

General Education Assessment 2015-2016

DISCUSSION AND RECOMMENDATIONS

Discussion

Four of the eight university learning goals, Foundational Knowledge, Second Language (Spanish), Inquiry (including Data Analysis), and Information Literacy, were assessed during AY 2015-2016 using course-embedded assignments. The following two tables separate the results by course level (lower division or upper division) and then lists the percentage of scores at either two and higher (for lower) or three and higher (for upper) for each dimension. The Foundational Knowledge and Spanish reading scores are not reported here as they were not scored via rubric, only as correct/incorrect.

It is important to note that, while a level one score indicates the benchmark at which a freshman is expected to perform and a level four score indicates what a graduating senior should demonstrate, levels two and three do not necessarily correspond to sophomore and junior class designation. Rather, score levels two and three indicate developmental milestones that student work is expected to achieve as students move toward satisfying degree requirements.

Percentage of work products from lower-division courses scoring a two or higher

<i>Dimension</i>	<i>% of Work Products Scored Two or Higher</i>
SPN 2 Organization (n=228)	99.6%
SPN 3 Vocabulary: Variety (n=255)	99.6%
SPN 1 Content (n=218)	99.5%
SPN 4 Vocabulary: Proper Use (n=188)	98.4%
IL 2 Access Needed Information (n=40)	90.0%
SPN 5 Grammar (n=276)	87.3%
IN 2 Existing Knowledge, Research and/or Views (n=44)	86.4%
IL 4 Use Information Effectively (n=40)	80.0%
DA 3 Reasoning (n=63)	77.8%
IL 1 Determine Extent of Information Needed (n=40)	75.0%
IN 5 Conclusions (n=44)	75.0%
IN 3 Design Process (n=44)	70.5%
IL 5 Use Information Ethically and Legally (n=40)	62.5%
IN 1 Topic Selection (n=44)	60.0%
DA 1 Summarizing and Analyzing Data (n=210)	60.0%
IN 4 Analysis (n=44)	56.8%
DA 2 Explanation of Results (n=210)	53.4%
IL 3 Evaluate Information Critically (n=40)	40.0%
IN 6 Limitations and Implications (n=44)	NA

Looking at the above table of the percentages of scores at a level two or higher for work collected from lower-division courses, 17 of the 19 dimensions have at least 53% of student work scoring at a level two or higher, and there are over half of the rubric dimensions (11 of 19) with at least 75% of scores at a two or higher. Of those 11, five are from the five-part Spanish writing rubric, three are from the six-part Inquiry rubric, two are from the five-part Information Literacy rubric, and one is from the Inquiry Data Analysis rubric. This indicates that student work was not of uniform quality across all dimensions of a learning goal (with the exception of Spanish writing, with very close percentages across all dimensions). This is to be expected, and illustrates the benefits of analytical (rather than holistic) rubrics. Looking more closely at the dimensions that had the lowest percentages of scores of two and higher, many of these dimensions call on higher-order skills such as analyzing, evaluating, and explaining. One Inquiry dimension, IN6 Limitations and Implications, was determined to not be applicable for the assignments scored.

The next table shows the same dimensions as above, but for upper-division work with the percentage scoring *three and higher*.

Percentage of work products from upper-division courses scoring a three or higher

Dimension	% of Work Products Scored Three or Higher
IN 6 Limitations and Implications (n=44)	80.0%
IN 5 Conclusions (n=44)	50.0%
IL 5 Use Information Ethically and Legally (n=68)	47.1%
IL 2 Access Needed Information (n=68)	45.6%
IL 4 Use Information Effectively (n=68)	44.1%
IL 1 Determine Extent of Information Needed (n=68)	42.6%
IN 3 Design Process (n=44)	36.4%
IN 4 Analysis (n=44)	36.4%
IN 1 Topic Selection (n=44)	31.8%
IN 2 Existing Knowledge, Research and/or Views (n=44)	29.5%
IL 3 Evaluate Information Critically (n=68)	21.4%

Of the 11 dimensions for which work was scored from upper-division courses, one dimension, IN 6, had a majority of student work scored at a level three or higher. In terms of the percentage of work scoring a three or higher for upper-division work, dimensions from the same rubric have similar percentages with a three exceptions. These are IL 3 which had fewer work products scoring three or higher than the other IL dimensions, and IN 6 and IN 5--both of which had substantially more work products scoring three or higher than the other IN dimensions.

Comparing the results shown in both tables, IN 6 Limitations and Implications had the highest percentage of work products scoring a three or higher for upper-division work, while this dimension was determined not applicable for lower-division work. Four of the lowest

percentages of work scoring a two or higher for lower-division are also in the lowest percentages of work scoring a three or higher for upper-division work. These are IN 3 Design Process, IN 1 Topic Selection, IN 4 Analysis, and IL 3 Evaluate Information Critically.

Scorer Feedback on Process

Scorers were asked to provide feedback on the process several months after the scoring events via likert-scale and an open-ended question.

Respondents mostly agreed or strongly agreed that process was an appropriate way to assess students on the UNCW learning goals and is valuable in improving student learning (86.7%), though one scorer responded neutrally on this question and one scorer responded “disagree” to this question. Most scorers (93.3%) would recommend participating in the process to their colleagues. One scorer responded neutrally to this question.

Scorers were asked if their participation in the scoring event process impacted their teaching practice during the Fall 2016 semester. Most respondents agreed or strongly agreed with this (73.4%). Four respondents indicated a neutral response to this question. No respondents disagreed with the statement.

