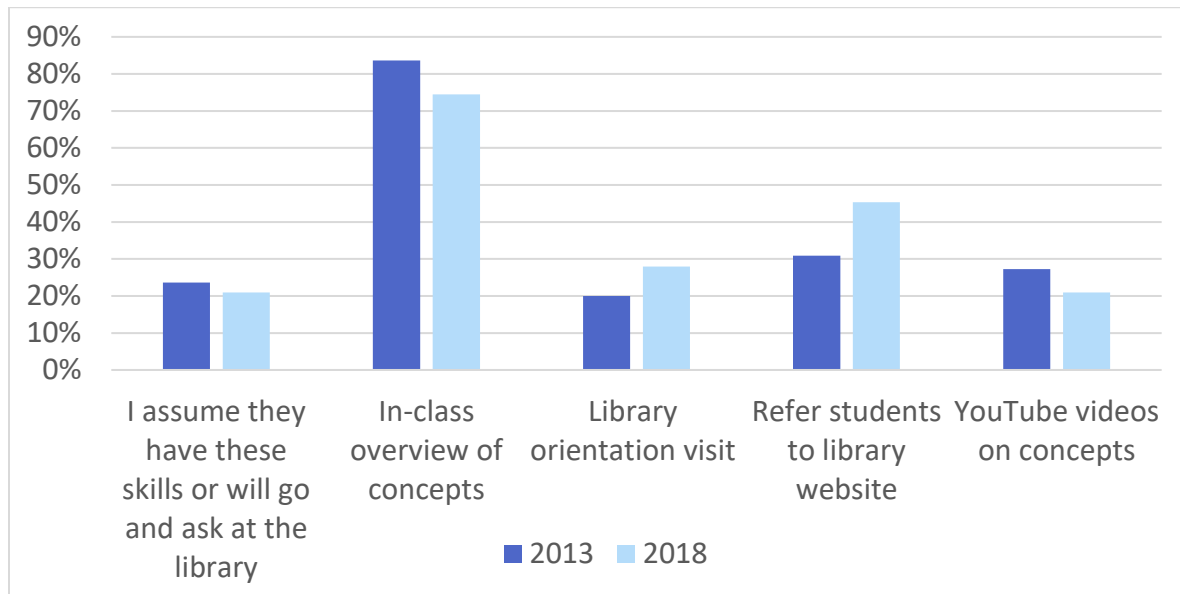


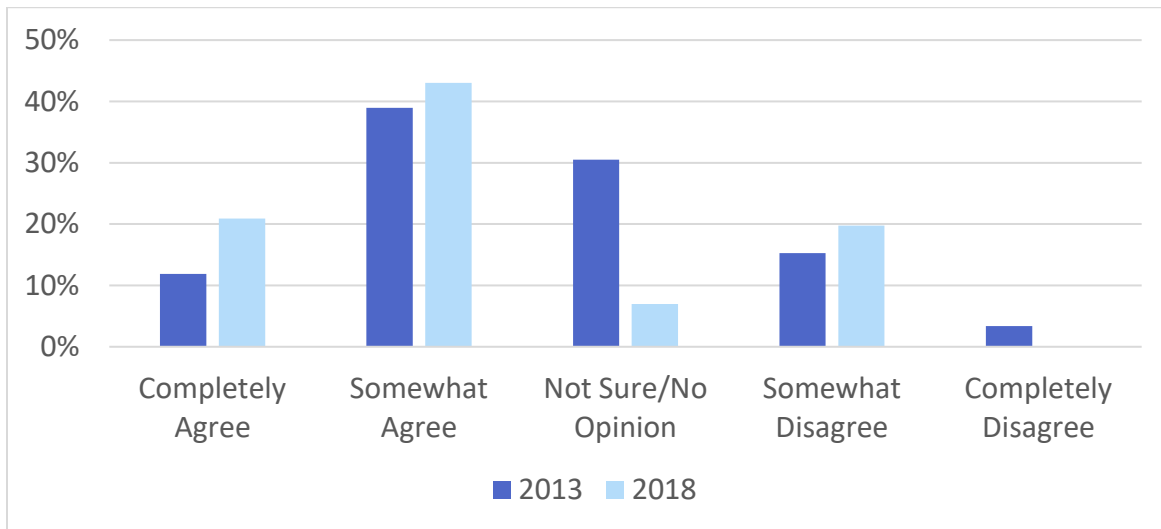
Figure 3 shows some of the methods instructors use to teach information literacy skills. There was an increase in use of library orientation visits and a decline in in-class overviews. Twenty percent of instructors continue to put the onus on students to seek the appropriate help if help is needed.

