



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

College: College of Applied Studies  
Program: Arctic Studies  
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Department: Arctic Studies  
Degree: Bachelor of Science  
Academic Year of Report: 2013-14

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

Our department assessed three student learning outcomes this year:

1. Students will demonstrate competence in written communication. This goal is related to CWU's Strategic Outcome 1.1.1 "Students will achieve programmatic learning outcomes." This goal was chosen because our department wanted to know whether we needed to increase the number of writing and presentation assignments in classes to give students practice.
2. Students will be able to construct energy-efficient igloos. This goal relates to CWU's Strategic Outcome 3.1.1 "Sustain participation by faculty, students, and staff in quality research, scholarship, and creative expression." This goal was chosen because student's igloos have traditionally not been able to be habitable all winter – particularly February. Thus, we want to see if our students can build igloos that can handle the needed requirements in the field.
3. Students demonstrate dispositions for employment in the Arctic. This goal is related to CWU's Strategic Outcome 1.1.1 "Students will achieve programmatic learning outcomes." This goal was chosen because our department wanted to know what areas are weak from the alumni perspective. Students in the program seem to rate commitment to living in the Arctic as a problem. We want to see if this is true and consistent for alumni.

**2. How were they assessed?**

**A) What methods were used?**

Outcome 1, "students will demonstrate competence in written communication," was evaluated through the course ARC 455 in a student capstone essay. Senior essays were reviewed using a three-area (mechanics, content, grammar), three-point (below expectations, met expectations, exceed expectations) rubric designed to assess competence in written communication. This is a direct measure of student knowledge and performance. The minimal level of mastery is that at least 80% of students earn at least a "met expectations" rating for each of the areas of the rubric.

Outcome 2, “students will be able to construct energy-efficient igloos,” was evaluated through an igloo construction project. The igloo will be evaluated based on national standards for energy-efficient igloos, created by the International Arctic Studies Association (IASA). These standards are pass/fail and relate to the areas of igloo safety, warmth, and coloring (snow-like). This is a direct measure of student knowledge and performance. The minimal level of mastery is to have 90% of students pass with relation to each of the 3 areas (igloo safety, warmth, and coloring).

Outcome 3, “students will demonstrate dispositions for employment in the Arctic,” was assessed through a survey of alumni in the spring quarter. The online survey was designed to determine the degree to which alumni felt they were prepared (customs, attitudes, commitment) for employment in the Arctic. This is an indirect measure of attitude. A minimal expectation is that 90% of alumni will report agreement that they were prepared with relation to three different dispositional or attitudinal areas (customs, attitudes, commitment).

### **B) Who was assessed?**

For outcome 1, 20 students from the fall semester and 20 students from the spring semester were evaluated. For outcome 2, all students enrolled in ARC 476, Igloo Internship, were evaluated (N = 30). For outcome 3, all alumni from 2013 were surveyed (N = 25).

### **C) When was it assessed?**

Outcome 1 was assessed in ARC 455 fall and spring quarters, outcome 2 was assessed in ARC 476 in the spring quarter, and outcome 3 was assessed in spring quarter.

## **3. What was learned?**

1. Students will demonstrate competence in written communication.

### Written and Oral Communication Summary Table

Areas	Below Expectations	Met Expectations	Exceeds Expectations
Mechanics	10	20	10
Content	1	10	29
Grammar	1	5	34
Total	12 (10%)	35 (29%)	73 (61%)

Overall, students performed well on the capstone essay. The area of greatest strength related to grammar while the weakest area was clearly regarding mechanics. In fact, both the content and grammar areas were rated at least at

the “met expectations” level by more than 97% of students. However, mechanics was rated “below expectations” for 25% of students. This is below the mastery level we set for at least 80% of students to be above this mark.

Students did not meet our expectation for this outcome.

