



CHAPMAN UNIVERSITY

General Education Learning Outcomes Assessment Report for Quantitative Inquiry (7QI) May 2014

Degree Program Information	
Academic Degree Program (<i>Major</i>)	Quantitative Inquiry (7QI)
Degree (<i>BS, BA, BFA, MFA, MBA, etc.</i>)	
Department/ School	General Education
Number of students currently enrolled (as majors) in the program:	
Contact Person	
Name (<i>Person coordinating program's assessment effort</i>)	Joe Slowensky
Title	Vice Chancellor for Institutional Effectiveness and Faculty Affairs, ALO
E-mail address	jslowens@chapman.edu

Assessment Data Summary for Website (Optional):

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Learning Outcome	
I. Process:	
Student Learning Outcome	Creates sophisticated arguments supported by quantitative evidence and can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).
Supports University Theme <i>(Some or all of the program's learning outcomes must support at least two of the university's strategic themes)</i> <ul style="list-style-type: none"> Themes: Internationalization, Personalized Education, Faculty/Student Research, Interdisciplinarity, or Student Writing Describe how the theme is supported by the learning outcome 	Personalized education: GE 7QI allows students to select courses from among several disciplines according to their GE interests and/or to integrate with their majors.
Supports WASC Core Competency <i>(Please indicate whether this outcome supports any of WASC's core competencies)</i> <ul style="list-style-type: none"> Oral Communication Written communication Information Literacy Quantitative Reasoning Critical Thinking 	Quantitative Reasoning
Where is the outcome published for students? <ul style="list-style-type: none"> Syllabi <i>(If syllabi, list course numbers)</i> Website Handbook 	<p>The outcome is published on the GE website and will be updated in 7QI GE course syllabi, and on the Learning at Chapman website.</p> <p>As a result of this assessment, each semester, the Office of Institutional Effectiveness and Faculty Affairs will send the 7QI learning outcome statement and evaluation rubric with specific criteria to all faculty members teaching 7QI approved courses. Faculty will be encouraged to place the learning outcome statement in course syllabi and to share the rubric with their students. We recommend that department chairs and associate deans reinforce the inclusion of GE outcome statements in applicable course syllabi.</p>
Evidence of Learning <ul style="list-style-type: none"> capstone project presentation performance course-embedded exam assignment standardized test portfolio 	<p>Student assignments from 7QI courses were collected during the 2012/13 academic year according to the process described below (Collecting and Analyzing the Data). Particular assignments from randomly selected students were hand selected by the professor of record. The assignment chosen was to be a project, presentation, performance or exam that would demonstrate the student's accomplishments according to the outcome statement and rubric criteria.</p> <p>In addition to the direct evidence described above, survey results from nationally recognized NSSE 2013 (National Survey of Student Engagement) and the 2013 College Senior Survey (CIRP: Cooperative Institutional Research Program at the Higher Education Research Institute at UCLA) were also analyzed. In these surveys conducted in 2013, Chapman seniors reported their levels of engagement with quantitative reasoning skills. These indirect assessments also provide comparison group scores, allowing Chapman's scores to be placed in context.</p>
Collecting and Analyzing the Data <ul style="list-style-type: none"> How did you select the sample? 	During the fall and spring semesters of academic year 2012-13, randomized student work samples were requested from faculty members teaching across

- *What was your sample size (number of students)?*
- *Provide the percentage of the sample size as compared to the relevant population.*
- *How did you assess the student work/data collected?*
 - *Possible Tools: rubric, exam questions, portfolio samples*
 - *Attach all assessment tools*

all sections of courses which had been approved for the GE 7QI category. Faculty members were asked to select an assignment, project, presentation, performance or exam for the selected student(s) that would demonstrate the student's accomplishments according to the outcome statement (see attached letter).

The following table shows the participation rates for 7QI work sample requests for AY 2012-13.