Figure 3: What methods do you use to teach information literacy skills?



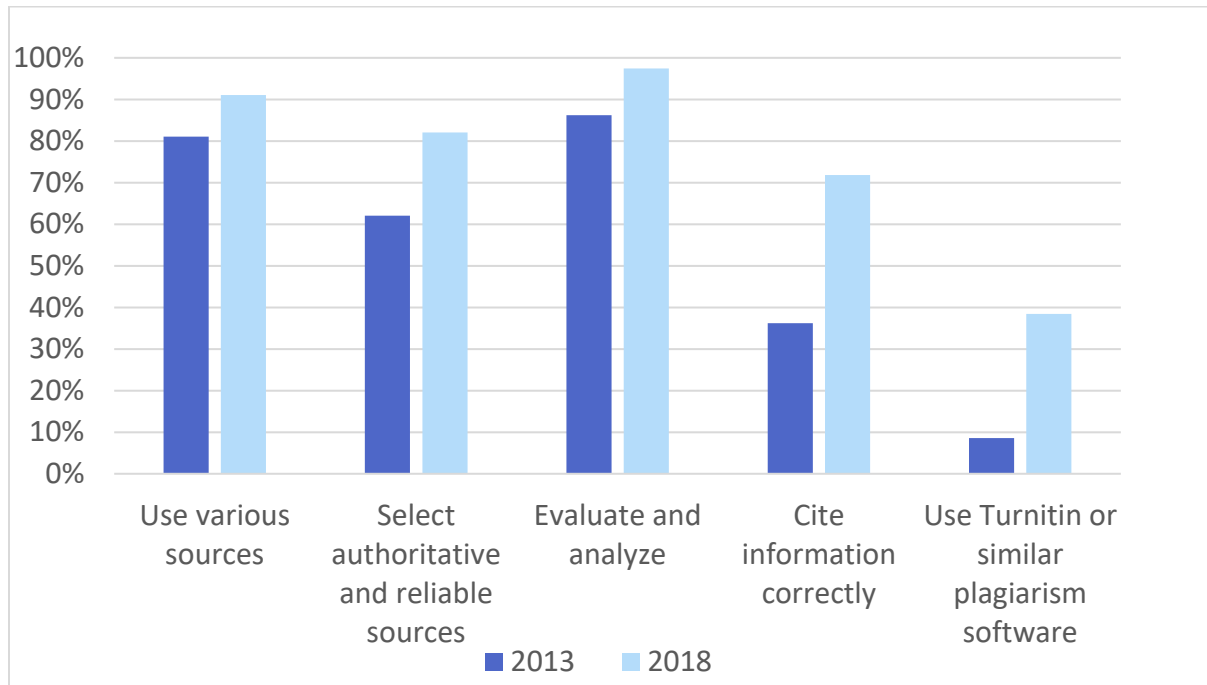
Part of the reason instructors do not feel students have enough information literacy is that students have trouble selecting credible sources. The percentage of instructors who agreed that students had issues with selecting credible sources increased from 51% to 64% (Figure 4). The increase in agreement with the statement coincides with a decrease in the percentage of faculty giving a neutral opinion.

Figure 4: Selecting credible sources is a challenge for my students.



