300-Level Information Literacy Report

1. Overview

The 300-level Information Literacy (IL) group was asked to provide recommendations for student learning. The suggestions in this report primarily concern student learning. However, the group also produced minor suggestions regarding methodology.

The IL group evaluated student performance on five metrics of Information Literacy: (1) Knowing, (2) Locating, (3) Evaluating, (4) Using, and (5) Sharing. The 300-level IL group members evaluated student papers using the "Information Literacy + Critical Thinking Rubric (Nov 5, 2021)."

2. Methods

The 300-level IL group was composed of faculty from each of the colleges/faculty units. They reviewed anonymized writing samples from English 315 and English 316 classes. An average score of 2.0 was deemed the minimum acceptable score.

We highlighted any average score falling below 2.0 as an area with which students struggled. We recommend students with scores falling below 2.0 develop skills in the "developing" and "highly developed" levels of the corresponding areas of Information Literacy.

3. Recommendations for Student Learning

Students were strongest in knowing and locating information. While students could improve in all five areas of Information Literacy—knows, locates, evaluates, uses, and shares, based on the data, the areas that needed the most work (average scores fell below 2.0) were, in order of weakest to strongest: evaluating, sharing, and using. Evaluating information was by far the most needed area for improvement, with 22% of students performing at the "emerging" level (1 or lower), the second lowest of four levels. This means that more than one in five students, almost one in four students, is not able to adequately evaluate the validity of a source of information. If a score of 2 is acceptable, the percentages of students in each area that scored below 2 are: uses (37%), evaluates (33%), shares (33%), knows (22%), and locates (11%). Students are demonstrating capabilities in the initial and emerging skills. We propose that the skills 300-level students are lacking and need to develop most with regard to Information Literacy are:

Evaluating

Developing:
- Identifies own and others' assumptions and several relevant contexts when presenting a position.

- Describes the relevance of the source in context of research topic/thesis/statement or question.

Highly Developed:
- Thoroughly (or systematically and methodically) analyzes one's own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.
- Describes the relevance of the sources with specific examples from the text in the context of research topic, thesis statement, or question.

Uses

Developing:
- Summarizes, paraphrases and/or quotes in order to integrate the work of others into their own.

Highly Developed:
- Lends summaries, paraphrases, and/or quotes in a manner that demonstrates a highly developed understanding of how the work of others can be integrated into one's own work.

Shares

Developing:
- Demonstrates a mature understanding of how context is important when using sources to support arguments.

Highly Developed:
- Respects the context and integrity of sources of information.

3.1 Information Literacy Skill Scores by Demographics

Student scores falling below 2.0 as a minimum acceptable standard in each of the five metrics of Information Literacy by demographic include gender, EIL, home region, and college/discipline. The areas we recommend for improvement are all those with average scores below 2. Note that all differences in average scores between groups are not statistically significant.

3.1.1 Gender

Average male student scores fell below 2.0 in Evaluating and Using information correctly. Male students scored higher than 2.0 in every other category. Female students scored above 2.0 in every category.

3.1.2 EIL status

The average students enrolled in EIL struggled in Evaluating, Using, and Sharing information, not meeting the minimum 2. All non-EIL students had higher than 2.0 scores in all areas. EIL students had higher than 2.0 scores in Knowing and Locating information.

3.1.3 Home region

Students from Asia struggled with Evaluating, Using, and Sharing information. Students from the Pacific (not including Hawai'i) struggled with Using and Sharing information. Students from Hawai'i scored above 2 in all five categories. Students from the US Mainland struggled with Evaluating information. Students from "Other" international regions (meaning other than the Pacific and Asia) struggled with Using information.

Students in all regions had average scores higher than 2.0 in all other metrics.

3.1.4 College

Students in Business and Government struggled with Evaluating, Using, and Sharing information, three of the five categories. Students in Education and Social Work struggled with Knowing, Evaluating, Using, and Sharing information, four of the five categories. These students were able to "Locate" information, but that was at the bare minimum acceptable level (2.0).

In an almost comedic turn of data, the "Undecided" majors had difficulty with "Knowing" (apropos), but scored 2 or higher in each of the other categories. However, they also had a bare minimum acceptable level of 2.0 for "Locating" information.

All other majors in all other categories had a higher than 2.0 score. We recommend students in Business/Government and Education/Social Work receive further training in the developing and highly developed skills in Evaluating, Using, and Sharing defined previously. Additionally, we also recommend students in Education/Social work develop the following skills in Knowing:

Developing

- Designs research objectives appropriate to assignment.
- Produces an appropriate thesis or argument, research proposal, or exploratory observation.
- Presents a position that is adequate and suitable for assignment.

Highly Developed

- Designs original, concise and focused research objectives appropriate to assignment.
- Articulates a well crafted thesis or argument, research proposal, or exploratory observation.
- Presents a well conceived position that displays mastery of material.

While the correlation between undecided students and lower scores in Knowing and Locating may be due to chance, it may be that if undecided students were taught information literacy skills in "Knowing" and "Locating" information, these skills could help them gather enough information to know how to decide on a major. It may be that they do not know where to find information on various disciplines.

4. Recommendations for Methodology

The inter-rater reliability could be improved with more time. This is to be expected, as each of the raters came from a different discipline and evaluates writing on very disparate discipline-specific standards.

It was suggested that the sample size was insufficient. It was also suggested that the current statistics are comparing students to each other without intra-student comparisons. An additional useful metric would be to look at the different scores for each individual student, to find out with which areas individual students struggled, as an individual might be stronger in one area than another.

Other demographic information that would help to know would be the student's year in school (Junior, Senior, etc.), to determine if it correlated to the IL score.

Also, some IL group members noted that the statistics are skewed by the fact that each faculty unit has a different number of students represented, some with very few.

Furthermore, it was noted that the standards for professional academic publications differ dramatically across disciplines. For example, in the sciences paraphrasing findings from an experiment is the normal practice; quotations are never used. However, the ability to select peer-reviewed publications of reproducible research and to read, understand, and accurately represent their conclusions is essential. Whereas, it was pointed out that in English quotations are common practice. A requirement in the rubric to use direct quotations from sources is not appropriate or accurate for IL skills in technical science writing.

Cautions

Individual student abilities in Information Literacy may vary significantly within a demographic. One must caution against stereotyping students, as although the average scores of a demographic group might fall below 2.0 in a metric of IL, individual students who happen to be that demographic may score higher. It is also a risk, and we caution against assuming a student will have lower IL skills based on their demographics. Furthermore, none of the

differences in averages between demographics from this study were statistically significant. This means that if the population averages were the same, then differences in averages of the magnitude found in this study could have reasonably occurred by chance.