	7QI Enrolled Students	Samples Requested	Samples Collected	Samples Evaluated
2012-2013	2450	90	76	76

In preparation for this assessment, and in light of WASC's new requirement to assess Quantitative Reasoning skills at or near graduation level, Joe Slowensky, the Vice Chancellor for Institutional Effectiveness and Faculty Affairs, assembled an interdisciplinary group of three 7QI faculty members to attend a WASC Quantitative Reasoning Conference held at Cal Poly Pomona in October 2013. This group, consisting of Jason Bennett (Kinesiology and Athletic Training), Andrea Molle (Political Science) and Adrian Vajiac (Mathematics), participated in the conference and subsequently met to determine whether WASC's quantitative reasoning core competency skills could be reflected and aligned with Chapman's General Education Quantitative Inquiry (7QI) area. The group determined that the skill definitions could be aligned, and they designed an outcome statement and rubric for 7QI using the resources from the conference and AAC&U's nationally recognized Value Rubric for Quantitative Reasoning as starting points.

Once a draft of the outcome statement and rubric were complete, a GE 7QI Assessment Working Group was assembled by the Vice Chancellor for Institutional Effectiveness. The Assessment Working Group, consisting of Jason Bennett (Kinesiology and Athletic Training), Peter Jipsen (Mathematics), Andrea Molle (Political Science), Drew Moshier (Mathematics and Computer Science), Adrian Vajiac (Mathematics) and Christopher Bader (Sociology), met on 05/04/2014 (see attached agenda) to refine the 7QI outcome statement and design the rubric and evaluation criteria. The meeting was facilitated by Joe Slowensky, who served as an ex officio committee member. A norming session was conducted using the newly designed rubric and 4 student work samples. The norming of faculty evaluators continued until consensus was reached and inter-rater reliability scoring differentials did not exceed one degree of separation on the rubric.

Following this meeting, the 76 student work samples that were collected in 2012-13 were distributed among the Assessment Working Group members for review (see assignments below).

Jason	Students: 1-26
Peter	Students: 1-26
Andrea	Students: 27-51
Drew	Students: 27-51

	<table border="1"> <tr> <td data-bbox="571 128 786 174">Adrian</td> <td data-bbox="786 128 1373 174">Students: 52-76</td> </tr> <tr> <td data-bbox="571 174 786 218">Christopher</td> <td data-bbox="786 174 1373 218">Students: 52-76</td> </tr> </table>	Adrian	Students: 52-76	Christopher	Students: 52-76	
Adrian	Students: 52-76					
Christopher	Students: 52-76					
<p>Expected Level of Achievement</p> <ul style="list-style-type: none"> <i>What was your target(s) for student performance for this outcome? (This should tie to the methods in which you assessed the students and collected and analyzed data in the section above.)</i> 	<p>Each student work sample was blindly evaluated by two Working Group members.</p> <p>After the Working Group members completed their independent reviews, a second meeting was held on 05/15/2014 (agenda attached), and results were tallied and reviewer scores were averaged for each sample. Work samples that received evaluation scores from two reviewers differing by more than one point were reevaluated (there were 43 of these). In all of these cases, the reviewers were able to reconcile their differences and agree upon a consensus score.</p> <p>The results for the 76 samples were calculated and the data was analyzed. Upon observing the findings, the Assessment Working Group decided to add a “Not Evident” option on the scoring rubric to account for samples that did not show evidence of student skills in a particular area. They also decided to establish the score of 2 as the benchmark, “Minimally Acceptable,” for each of the evaluation criteria they had established. The Working Group fine-tuned and recalibrated the rubric in light of these decisions (see attached final version).</p> <p>This report and the following recommendations were subsequently created following the Working Group’s discussion and analysis of the data.</p> <p>For the sake of establishing a target, the 7QI Assessment Working Group concluded that 90% of students should maintain an average score 2 (Minimally Acceptable) or above in at least 4 of the 6 criteria according to the rubric used in this evaluation (see attached). While it may seem that the Working Group set the bar generously low, the Group felt that neither faculty nor students had been able to see the newly created outcome statement or rubric and it would be unfair to expect consistency and high performance levels for criteria that had not been distributed. Thus, the Working Group decided that students scoring “Minimally Acceptable” in 4 or more criteria would be deemed to have met the expected level of achievement for GE 7QI in the initial assessment year.</p> <p>With regard to the NSSE 2013 results, the Working Group decided that Chapman students should score at or above the average score at Chapman’s Carnegie Classification Group.</p> <p>For the 2013 College Senior Survey (CSS), the Working Group hoped to see scores at or above the comparison group scores that were provided for Private Universities and for Nonsectarian 4yr Colleges.</p>					