Assessment of UF 100 Annotated Bibliographies

Instruction Team | Albertsons Library | Boise State University

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THE UF 100 LIBRARY CURRICULUM

The Albertsons Library collaborates with the Foundational Studies Program to provide library instruction to students enrolled in our University Foundations courses.

Library instructors join each Intellectual Foundations 100 (UF 100) discussion section to lead either two 45-minute or one 75-minute course-integrated, active-learning session(s).

LIBRARY SKILLS ASSESSED AND SCORED

Three librarian instructors assessed and scored 56 annotated bibliographies that students created while working on UF 100 papers or presentations during Spring 2015. The students' bibliographies were rated on a 1-4 scale as "unsatisfactory" (1) "developing" (2) "good" (3) or "exemplary" (4). See attached rubric.

Students were scored on their abilities in the following three categories:

1. **Identifying Peer-reviewed Journal Articles:** Was the student able to identify a peer-reviewed journal article?
2. **Evaluating Information:** Was the student able to apply the CRAAP criteria when evaluating information?
3. **Collecting and Organizing:** Was the student able to collect and organize a variety of appropriate source types?

EXECUTIVE SUMMARY

- Participants were 23% first-year students, 61% second-year, 13% third-year, and 4% fourth-year.
- The average student score was about "3," or "Good," (out of 4) in all three assessment categories: identifying peer-reviewed journal articles, evaluating information, and collecting/organizing.
- 16 students (29%) achieved a "4," or "Exemplary," in all three assessment categories.
- 8 (14%) students achieved an average overall score in the "1," or "Unsatisfactory" range.
- About 50% of the students (29 of 56) received a score of "3" or higher in every one of the three assessed categories. The remaining 50% of students scored below "3" in at least one category (i.e., either "developing" or "unsatisfactory" on at least one skill).

ACADEMIC LEVELS OF STUDENTS

The annotated bibliographies we reviewed were selected at random. However, later examination of student authors by academic level revealed the following differences in the proportions of freshmen, sophomores, juniors, and seniors represented in our sample, compared with all UF 100 students:

Academic Level	Sampled Students	All UF 100 Students
Freshman	23%	56%
Sophomore	61%	30%
Junior	13%	10%
Senior	4%	3%

Table 2: Comparison of sample population to student enrollment by class level

As Table 2 shows, sophomores were overrepresented in our sample, and freshmen were correspondingly underrepresented. Although a comparison of assessment scores by academic level does not reveal significant differences in achievement between freshman and sophomore students, the fact that the assessed samples were not proportionally representative introduces some additional uncertainty into the results.

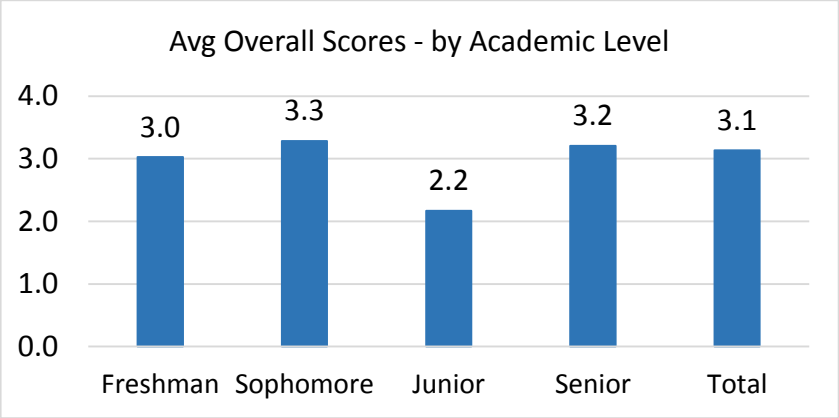

Figure 4: Average overall scores by academic level

Accordingly, we may change sampling practices for future assessments. For example, we may pull samples that are proportionally representative of academic levels. Or we may pull samples from freshman students only. Assessing freshman students only may help us tie student skill levels more directly to the UF 100 library curriculum rather than to other instruction or experiences.

SUMMARY AND ANALYSIS

Overall Results

The average student score was about "3," or "Good," in all assessment categories. Students who achieved a score of "3" in all categories could (1) identify a peer-reviewed journal article, (2) apply at least two CRAAP criteria to a source, and (3) accurately collect data from more than one appropriate source type.