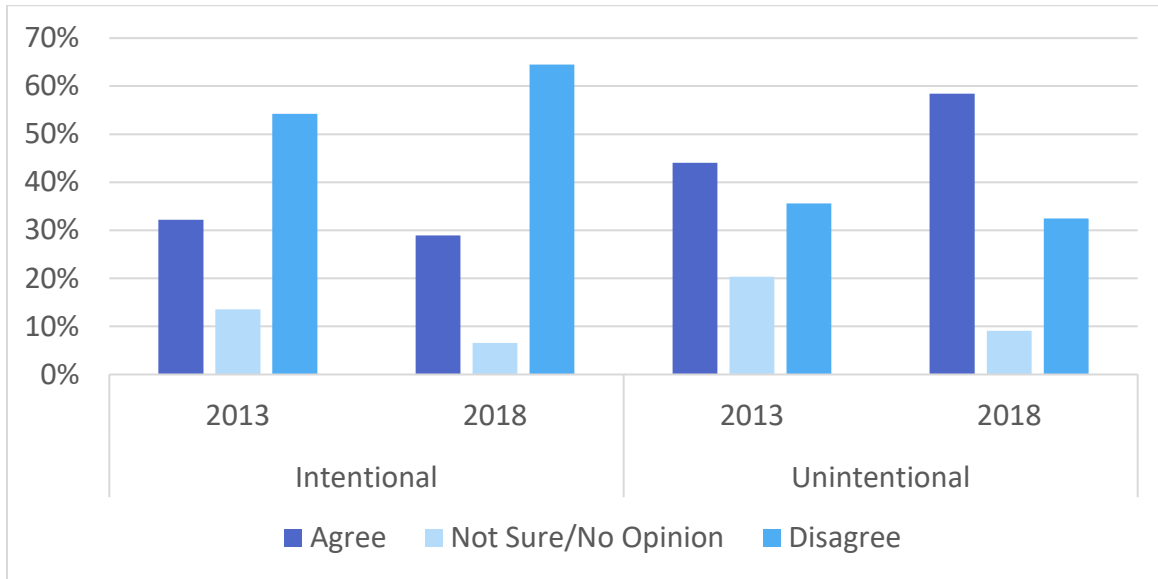
This lack of skills is a problem because instructors are requiring more usage of information literacy skills in their classrooms. There has been an increase in the percentage of instructors requiring students to utilize multiple sources (+10%), select authoritative sources (+20%), evaluate and analyze information (+11%), cite sources correctly (+36%), and to use plagiarism software (+30%). Figure 5 shows the growth in importance of these skills, including the relatively large increase in focus on proper citation and plagiarism.

Figure 5: In one or more assignments, do you require your students to use one or more of these information literacy skills?



The plagiarism aspect is interesting because Figure 6 shows that faculty are less inclined to think intentional plagiarism is a problem and more inclined to think unintentional plagiarism is a problem. This may be why more faculty are promoting the use of software that detects plagiarism.

Figure 6: Plagiarism is a problem in my class.



