

**Assessment of Student Learning Outcomes
Degree Program Report**

College: College of the Sciences

Department: Not Applicable

Program: Primate Behavior & Ecology

Degree: Bachelor of Science

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Academic Year of Report: 2014-15

1. What student learning outcomes were assessed this year, and why?

We assessed PBE BS SLO 6: “PBE students will be proficient users of information technology as it relates to primatology” to test an assessment plan we implemented in 2014-15. Based on previous years’ observations that students did not understand where and how to find peer-reviewed sources, we designed a two part assessment: 1) students complete a library workshop and write an essay that is supported by 3 peer-reviewed sources in ANTH 313 Primate Social Behavior (a course taken shortly after declaring the major); and 2) in ANTH 412 Long Term Primate Studies (a course taken in junior or senior year and by graduate students), students are required to find ten peer reviewed sources and identify in an annotated bibliography each study’s research question, methods, and major findings. This SLO relates to CWU Strategic Plan Outcome 1.1.1: “Students will achieve programmatic learning outcomes.”

2. How were the student learning outcomes assessed?

A) What methods were used?

Students enrolled in ANTH 412 Long Term Primate Studies were assessed using direct measures. Students’ performance and knowledge were both assessed. Each was asked to note whether she or he had completed a library instruction module in ANTH 313 Primate Social Behavior, and then each student’s annotated bibliography submitted in ANTH 412 was scored from a rubric to compare 1) overall performance on the assignment for those receiving library instruction compared to those who did not, and 2) to see whether students learned how to find, read, and comprehend peer-reviewed literature in primatology. There were two criteria of mastery: 1) each student (100%) completed a library workshop in ANTH 313 Primate Social Behavior prior to enrolling in ANTH 412, and 2) $\geq 75\%$ of students earned $\geq B$ (4 or 5 on 5-point scale) for their ability to identify the research question, describe the study methods, and identify the study outcomes for each peer-review article annotated.

B) Who was assessed?

The 14 students enrolled in ANTH 412 Long Term Primate Studies during winter quarter 2014 were all assessed. The course included 13 undergraduates (4 juniors and 9 seniors) and 1 graduate student.

C) When was it assessed?

The assessment links a skill acquired in the freshman or sophomore year (completion of library training workshop on peer review while enrolled in ANTH 313 Primate Social Behavior) to a more extensive writing assignment focused on peer-reviewed works that occurs in ANTH 412 Long Term Primate Studies. The assessment occurs in the last two years of the undergraduate students' degree.

3. What was learned?

Few students (28%) completed the library workshop on peer-reviewed works while enrolled in ANTH 313 Primate Social Behavior (Table 1). This appears to be related to instability in the PBE curriculum attributed to sabbatical and medial leaves and faculty resignations: although 313 was taught every fall quarter, it was taught twice on-line and three times by different faculty who did not use the same class activities. However, it does not appear that completing 313 activities resulted in a higher overall score on the 412 bibliography compared to those who did not receive the training. It is perhaps noteworthy that the aggregated annotated bibliography score combines a number of bibliography elements including content, format, and writing. The aggregated score may be too insensitive to detect differences, if any, made by the library training preparation.

	Took Library Training Module	Did Not Take Library Training Module	Standard of Mastery Met? [100% of students complete library module]
Overall Score on Bibliography Assignment	36.75 (N=4 or 28%)	35.70 (N=10 or 71%)	No

Table 1. ANTH 412 Long Term Primate Studies student performance on annotated bibliography assignment.

Students met some but not all standards of mastery for their ability to understand peer-reviewed literature (Table 2). They could find appropriate sources of information and were able to describe in their own words the methodology being used to explore the problem, but they were less capable when it came to identifying and articulating in their own words the research question and major findings.

	No. of Students Earning 4 or 5 for this Item on Rubric	No. of Students Earning 1, 2, or 3 for this Item on Rubric	Standard of Mastery Met? [\geq 75% of students earn B (4 or 5)]
Identified peer-reviewed journal articles for bibliography exercise (1-5)	93% (13/14)	7% (1/14)	Yes

Student's ability to identify and describe in her own words the research question addressed in the article (1-5)	71% (10/14)	29% (4/14)	No
Student's ability to identify and describe in his own words the research findings described in the article (1-5)	50% (7/14)	50% (7/14)	No
Student's ability to identify and describe in her own words the methodology used in article (1-5)	78% (11/14)	22% (3/14)	Yes

Table 2. ANTH 412 Long Term Primate Studies student performance on rubric assessing ability to identify research question, research methods, and study results in peer-reviewed literature.

4. What will the department or program do as a result of that information?

The program will do two things with the 2014-15 assessment information. First, an ongoing search for a tenure track faculty member (completed in winter/spring 2016) will enable stabilization of the curriculum even in the face of faculty sabbatical leave. This will increase the probability that ANTH 313 Primate Social Behavior will be taught by the same instructor, and that assessment plans will be implemented and followed through into high-level courses.

This assessment will include continued use of the library workshop on peer-reviewed sources, but with a clearer link of this information to information gathered from the upper-level rubric. For upper-level courses, we will assess students enrolled in ANTH 412 and in ANTH 416 Pongid Behavior, to ensure every student is assessed when she declares and completes the PBE major.

In the two upper-level courses, students will be taken through a “dissection” of a journal article, during which the class will together identify the major components of the article and critique the authors’ findings. This will better prepare each student for the graded activity (bibliography and/or paper) that requires them to synthesize primary literature in the field of primatology. The new faculty member will work with the program director to ensure consistency in the assessment process in both of the upper-division courses.

Finally, the rubric used in ANTH 412 and ANTH 416 will be more directly linked to the library workshop and essay that occurs in ANTH 313. A clearer linkage between courses will provide a clearer picture of the skills students are developing as each progresses from the major’s start to graduation.

5. What did the department or program do in response to previous years' assessment results, and what was the effect of those changes?

At the last assessment meeting, PBE program faculty noticed that we had not formally assessed student ability to understand primary literature in the field, and we had not yet implemented an assessment activity that followed students from the beginning to the end of the degree. Faculty had noticed that ANTH 313 students were unable to find and use peer-reviewed article information to support a point. More advanced students did not perform much better, and graduate advisors noticed that graduate students were not conducting comprehensive searches for literature reviews. This suggested that students might not be learning this skill. We set out to integrate this into the undergraduate curriculum and to assess our efficacy at teaching this. We did not change our assessment plan or methods, but this assessment activity marks our first time collecting “flanking” data points from entry level and more advanced PBE students.

6. Questions or suggestions? Contact Tom Henderson (henderst@cwu.edu) or Bret Smith (bpsmith@cwu.edu)