Biology Department College-Wide Assessment – Communicate Effectively - 2013

In 2011, Salt Lake Community College adopted a plan for assessing our College-wide Learning Outcomes (CWLO) and General Education Learning Outcomes. This plan can be reviewed at the following link.

https://www.slcc.edu/assessment/overview.aspx

The CWLO's include

1. Acquire substantive knowledge in their intended major.
2. Communicate effectively.
3. Develop quantitative literacies necessary for their chosen field of study
4. Think critically and creatively.
5. Develop the knowledge and skills to be a community engaged learner and scholar.
6. Develop the knowledge and skills to work with others in a professional and constructive manner.
7. Develop computer and information literacy

Beginning in 2012, Departments developed specific activities and rubrics to assess the communication CWLO. The Biology Department selected an assignment that was and is part of the BIOL1610/1615 (College Biology I) course requirements. The assignment requires students to choose, read and write a critical summary of a peer-reviewed scientific article. Below is the rubric that was developed in collaboration with the SLCC Assessment Department. The intent of this rubric is to measure established criteria that assesses whether or not students are learning to communicate effectively.

Also shown below are the results for Spring Semester 2013. A total of 637 students completed the assignment and were subsequently scored using the rubric. Eighty-two percent or more of the students that completed this assignment met or exceeded expectations in all criterions used to assess whether or not they were able to communicate effectively via written communication. That is, the majority of students scored at least a 2 or 3 in each category. The area that students tended to score the lowest was in citing or documenting evidence appropriately. The area in which students scored the highest was demonstrating content knowledge and/or understanding biology (analysis).

Scoring Rubric for BIOL 1615 Paper					
Criteria	**Unacceptable (0 Points)**	**Below Expectations (1 point)**	**Meets Expectations (2 points)**	**Exceeds Expectations (3 Points)**	**Score**
Demonstrates Content Knowledge and Understanding of Biology	The student demonstrates little or no content knowledge and Biology understanding.	The student demonstrates insufficient content knowledge and Biology understanding.	The student demonstrates sufficient content knowledge and Biology understanding.	The student demonstrates an especially strong grasp of content knowledge and Biology understanding.	
Demonstrates Understanding of Scientific Writing	The student demonstrates little or no understanding of Scientific Writing.	The student demonstrates insufficient understanding of Scientific Writing.	The student demonstrates sufficient understanding of Scientific Writing.	The student demonstrates an especially strong understanding of Scientific writing.	
Structure and Organization	The structure and organization of the paper are completely improper.	The structure and organization of the paper are insufficiently proper.	The structure and organization of the paper are sufficiently proper.	The structure and organization of the paper are exceptional and the project has been placed into an e-portfolio.	
Evidence is Documented and Cited Appropriately	The student does not cite or document evidence.	Citations and documentation are insufficient.	Citations and documentation are sufficient.	The student cites and documents evidence in an exceptional manor.	
Demonstrates and Uses Proper Mechanics	The student does not use acceptable writing mechanics.	Writing mechanics are low quality.	Writing mechanics are of sufficient quality.	Writing mechanics are exceptional.	
				TOTAL (out of 15)	

2013 - Biology Department Communication Assessment Results					
SLCC CWLO Assessment Category	**Analysis**	**Content Development**	**Genre and Discipline-specific Conventions**	**Credible Evidence**	**Control of Syntax and Mechanics**
Biology Department Assessment Category	**Demonstrates Content Knowledge and Understanding of Biology**	**Demonstrates Understanding of Scientific Writing**	**Shows Proper Structure and Organization**	**Evidence is Documented and Cited Appropriately**	**Demonstrates and Uses Proper Mechanics**
3	384 (60.3%)	351 (55.1%)	357 (56.0%)	294 (46.1%)	311 (48.8%)
2	215 (33.8%)	224 (35.2%)	198 (31.1%)	226 (35.5%)	212 (33.3%)
1	38 (5.9%)	62 (9.7%)	63 (9.9%)	100 (15.7%)	114 (17.9%)
0	0	0	19 (3.0%)	17 (2.7%)	0
Total	637	637	637	637	637