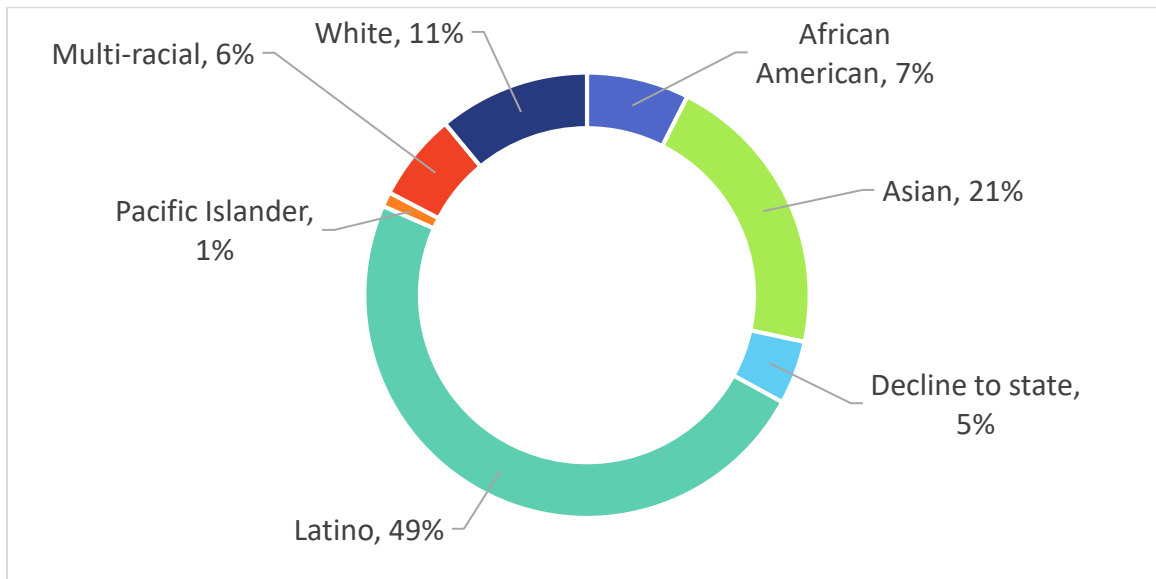
SAILS Assessment

Thirteen sections at El Camino College were selected to participate in the SAILS assessment during the Spring 2018 term. These sections had Student Learning Outcomes which mapped to the Information Literacy ILO. There were 282 students who completed the assessment, giving a 6% margin of error. In 2013, El Camino College administered the full SAILS assessment to students. In 2018, questions were removed if they were redundant or if they addressed skills that may not be applicable to most community college students. At least three questions from each of the eight skill sets identified by SAILS were maintained. These scores were aggregated to establish a skill score. Because the format is different, the results are not presented in the same way as the 2013 assessment, however, skills comparisons can still be made based on the selected questions.

The survey participants were partially representative of the college student body. Hispanic and White students were a similar to the student population (Figure 7). African-Americans were underrepresented and Asians were overrepresented in the sample group. In terms of units completed, 38% completed less than 15 units, while 36% completed more than 30 units. Over 63% of the respondents had completed less than 30 units, which was higher than the 52% from the 2013 sample.

For a list of how students performed by major, see Appendix A.

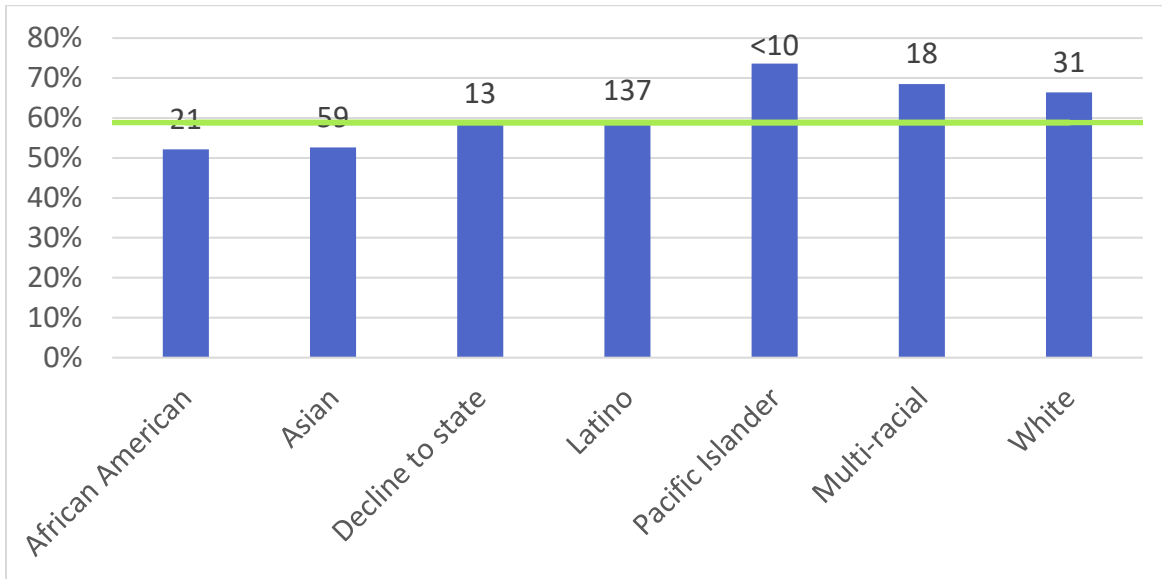
Figure 7: SAILS assessment respondents by ethnicity



Overall, students answered 59% of the information literacy questions correctly. In the 2013 scale, students scored closer to 50%, however, that scale includes several questions which the Assessment of Learning Committee SAILS review team considered irrelevant to community college students. That aspect needs to be considered for all comparisons to the 2013 SAILS assessment. The 59% average is represented by the horizontal line in Figures 8-10.

Figure 8 shows the overall score by race and ethnicity. Latinos, being the most populous group (N=137), set the average. White and multi-racial students perform above the average. African American and Asian students perform below the average.

Figure 8: Average score by race/ethnicity



Most of the students in the sample had completed less than 30 units at El Camino College. Those who completed less than 15 units performed below the average (Figure 9). Those who completed 16 to 30 units performed at the average. Those who completed more than 30 units performed above the average.