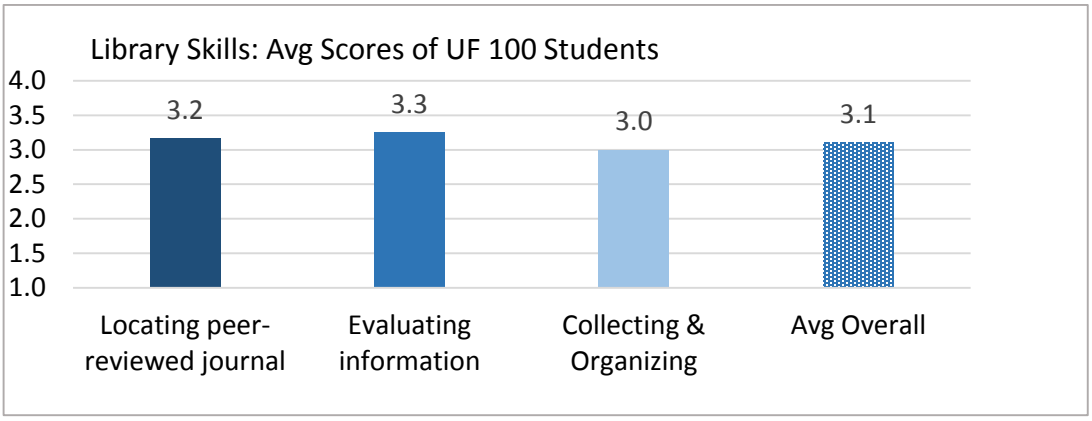

Figure 1: Average scores of UF 100 students

Distribution of Scores

About 50% of the students (29 of 56) received a score of "3" or higher in every one of the three assessed categories. The remaining 50% of students scored below "3" in at least one category (i.e., either "developing" or "unsatisfactory" on at least one skill).

The following graph shows the distribution of average overall student scores across our rubric's rating scale, from "unsatisfactory" to "exemplary":

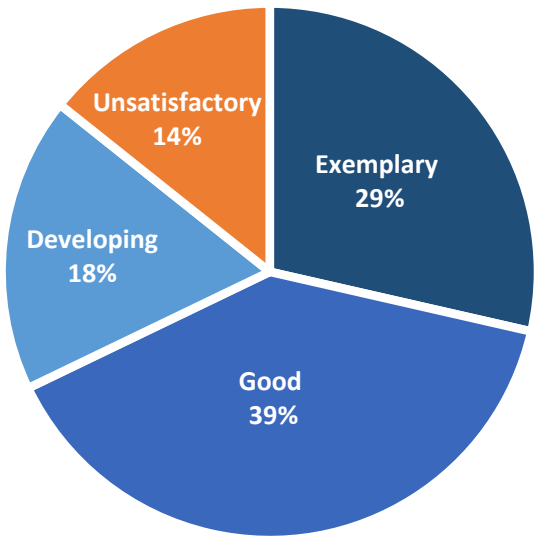

Figure 2: Distribution of average overall student rubric scores

Exemplary: 16 students (29%) achieved a "4" in all three assessment areas.
Good: 22 students (39%) achieved an average overall score in the "3" range (3.0-3.9).
Developing: 10 (18%) students achieved an average overall score in the "2" range (2.0-2.9).
Unsatisfactory: 8 (14%) students achieved an average overall score in the "1" range (1.0-1.9).

Underperforming Students

The 18 students who received average overall scores below a "3" (those who fell into the "developing" or "unsatisfactory" groups on chart 2) had the following average scores in each assessed category:

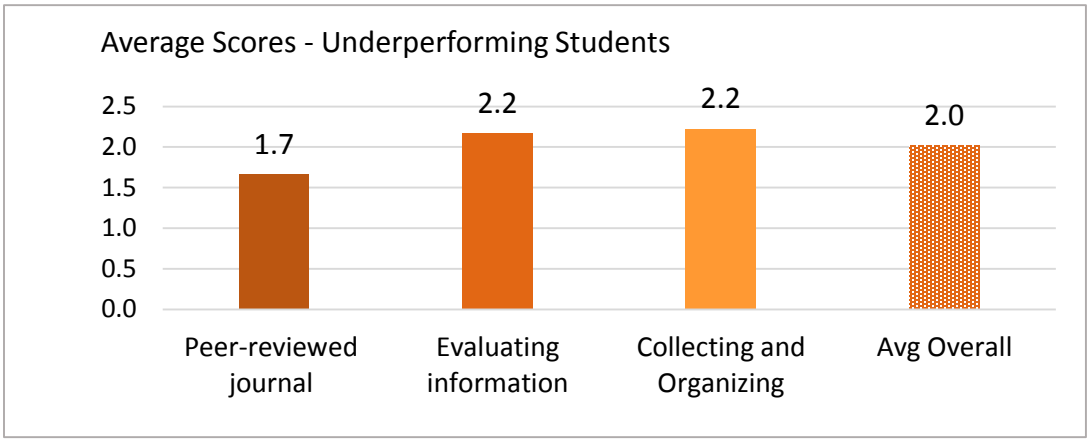

Figure 3: Average scores of underperforming scores

When examining only those students who underperformed the group as a whole, the "Locating a peer-reviewed journal article" category was scored -0.5 points lower, on average, than the other two categories.

In other terms, underperforming students received a "1" in the "Locating an academic article" category at about twice the rate they received a "1" in other categories. (Of the 18 underperforming students represented in figure 3, 12 received a "1" in the "Locating an academic article" category. In contrast, 7 students in this group received a "1" in the "CRAAP Criteria" category and 5 students received a "1" in the "Collecting and Organizing" category.)

While we can draw no conclusions based on the small 18-student subgroup examined here, this difference suggests that struggling students may find using Academic Search Premier to identify peer reviewed articles particularly challenging.

NORMING

To ensure consistent use of the attached rubric among the three librarian reviewers, a norming session was held before assessment began. The following table lists the average scores given by each reviewer and shows that average overall ratings were similar.

	Average Scores by Reviewer in Each Category						
	Locating peer-reviewed journal article		**Evaluating information**		**Collecting & Organizing**		**Overall**
Rater 1	3.0		3.4		2.8		3.1
Rater 2	3.3		3.0		3.2		3.2
Rater 3	3.4		3.1		3.2		3.2

Table 1: Comparison of reviewer scores

CONCLUSIONS AND FUTURE STEPS

This assessment suggests that the majority of UF 100 students are acquiring the basic library skills they will need for future coursework. On average, the scores students received suggest they have "good" basic library skills, which is our target for this developmental level. Most students were appropriately applying knowledge covered during library sessions to their UF 100 research.

However, almost 1/3 of the assessed students scored below the overall group average. These students received a "developing" or "unsatisfactory" score on one or more of the assessed skills. It is recommended that the UF 100 faculty refer these students to the library staff for additional research skill building.

Potential changes to assessment instrument:

- *Sampling practices*. We will pull samples from freshman students only, since this is the target audience. Assessing freshman students only may help us tie student skill levels more directly to the UF 100 library curriculum rather than to other instruction or experiences.
- *Frequency*. Administer assessment each semester in order to see patterns across semesters among freshman.

Appendix A

LIBRARY SKILLS ASSESSMENT RUBRIC

	Exemplary (4)	**Good (3)**	**Developing (2)**	**Unsatisfactory (1)**
IDENTIFYING PEER-REVIEWED ARTICLES: After searching in Academic Search Premier, students will identify a peer-reviewed article and email one of the articles, with its citation, to themselves.	Demonstrated clear understanding of peer-reviewed academic journal articles. Identified at least one in her/his bibliography.	Demonstrated understanding of peer-reviewed concept. Included a peer-reviewed source that is not from an academic journal.	Demonstrated understanding of articles. Included an article that is from a source other than a peer-reviewed academic journal.	Demonstrates no understanding of peer-reviewed academic journals. No attempt to identify or include a peer-reviewed academic journal article.
EVALUATING INFORMATION: Students will be able to apply the CRAAP criteria when evaluating information.	Applied at least two CRAAP criteria to two or more sources. Each time, the CRAAP criteria were applied to the same source.	Applied at least two CRAAP criteria to one source. The CRAAP criteria was applied to the same source.	Included CRAAP terminology but were unable to apply the criteria.	No attempt to include CRAAP terminology or apply CRAAP criteria.
COLLECTING AND ORGANIZING: Collecting and organizing Evidence/Data/Reasons [pertains to academic research]	Data collection represents a variety of all appropriate, accurate source types.	Adheres to and clearly follows research practices with respect to thoroughness and accuracy of data collection.	Data collection represents only one source type. Source types may not all be accurate.	No attempt to follow research practices.