

# General Education Assessment 2015-2016

## INFORMATION LITERACY

### Overview Information for Information Literacy Assessment

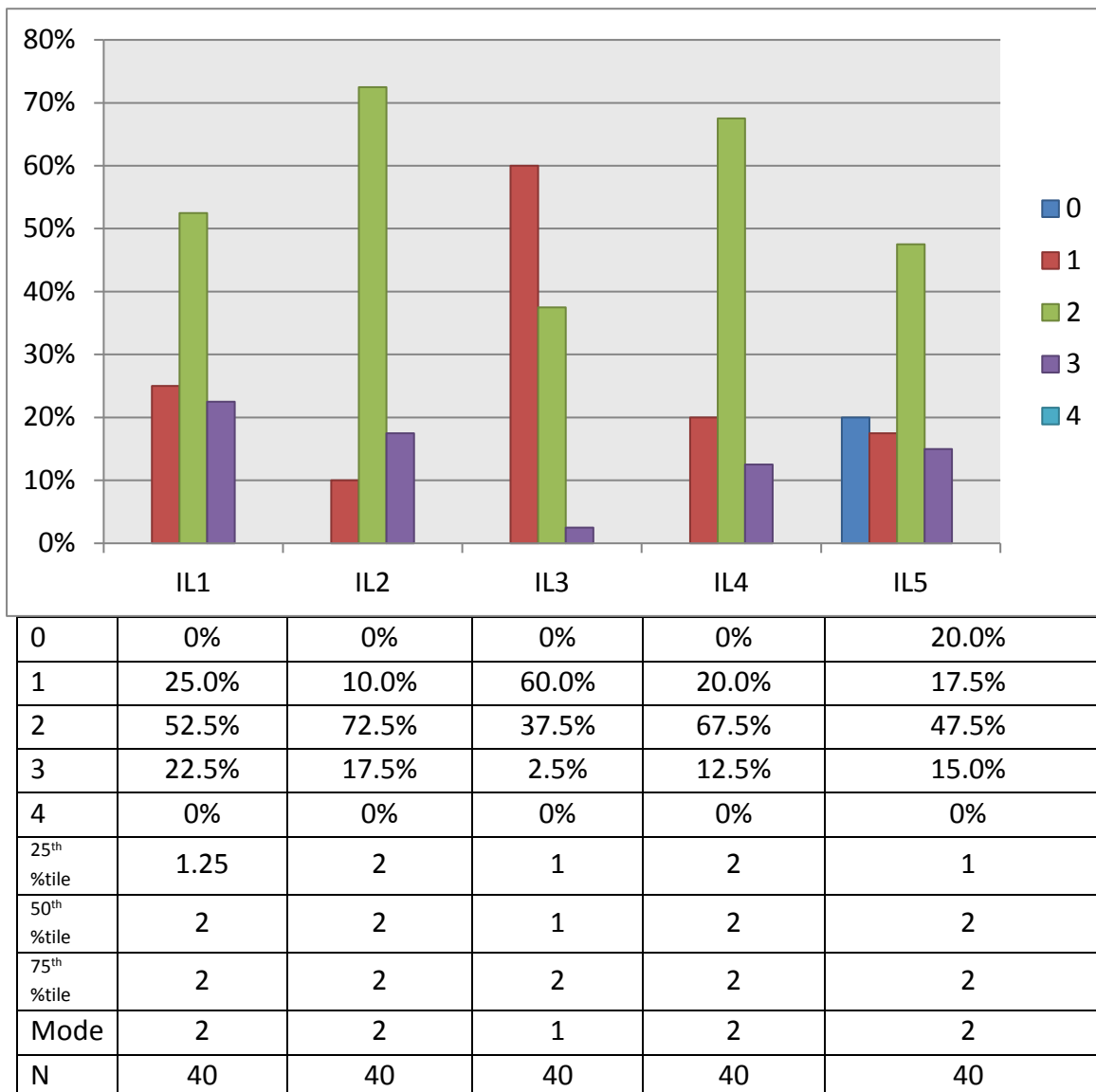
- Total number of courses: 7 with a total of 17 sections
  - LOWER: 1 course, EVSL 195, with 10 sections
  - UPPER: 5 courses, EDN 334, ARH 476, INT 490, RTH 459, and SOC 490, with 1 section each; 1 course, SWK 321, with 2 sections
- All work products were collected during the Fall Semester of 2015 and Spring Semester of 2016
- Types of work products collected: group papers, content papers, group project essays, group research proposals, research papers, and term papers
- Learning goal assessed: Information Literacy
- University Studies components represented: Capstone Course, Information Literacy
- Rubric used: AAC&U Information Literacy rubric
- Total number of faculty scorers: 6
- Total number of work products sampled and scored: 108 (40 lower-division and 68 upper-division)
- Number of students contributing to each work product
  - LOWER:
    - 1 student contributing = 1
    - 3 students contributing = 12
    - 4 students contributing = 24
    - 5 students contributing = 2
    - 6 students contributing = 1
  - UPPER:
    - 1 student contributing = 64
    - 3 students contributing = 4
- Total number of multiple-scored work products: 17
  - LOWER: 9
  - UPPER: 8

