

Mesa Community College
Student Outcomes Assessment AY2008-2009

Executive Summary

The Mesa Community College Program to Assess Student Learning has historically demonstrated evidence of student learning in both general education and career and technical areas. A common set of student learning outcomes provide the foundation for assessment. The assessment process is a part of the college culture and is a collaborative effort of faculty in many disciplines. Faculty members across nearly all disciplines and campus locations participate in the college's award-winning assessment program.

During the 13th annual Assessment Week in spring 2009, the Student Outcomes Committee (SOC) decided to re-administer the Problem Solving assessment since no significant difference between the beginning and completing groups was observed during Assessment Week 2008. In addition, a pilot administration of a faculty-created Global Awareness assessment was conducted, and a pilot online assessment was attempted using Hosted Test online administration software. Analysis of the pilot results is still underway and will be reported at a later date. In all, over 1,000 general education students took an assessment.

For the prior year's Assessment Week, assessments in Information Literacy, Scientific Inquiry, Problem Solving and Numeracy were administered to approximately 3,000 general education students. A small number of students enrolled in Career and Technical programs participated in a workplace skills assessment.

Summary of Findings – Assessment Weeks 2008, 2009

Outcome and Year Assessed	Results
Problem Solving – Assessed 2009	The average score was higher by a statistically significant margin for the completing student group overall and for the “deduction” sub-area of the assessment. <i>As with past years, mean scores have been highest for the Interpretation and Evaluation of Arguments sections and lowest for Inference.</i>
Global Awareness – Assessed 2009 (Pilot)	Results are pending completion of an item analysis of the assessment. No historical information is available for this pilot assessment.

Summary of Findings - Continued

<p>Information Literacy – Assessed 2008</p>	<p>The percent correct was significantly higher for completing students overall and for two of five learning outcomes:</p> <ul style="list-style-type: none"> • identify appropriate print and electronic sources • locate relevant information to match needs <p><i>Students were most successful in evaluating information for currency, relevancy and reliability, followed by identifying appropriate sources, and defining information needed to solve a problem. Scores for locating information and use of information have been relatively lower in all administrations of the assessment.</i></p>
<p>Numeracy – Assessed 2008</p>	<p>The percent correct was significantly higher for the completing students overall and four learning outcomes:</p> <ul style="list-style-type: none"> • use models to organize the data • obtain correct results and state results with qualifiers • identify and extract relevant data • use information effectively <p><i>Patterns of performance have remained consistent over several years.</i></p>
<p>Problem Solving / Critical Thinking – Assessed 2008</p>	<p>The average score was not significantly higher for the completing student group overall or for any of sub-sets of the assessment.</p> <p><i>In the past, scores have been highest for the Evaluation of Arguments and Interpretation sections and lowest for Inference section.</i></p>
<p>Scientific Inquiry – Assessed 2008</p>	<p>Completing students performed significantly better than beginning students overall and on two of the five outcome areas:</p> <ul style="list-style-type: none"> • interpretation • evaluation <p><i>Students have been most successful in deciding if conclusions are warranted (Interpretation) and in making a conclusion based upon information presented (Evaluation).</i></p>
<p>Workplace Skills – Assessed 2008</p>	<p>Students scores ranked highest in:</p> <ul style="list-style-type: none"> • ethics • personal and professional responsibility • technology literacy • interpersonal communication <p><i>For the past several years teamwork and organization scores ranked lowest compared to the other outcome areas</i></p>

Summary of Findings – Continued

Historical Overview of Assessment Results

Outcome	Spring 2006	Spring 2007	Spring 2008	Spring 2009
<i>Arts & Humanities</i>				
<i>Cultural Diversity</i>				
<i>Oral Communication</i>				
<i>Written Communication</i>				
<i>Numeracy</i>				
<i>Scientific Inquiry</i>				
<i>Problem Solving/Critical Thinking</i>				
<i>Information Literacy</i>				
<i>Workplace Skills</i>				
<i>Global Awareness</i>				



Significant Results



No Significant Results



Pilot Year or In Development



Not Assessed This Academic Year



Sample Size too Small for Pre/Post Group Analysis

Highlights

At its 2008-2009 meetings, SOC discussed changes and improvements to the MCC Student Outcomes Assessment program:

- Creating an assessment review cycle to periodically examine assessments for functionality and relevance.
- Further promoting the efforts of SOC's Results Outreach sub-committee (ROC). This committee allocates grant funds for faculty projects aimed at connecting assessment results with teaching and learning practices. These efforts included attending many department faculty meetings, as well as a ROC call for proposals poster and brochure campaign at both campuses. This year's outreach efforts resulted in the submission of three proposals, all of which received at least partial funding:

Highlights – Continued

- A proposal to create a faculty workshop series to provide methods on how to engage students' critical thinking skills with information literacy education.
- A proposal to integrate the use of PDA devices in nursing education courses.
- A proposal to help fund book purchases for the faculty, staff and student book club to help expand multiple outcomes-related skills among participants.
- SOC discussed the need to expand student assessments to include online administration and administered a pilot assessment to two online sections using Hosted Test online test administration software. Unfortunately, this pilot yielded few student responses.
- The results of the re-administered Problem Solving assessment showed a significant difference between the completing and beginning student groups. This is an improvement from having no significant difference between the groups in last year's administration.
- An MCC Adobe Photoshop design class was enlisted to design the yearly Assessment Week poster, and the winning student's design was displayed at key campus locations during Assessment Week.
- SOC plans for the new academic year include:
 - Conducting and instrument review of the Information Literacy assessment
 - Creating a special SOC newsletter to highlight best practices submitted by faculty
 - Discussing the creation of a Technology Literacy assessment
 - Changing the format of the current assessment week results report to be more readable and useful to faculty, with an emphasis on tying results to teaching and learning in the classroom.
 - Hosting two discussions during the MCC Center for Teaching and Learning's assessment themed week.

Student Outcomes Committee Members – 2008-2009

Derek Borman, Chair

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