Scorers were provided opportunity to provide comments or suggestions via an optional open-ended question. These comments are included below:

- I am very happy I attended the event in May. It was very helpful for me and I learned quite a lot.
- In scoring, I have gained a better understanding of university learning outcomes and how to work toward these within the courses I teach.
- It is a great experience and I always learn something about my teaching and about how to properly assess student work products.
- I appreciate how faculty-friendly and thoughtful the process was, including time to read and review the student papers on our own schedule, following the initial orientation / training.
- Thoughtfully conceived and well executed.

Interrater Reliability

The following table combines the interrater reliability findings from all 2015-2016 studies, arranged in descending order by percent agreement.

Interrater reliability measures

Dimension	Percent Agreement	Percent Agreement Plus Percent Adjacent	Krippendorff's Alpha
DA 1 Summarizing and Analyzing Data (n=210)	75.70%	99.50%	0.647
SPN 4 Vocabulary: Proper Use (n=188)	58.40%	88.70%	0.3407
SPN 1 Content (n=218)	56.10%	92.90%	0.2617
SPN 2 Organization (n=228)	52.60%	87.40%	0.2293
SPN 5 Grammar (n=276)	50.00%	80.30%	0.3626
SPN 3 Vocabulary: Variety (n=255)	46.80%	82.90%	0.2851
IN 4 Analysis (n=30)	46.70%	80.00%	0.3717
IL 2 Access Needed Information (n=17)	41.20%	82.40%	0.3555
IN 3 Design Process (n=30)	40.00%	83.30%	0.2381
DA 3 Reasoning (n=63)	38.10%	81.10%	-0.125
IL 4 Use Information Effectively (n=17)	35.30%	100%	0.2423
DA 2 Explanation of Results (n=210)	35.20%	77.10%	0.188
IN 5 Conclusions (n=30)	33.30%	86.70%	0.2939
IN 1 Topic Selection (n=30)	30.00%	63.30%	-0.0869
IL 1 Determine Extent of Information Needed (n=17)	23.50%	94.10%	0.5017
IL 5 Use Information Ethically and Legally (n=17)	23.50%	70.60%	0.1396
IN 2 Existing Knowledge, Research and/or Views (n=30)	23.30%	90.00%	0.129
IL 3 Evaluate Information Critically (n=17)	17.60%	47.10%	-0.4143

No dimensions have pairs of scores meeting the benchmark for Krippendorff's alpha of 0.67. Paired scores on 14 of the 18 dimensions were in agreement or within one score level for at least 80% of papers. IN 1 and IL 3 have the lowest number of paired scores in agreement or within one score level.

Follow-up on previous recommendations

Year of Critical Thinking

Based on results from the General Education Assessment process, UNCW's Learning Assessment Council voted to endorse a year-long effort during AY 2015-2016 to focus on Critical Thinking (CT), one of UNCW's eight Learning Goals and a UNC System general education core competency. This effort engaged campus and local business stakeholders in order to raise the visibility of CT in University Studies. A core team of representatives from University Studies, CTE, Student Affairs, and the Career Center oversaw this effort. A number of events were implemented for the Year of Critical Thinking initiative:

- “Year of Critical Thinking” booth at the Student Involvement Carnival
- Critical Thinking lawn Puzzles
- “Year of Critical Thinking” banners on Chancellor’s Walk
- “Thinking Skills: How to Recognize and Resolve Critical Issues”, Larry Chester lecture
- "What Every Professor Should Know About Critical Thinking" and "The Science Of Critical Thinking In Higher Education”, two Dan Willingham lectures (37 and 56 attendees)
- “Critical Thinking in the Disciplines” multidisciplinary panel discussion
- “Creative and Critical Thinking” panel/roundtable
- Critical Thinking book circles, Center for Teaching Excellence (30 attendees over 5 meetings)
- “Integrating Critical Thinking: Assignments that Work” Center for Teaching Excellence event (23 attendees)
- “Assignments in Critical Thinking from the Professional Schools” panel/roundtable (13 attendees)
- “Emotional Obstacles to Critical Thinking” panel/roundtable

Changes to General Education Assessment Scoring Process

Based on feedback from faculty scorers, the General Education Assessment office implemented changes to the scoring session logistics during the 2015-2016 academic year. These changes were intended to increase flexibility and time to complete the scoring tasks. The changes included allowing scorers to score the work products outside of the scoring event, and providing the work products in an electronic format, rather than on paper. Based on observations from this office, some scorers had difficulty scoring work electronically; several (though a minority) requested paper copies of the work in lieu of the electronic files. In general, scores were returned in a timely manner, though one set of scores was lost in transit.

New recommendations

Based on 2015-2016 assessment findings, the Learning Assessment Council made the following recommendations:

1. In order to get information on the types of activities being used in Information Literacy courses and their effects on student abilities, the Learning Assessment Council recommends that a questionnaire be created about course information literacy learning activities to be part of information collected from courses selected to be included in Information Literacy assessment.

2. In support of general education activities and the transition to new student learning outcomes (SLOs) for the Information Literacy component of University Studies, the Learning Assessment Council recommends that the University Studies Advisory Committee issue a statement discussing the changes to the Information Literacy component of University Studies, and, with support from Randall Library librarians, provide resources to help faculty address the new SLOs, especially IL 2 Analyze information to evaluate its currency, authority, accuracy, relevance, and purpose.