## Findings

### Lower Division Results

The below table shows the applicable Information Literacy scores for work sampled from lower-division courses during Fall 2015 and Spring 2016.

*Lower Division Score Distribution without N/A or blanks*



All rubric dimensions were determined to be applicable to all lower-division assignments. There were no level-four scores for any dimension and no level-zero scores for dimensions IL 1 through IL 4. IL 5 Use Information Ethically and Legally was the only dimension with any zero scores. IL 1 Determine Extent of Information Needed had the

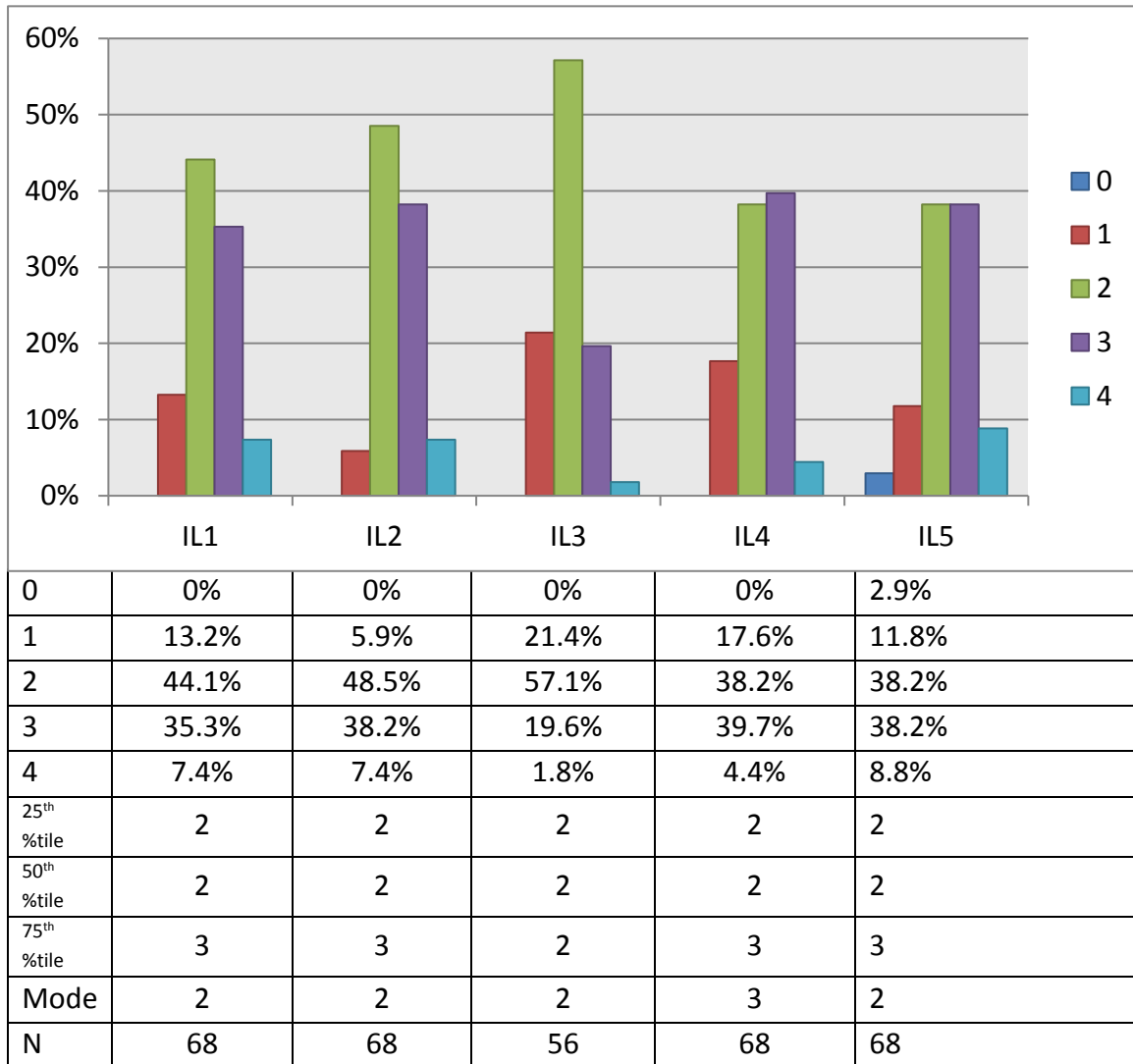
highest percentage of level-three scores. IL 3 Evaluate Information Critically scores tended toward the lower end, with the highest percentage of level-one scores. The majority of IL 2 Access Needed Information scores and IL 4 Use Information Effectively scores were a level two.

