



Course SLO Assessment Report - 4-Column

El Camino College

El Camino: Course SLOs (NSC) - Earth Sciences (Geography, Geology, Oceanography)

Course SLOs	Assessment Methods & Standard and Target for Success / Tasks	Results	Action & Follow-Up
<p>El Camino: Course SLOs (NSC) - Earth Sciences (Geography, Geology, Oceanography) - ECC: GEOL 36 - Geology Laboratory of Coastal California - SLO #1 Basic Knowledge - Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.) (Created By El Camino: Course SLOs (NSC) - Earth Sciences (Geography, Geology, Oceanography))</p> <p>Course SLO Assessment Cycle: 2015-16 (Fall 2015)</p> <p>Input Date: 11/08/2013</p> <p>Course SLO Status: Active</p>	<p>Assessment Method Description: An objective exam given at the beginning and end of the semester.</p> <p>Assessment Method: Exam/Test/Quiz</p> <p>Standard and Target for Success: 4 - extensive knowledge of the basic concepts (85% or above on the "objective" exam) 3 - considerable knowledge fo the basic concepts (above 70% on the "objective" exam) 2 - some knowledge of the basic concepts (above 55% on the "objective" exam) 1 - little or no knowledge of the basic concepts (below 55% on the "objective" exam)</p> <p>At least 70% of the students will achieve a level 3 or level 4 on the assessment.</p> <p>Related Documents: BK-F13-Assessment-Geol36-SLO2013 assessment Geol 30.36 questions.doc BK-F13-Assessment-Geol36-SLO2013 assessment Geol 30.36 questions.doc</p>	<p>12/01/2013 - The data from the pre-test and post-test scores show a significant improvement in student performance on the test of their basic knowledge of the subject. At the beginning of the semester, about 63% of the students did not have "considerable" knowledge of the subject matter (a score of 70% or more). At the end of the semester, about 26% of the students had "extensive" knowledge of the subject matter (a score of 85% or more) and about 47% had "considerable" knowledge (score of 70% or more). Even though the remaining 26% of the students did not achieve "considerable" knowledge as we might have hoped, most of them (about 2/3) went from the "little or no" knowledge category (below 55%) to the "some" knowledge category (more than 60%), showing improved knowledge of the subject matter." There wasn't as much improvement overall as I have seen in other SLO assessments of other classes because this class was half geology majors, so there was not as much general ignorance of the subject matter during the pre-test.</p> <p>Since some students cannot improve by 20% or more because they achieved a score of 80% or more on the pre-test, their "potential gain" defined as (Post Test Score – Pre-Test Score) / (100% - Pre-Test Score) might be a better measure of student improvement than their gain. In other words, the "potential gain" shows the percentage of "wrong answers" on the pre-test that became "right answers" on the post test. By this measure, 31% of students showed no improvement (a gain of less than 10%). This was mostly due to the fact that the class was 50% geology majors who did so well on the pre-test.</p> <p>The questions which students got wrong most often were: Pre-Test: Questions 15 and 18, but none of these were missed as much during the post-test Post-test: Questions 12 and 18. Question 9 interestingly had almost the same number wrong on the pre-test, which indicates that these concepts were not stressed as much in my class as much as other professors' classes.</p> <p>In general, I was pleased by the results, and think that</p>	<p>12/15/2014 - Questions 12 and 18 are some of the questions that students got WRONG most often on the POST TEST: (these questions were mineral versus element and metamorphic rocks). There are others, like questions 1, 7, and 30, that could use more improvement. I have thought of strategies for conveying this material better in the future. For example, one strategy would be to stress these concepts in my LAB class more, since I already do so in my lecture class. Another strategy could be to add these questions to the lab manual, since it has barely been updated in five years.</p> <p>Action Category: Teaching Strategies</p> <p>12/01/2013 - Based on the data, I decided to CHANGE THE ASSESSMENT next time I conduct it: Questions 3, 6, 13, and 19 are some of the questions that students got RIGHT most often on the POST TEST in the questions pertaining to the type of hazard the San Andreas is, what palte we are on, what is granite, and the causes of sandstone). We decided to ELIMINATE these QUESTIONS because we appear to be covering the material well.</p> <p>We decided to ADD SOME NEW QUESTIONS so that the assessment covers additional course material and/or probes students' understanding in more depth: (topics for the new questions include more global warming and field trip questions.)</p> <p>Based on the data, I decided to CHANGE THE ASSESSMENT. We decided to RE-WRITE QUESTIONS to</p>

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		<p>they are good for a student population with a wide range of reading and test-taking skills and backgrounds in science who are taking an introductory, general education science course. The results do not indicate a major need for changes. However, I may be able to improve instruction on specific topics.</p> <p>Although the pre-test scores were high because so many of the students were geology majors, I do not think the test should be made harder. Since the class is a general ed class and is designed for non-science majors, too, I think the SLO assessments should reflect that.</p> <p>Standard Met? : Yes</p> <p>Semester and Year Assessment Conducted: 2013-14 (Fall 2013)</p> <p>Faculty Assessment Leader: Joe Holliday</p> <p>Faculty Contributing to Assessment: T. James Noyes</p> <p>Related Documents: BK-F13-Data-Geol36-SLO2013 Assessment Scores Geo 36 sec 1299.xls BK-F13-Data2-Geol36.pdf </p>	<p>make it clearer, correct errors in the questions, and/or better diagnose students' understanding: I will re-write question 9 and 15 to be clearer. I did improve some questions from the last SLO assessment, such as questions 7 (contours) and 20 (granite), so that they showed the true learning instead of test-taking skills.</p> <p>Action Category: <u>SLO/PLO Assessment Process</u> </p>