Figure 9: Average score by units completed

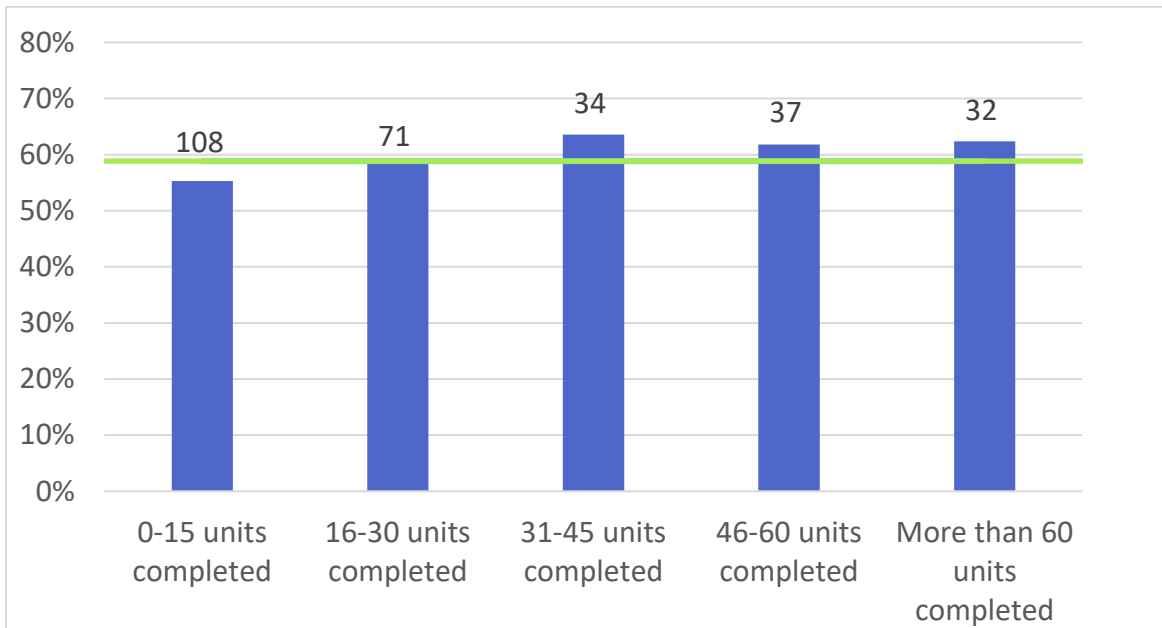
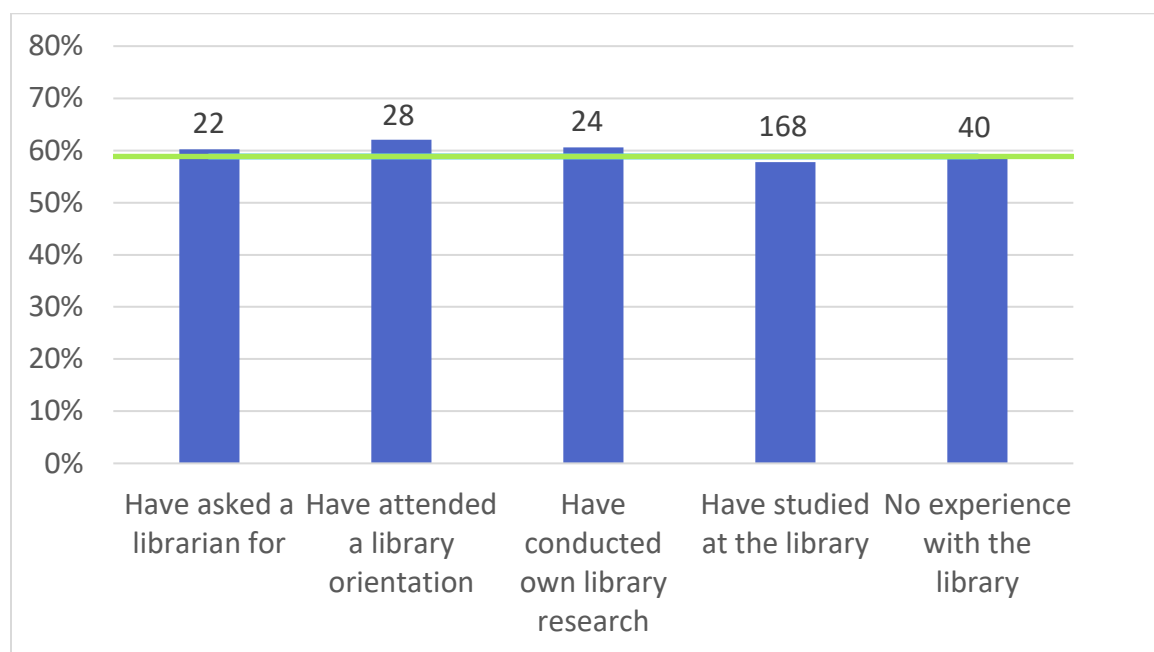