With the exception of dimension IL 3 Evaluate Information Critically with IL 1 Determine Extent of Information Needed, IL 2 Access Needed Information, and IL 4 Use Information Effectively, the scores from all rubric dimensions were significantly correlated

#### *Upper Division Results*

The following table shows the applicable Information Literacy scores for work sampled from upper-division courses during Fall 2015 and Spring 2016.

Upper Division Score Distribution without N/A or blanks



Not all rubric dimensions were determined to be applicable to all upper-division assignments; IL 3 Evaluate Information Critically was not applicable for all assignments from upper-division courses. Similar to the lower-division work, though, there were no level-zero scores for dimensions IL 1 through IL 4. IL 5 Use Information Ethically and Legally was the only dimension with any zero scores and it was also the dimension with the highest percentage of level-four scores. IL 1 Determine Extent of Information Needed, IL 2 Access Needed Information, and IL 3 Evaluate Information Critically all had higher percentages of level-two scores than any other scores. IL 4 Use Information Effectively and IL 5 Use Information Ethically and Legally both had about equal percentages of level-two and level-three scores.

Scores from all dimensions were correlated at the 0.01 level of significance.

### *Analysis Across Course Levels For Information Literacy*

#### *Demographic and Preparedness Findings*

A number of the work products collected were group assignments, which makes comparisons at the student level not possible for those work products. However, for the work products that were completed by only one student, there was a statistically significant difference between the mean scores of male vs. female students for IL3 such that work from males was scored higher than work from females. There were no statistically significant differences between the means, medians, and score distributions of ethnicity groups or honors vs. non-honors students.