2. Students will be able to construct energy-efficient igloos.

Igloo Construction Summary Table

Igloo Areas	No Pass	Pass
Safety	0	30
Warmth	10	20
Coloring	1	29
Above 50°	15	15

Although students constructed igloos that were safe and colored well – it seems they did not do as well when it came to keeping the inside warm. A third of the igloos tested failed to meet basic standards of warmth construction. This seems to be corroborated by the fact that half the igloos could not maintain a minimum 50° core temperature. Both of these areas (warmth & core temperature) are well below our expectation of 90% of the students passing these standards.

Students did not meet our expectation for this outcome.

3. Students will demonstrate dispositions for employment in the Arctic.

Alumni Survey Summary Table

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My Arctic studies program has contributed to me enjoying a variety of Arctic customs (eating whale blubber, etc.)	1	0	0	24	0
2. I am self-reflective of my arctic related actions.	0	0	2	20	3
3. I show commitment to the Arctic professional community by regularly attending Arctic study conferences.	1	1	0	20	3
Total	2 (3%)	11 (1%)	2 (3%)	64 (85%)	6 (8%)

Alumni tended to report being reflective (this is a positive attitude) and commitment to the arctic professional community. This was reflected by more than 90% agreeing that the arctic studies program enhanced self-reflection and commitment. In addition, 96% of alumni reported that the program contributed to them enjoying various arctic customs.

Students met our expectation for this outcome.

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

1. Written communication: Based on the results of this year's assessment our department will try to improve the writing of our students in a few ways. The first improvement will be the use of the rubric in earlier coursework – providing feedback to both students and faculty concerning progress as well as writing strengths and weaknesses. The department will also try to improve the number of papers written in each course by a minimum of one. Special attention will be given so that mechanics is a bigger focus of the grade for writing assignments. All of these strategies are expected to increase the overall writing quality of our students.

2. Construct energy-efficient igloos: Based on the results of the igloo building, our department will work to create a course that deals with igloo engineering and design. Currently, this content is spread out over several courses and is not given as much focused attention as the department faculty would like. Thus, the creation of an igloo engineering course would do much to assist students. In the meantime, (while the course is being developed and going through curriculum process) the department will emphasize engineering principles in ARC 333 as this class is taken in the quarter prior to enrollment in ARC 476 (Igloo internship).

3. Dispositions for employment: Students have met our disposition mastery level. Thus, we feel that no major programmatic changes are needed. However, we will continue to emphasize these dispositions in our courses. In addition, a group of faculty is developing a disposition rating sheet to use for students prior to graduation to provide students feedback. We think this may help us guide students that may have an aversion to cold away from our program.





We discussed the results during a regularly scheduled faculty meeting (March 27) and with our departmental student advisory group (April 1). We also presented to our external advisory group on April 12 for feedback. Our chair met with the Dean once (March 16), and as a department we voted on the changes at our April 12 department meeting. We will discuss the changes as related to coursework in our fall faculty meeting to assure compliance with rubric use and improve faculty training. Also, we will announce our new igloo design course to our advisory groups through our departmental newsletter this summer.

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

Based on last year's report, we have spent additional time requiring students to engage in Arctic service learning opportunities. By having students work with sick Arctic terns and harpooned whales, we felt it would improve their aversion to the cold and improve their commitment to the field. Based on this year's results, it seems to have had a positive impact.

A five-year trend analysis of the selected outcomes demonstrates that prior initiatives (course creation, curriculum review, professional development, and recruiting) have overall had the desired result of improvement of student learning.

Our program student learning outcome feedback ratings have been slowly improving. We need to focus future improvement on how previous year assessment results were used to improve current student learning outcomes.

	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	Trend lines
Outcomes	2.4	2.6	2.4	2.1	2.5	3.2	
Methods	1.7	2.1	2.3	2.4	2.8	2.7	
Results	2.8	2.5	2.4	2.6	3.3	3.5	
Feedback/ Program Improve.	0.8	0.9	1.3	1.5	1.9	1.8	
Previous Year Use	1.3	1.6	1.8	1.7	1.7	1.6	