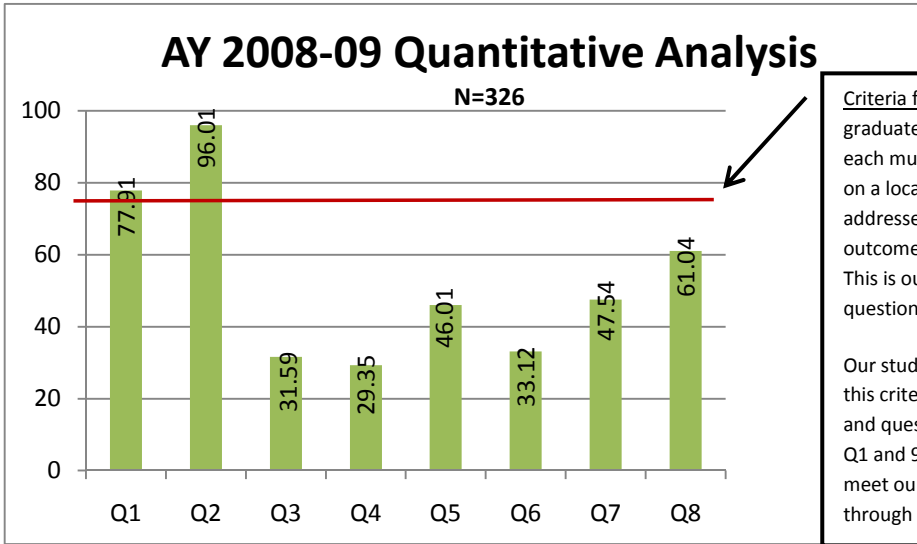


AWC General Education Outcome: Quantitative Analysis

AWC General Education Outcome: Quantitative Analysis Academic Achievement Report – Academic Year 2008-2009	
Statement of Purpose	Learning-Centered Values: Arizona Western College graduates will demonstrate competency in communication, critical thinking, quantitative analysis, and technology applications. <i>AWC 2013: A Vision in Progress 2008</i>
Intended Student Learning Outcomes	Graduates will: <ol style="list-style-type: none"> 1) Identify and extract relevant data from given mathematical or contextual situations. 2) Select known models or develop appropriate models that organize data into: tables or spreadsheets (with or without technology); or graphical representations (with or without technology); or symbolic/equation format. 3) Obtain correct mathematical results and state those results with qualifiers. 4) Use the results to: (a) determine whether they are realistic in terms of the original situation; or (b) determine whether the mathematical model/representation of data was appropriate; or (c) describe a trend in a table, graph, or formula and make predictions based on trends; or (d) draw qualitative conclusions in written form.
Tools for Assessment and Criteria for Success	A) 100% of the graduates will correctly answer 6 or more questions. B) Additionally, 75% of participating graduates will correctly answer each multiple-choice question on a locally designed test that addresses all of the target outcomes for quantitative skills.
Summary of Data Collected	The Quantitative Analysis test was randomly administered to students applying for graduation during Summer 2008, Fall Semester 2008, and Spring Semester 2009. A total of 326 students were administered the Quantitative Analysis exam. Copy of the assessment tool can be located at the Assessment and Program Review office. <ol style="list-style-type: none"> A) Criteria 'A' were not assessed. Due to a computer glitch in the system used during 2008-09, we were not able to calculate and determine if 100% of students were able to answer 6 or more questions. B) The Quantitative Analysis exam has a total of eight (8) questions targeting each outcome with the exception of 4 in which it is broken down into four subareas. 4b has not been assessed (since the inception of this GE assessment) as it allows the option of "or" to assess. Students successfully meet the 75% criteria in questions 1 (Q1) and question 2 (Q2) and 78% in Q1 and 96% in Q2. Criteria not met for questions 3 through 8. See below for chart.



Criteria for Success: 75% of graduates will correctly answer each multiple-choice question on a locally designed test that addresses all of the target outcomes for quantitative skills. This is our target for all eight questions.

Our students successfully met this criteria in questions 1(Q1) and question 2 (Q2), by 78% in Q1 and 96% in Q2. We did not meet our criteria in questions 3 through 8.

--	--

Analysis and Use of Results	Data results will be communicated and shared during Fall 2009-10 Start-up. An attempt to revise and or use a different tool continues to be discussed among faculty in the math department and the LEAP Committee. The analysis and results of the Spring 2009 ACT/CAAP Math pilot in the embedded math pilot will be reviewed and analyzed to determine if this could serve as a replacement to our Quantitative Analysis exam. The Math department will also review the ACT /CAAP Math assessment tool during 2009-2010. Review of the results during 2009-10 by degrees type will be conducted and analyzed to determine if a deeper focus in these fields need to occur. We currently gather and analyze the results of all students who take this exam.
-----------------------------	--