To compare scores on single-student work products based on number of credit hours completed, two methods were used. First, students were grouped into four categories, those having completed 0-30 credit hours, 31-60 credit hours, 61-90, and over 90 credit hours. Comparison of means (using ANOVA), medians (using Independent Samples test of medians) and distributions (using the Mann-Whitney U statistic) showed a statistically significant difference between the groups for IL3 and IL5 such that seniors scored the highest followed by juniors, sophomores, and finally freshman. Looking at Spearman rho correlation coefficients, the total hours a student had completed was significantly positively correlated with IL1 (.267\*), IL2 (.346\*\*), IL3 (.454\*\*), and IL5 (.375\*\*). Furthermore, ACT scores were significantly positively correlated with IL5 (.600\*). Lastly, SAT Verbal scores were significantly positively correlated with IL1 (.422\*) and IL5 (.459\*\*) while, SAT Math scores were significantly positively correlated with IL5 (.376\*).

#### *Comparisons Between Criteria*

Comparisons were made across a number of criteria. Work was collected from courses taught by both tenure-line faculty and part-time faculty; there was no significant difference in scores on work collected from the two types of faculty. Additionally, there was no difference in scores between upper- and lower-division across all dimensions. There was a difference in scores, however, when comparing scores from the various university studies components, with scores from courses in the Capstone Course/Information Literacy category highest, followed by scores from courses in only the Information Literacy component.

#### *Interrater Reliability for Information Literacy*

There were a few common papers scored between each group of faculty scorers so that interrater reliability could be assessed (17 out of 108, or 15.7% of the total number of papers). The following table summarizes the reliability measures.

Dimension	N	Percent Agreement	Plus Percent Adjacent	Krippendorff's alpha
IL 1 Determine Extent of Information Needed	17	23.5%	94.1%	.5017
IL 2 Access Needed Information	17	41.2%	82.4%	.3555
IL 3 Evaluate Information Critically	17	17.6%	47.1%	-.4143
IL 4 Use Information Effectively	17	35.3%	100%	.2423
IL 5 Use Information Ethically and Legally	17	23.5%	70.6%	.1396

Interrater reliability is a measure of the degree of agreement between scorers, and provides information about the trustworthiness of the data. It helps answer the question-would a different set of scorers at a different time arrive at the same conclusions? In practice, interrater reliability is enhanced over time through scorer discussion, as well as through improvements to the scoring rubric. Percent Agreement, Percent Agreement Plus Adjacent, and Krippendorff's Alpha measure scorer agreement. The UNCW benchmark is .67 for Krippendorff's Alpha. See [A Note on Interrater Reliability Measures](#) for a more complete discussion of these statistics and the determination of benchmark levels.

Comparing the results of the reliability indices for this study to the benchmark of .67 for Krippendorff's Alpha, there are no dimension of the rubric that meets these standards. Looking at percent agreement plus adjacent (that is, the scores that were within one level of each other), we find that all dimensions had at least 70% of scores in agreement or within one level of each other for all dimensions except IL 3, which had a lower percent agreement plus percent adjacent percentage of 47.1%.

### Discussion

The following table below shows the percent of work products scored at a level two or higher and the percent of work products scored at a level three or higher for each dimension, for lower-division and upper-division courses.

Information Literacy: Lower-Division Courses		
Dimension	% of Work Products Scored Two or Higher	% of Work Products Scored Three or Higher
IL 1 Determine Extent of Information Needed	75.0%	22.5%
IL 2 Access Needed Information	90.0%	17.5%
IL 3 Evaluate Information Critically	40.0%	2.5%
IL 4 Use Information Effectively	80.0%	12.5%
IL 5 Use Information Ethically and Legally	62.5%	15.0%
Information Literacy: Upper-Division Courses		
Dimension	% of Work Products Scored Two or Higher	% of Work Products Scored Three or Higher
IL 1 Determine Extent of Information Needed	86.8%	42.6%
IL 2 Access Needed Information	94.1%	45.6%
IL 3 Evaluate Information Critically	78.6%	21.4%
IL 4 Use Information Effectively	82.4%	44.1%
IL 5 Use Information Ethically and Legally	85.3%	47.1%

Both lower-division and upper-division courses had a minimum of 40% of papers scoring at least a two across all dimensions, though upper-division courses had higher percentages of papers scoring above a two and above a three for all dimensions.