

Executive Summary

Student Outcomes Assessment Update: AY2003-2004

The Mesa Community College Program to Assess Student Learning has engaged the college community in the assessment process over the past eight years. Evidence of student learning is clear across both general education and career and technical areas based upon assessment results over the past several years. Further, survey results show that college faculty and staff perceive student outcomes assessment as a part of the college culture.

During Assessment Week 2004 four of the general education assessments (Information Literacy, Numeracy, Problem Solving, and Scientific Inquiry) were administered to approximately 3,000 general education students. Approximately 600 students enrolled in Career and Technical programs participated in a workplace skills assessment. More than one hundred faculty members representing nearly all disciplines, both campuses, and extended campus sites participated.

Highlights from the 2004 results include the following:

- In all assessment areas the mean scores of completing students (post-group) are significantly higher than the scores of beginning students (pre-group).
- Critical thinking scores are significantly higher for completing students but lag the community college comparison cohort.
- When examining results across measures over the past four years, students had the most difficulty with skills involving the use, application and/or evaluation of knowledge.

During Assessment Week 2003 assessments in the Arts and Humanities, Cultural Diversity, Oral Communication, Written Communication, as well as a baseline technology survey were administered to more than 3,400 general education students. Students enrolled in Career and Technical programs participated in the Workplace Skills assessment.

Additional highlights from spring 2003 results include the following:

- In all assessment areas the mean scores of completing students (post-group) were significantly higher than the scores of beginning students (pre-group).
- In general, all students are relatively more skilled in making and supporting personal observations than in recognizing opposing positions and seeing topics in a broad perspective.
- Compared to beginning students, completing students show a stronger sense of social obligation, are more likely to engage in social action, have more appreciation for cultural differences, and show more knowledge of cultural differences.

As the assessment program has matured the use of assessment results and outreach to students have received renewed emphasis.

- A significant accomplishment of the Results Outreach (sub)-Committee (ROC) was the initiation of a funded initiative to support the use of assessment results. Several pilot projects were funded for the next academic year. ROC also conducted two assessment workshops and began to prepare a website to help disseminate information about student outcomes assessment and the use of results.
- Outreach to students was expanded through advertisements in the college newspaper.

Summary of Results from Student Outcomes Assessment Spring 2003 and 2004

Outcome and Year Assessed	Results
Information Literacy – Assessed 2004	The percent correct was significantly higher for the post-group overall and for three of five outcome areas. 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 were relatively lower.
Numeracy – Assessed 2004	The average percent correct was significantly higher for the post-group overall and for outcomes related to using models to organize data, obtaining results and stating results with qualifiers and use of results. Patterns of performance have remained consistent over several years. Use of models is the strongest area and use of results is the weakest area.
Problem Solving/Critical Thinking – Assessed 2004	The average total score was significantly higher for the post-group (completing) overall and for three sub-scales: Interpretation, Evaluation of Arguments, and Inference. The post-group score was at the 40 th percentile when compared to a national sample. Average student scores have been consistently highest for the Interpretation and Evaluation of Arguments sections and lowest for Inference.
Scientific Inquiry – Assessed 2004	Completing students performed significantly better than beginning students overall and on four of the outcomes. Students have been most successful in deciding if conclusions are warranted (Interpretation) and in distinguishing between reasons for a problem. Making a conclusion based upon information presented (Evaluation) and recognizing assumptions needed have been relatively more difficult.
Workplace Skills – Assessed 2004	Post-group students performed significantly better than pre-group students overall and on four scales. For the past two years teamwork and organization ranked lowest and technology literacy and personal and professional responsibility ranked highest when compared to the other outcome areas.

Outcome and Year Assessed	Results
Arts and Humanities – Assessed 2003	Significant differences were observed overall and in three of four outcome areas: Demonstrate an awareness that different contexts and/or world views produce different human creations; an understanding and awareness of the impact that a piece has on the relationship and perspective of the audience; an ability to evaluate human creations.
Cultural Diversity – Assessed 2003	Students in the completing (post) group had significantly higher scores on direct measures of knowledge and on several diversity and democracy outcomes in both years. Completing students agreed more often that they have an “obligation to give back to the community.” In the most recent administration completing students rated themselves more highly than beginning students on having a pluralistic orientation, being able to see both sides of an issue and their own knowledge of cultures. Further, they agreed more strongly with statements that support the value of diversity, reflect tolerance for differences related to gender, and indicate that they engage in social action more often.
Oral Communication – Assessed 2003	Significant differences between beginning students and completing students were shown in the total percentage correct for the assessment overall and for each of the subscales: knowledge about effective interpersonal interchanges, small group interaction and conducting oral presentations.
Written Communication – Assessed 2003	The mean score for the post-group was significantly higher overall and on the scales for content, organization and mechanics/style. When each skill is considered separately, students showed relative strength in stating their own position, addressing the prompt, using appropriate voice and style and sentence structure. Students have consistently rated below the overall average on acknowledging the opposing position, developing each point with appropriate detail and commentary, progressing logically and smoothly, and using transitions and orienting statements.