Figure 10 shows there is little difference in outcomes for students based on if and how they use the library. Most of the students had minimal to no contact with the library. There were 168 students who used the library to study and another 40 who never used the library. These students had the lowest outcomes but they were still close to the overall average. While merely going to and using the library space was not effective in aiding information literacy skills, students who attended a library class/orientation did perform better on the SAILS assessment.

Figure 10: Average score by library usage



There were eight skills assessed by the SAILS test. Table 1 shows the 2013 and 2018 averages for each skill, as well as the racial/ethnic group with the lowest and highest scores for each skill. As a reminder, in 2018 not all questions were utilized because many of the assessment questions were thought to be redundant or beyond the scope of what community college students are expected to know. Because of this, it is not surprising that the 2013 scores are lower than the 2018 scores for most skills. The skill with the lowest score average was “searching,” which evaluates how well students understand the techniques to filter potential sources to find relevant resources. The next lowest score is “understanding economic, legal, and social issues,” which relates to issues of plagiarism, freedom of speech, and copyright rules. The skill students performed highest was “selecting finding tools.” This skill relates to students’ ability to select the appropriate tools to search for appropriate sources.

Table 1: SAILS skillset average, with demographic information

SAILS Skillset	2013 Average	2018 Average	Ethnic Low	Ethnic High*
Developing a research strategy	50%	60%	African American 48%	Multi-racial 70%
Selecting finding tools	49%	74%	African American 67%	Multi-racial 78%
Searching	47%	46%	African American 40%	Multi-racial 54%
Using finding tools features	52%	63%	Asian 53%	Multi-racial 74%
Retrieving sources	48%	69%	Asian 61%	Multi-racial 81%
Evaluating sources	46%	55%	Asian 50%	White 71%
Documenting sources	45%	55%	African American 43%	Multi-racial 69%
Understanding Economic, legal, and social issues	46%	49%	African American 33%	White 60%

*Pacific Islanders were among the top in most categories, but were excluded in favor of the highest group with at least 10 respondents.

Conclusions

The measurement of ILO #4, Information Literacy took two perspectives- the faculty who teach it and the students who learn it. Faculty are requiring their students to make greater use of information literacy through various mechanisms in their assignments, but faculty also feel they have less time to teach those skills to students they increasingly think are lacking them. Despite the increasing need for students to have and utilize information literacy skills, one in five instructors still expect students to advocate for, and figure it out themselves.

For students, those who have completed more than 15 units are performing better than students who have completed less than 15 units at El Camino College. Though causation cannot be confirmed, this suggests the college is having a positive impact on ILO #4 as greater progress corresponds to higher scores. There are some equity issues as African American and

Asian students score 7% below the mean, while White students performed 7% higher than the mean. These differences are even more pronounced when specific skills are viewed independently.

Because the SAILS structure this round did not follow the previous administration, direct comparisons to previous outcomes could not be made. Therefore, it is difficult to determine institutional progress on this learning outcome. If SAILS is administered one more time, the college can better compare the outcomes.

Appendix A

Table 2: Overall score by academic major

Major	Student Count	Percent Correct
Agriculture/Environmental Studies	*	50%
Architecture	*	57%
Business	63	55%
Communications/Journalism	*	71%
Education	*	58%
Engineering/Computer Science	17	59%
General Studies	*	63%
Health Sciences	39	64%
History	*	46%
Humanities	*	71%
Law	*	67%
Other	51	57%
Performing & Fine Arts	*	56%
Science/Math	18	63%
Social Sciences/Psychology	24	59%
Undecided	30	58%

*Less than 10 identified students.