# The 2004- 2005 Student Learning Outcomes Report

Rio Salado College Summer 2005

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#### Student Learning Outcomes Report 2004 – 2005

#### Introduction

In 2004-05, the Faculty Chairs decided to work on updating the Rio Salado College Plan for Assessment and Improvement of Student Learning. 35 % of the Faculty Chairs were new to the college since the last update of this plan. Additional discussions on effective teaching, assessment and learning have become both broader and more complex and this needed to be reflected in our plan and deployment. Baseline data have been established and validated over the six year period from 1998 to 2003 and have been studied for reference for all future improvements. These data collection efforts have given us a good understanding of our students' skills. We determined in 2003-04 to go to a three year cycle for college wide data collection so that Institutional Research staff could collaborate directly with the competency coordinators and faculty chairs as we focus on improvements in curriculum that would increase student learning. Several of the Competency Coordinators decided to examine specific subsets of the skills and behaviors that our students are demonstrating in their course work that may or may not reflect the skills that we were seeing in the baseline data collection summaries and analyses. Therefore, our efforts are becoming more focused on understanding and increasing application of skills, knowing that a high percentage of our students have these skills.

### Summary of Findings From Six Years of Baseline Data Collection: 1998-2003

Six years of baseline data collection shows that Rio Salado students continue to perform well on the five college competency assessments.

- In general, Rio Salado students demonstrate college-level skills for the five college competencies. All of the competencies use a 4 point scale where college level is a 3.
- ➤ Overall, 84.69% of our students score within the acceptable range of college-level performance on the competency assessments. Average scores remained relatively unchanged during the past three years on four of the five assessments (Writing, Critical Thinking, Information Literacy, and Problem Solving). The average score on the Reading Assessment has increased slightly during each of the past three years.
- In general, scores on the competency assessments positively correlate with the ages of the students. Overall, assessment scores, as evidence of skills, increase as students mature.

#### Evidence of Skill in the Writing Competency

While greater than 75% (76.2%) of students taking the Writing Assessment in 1998-1999 scored at or above college level, less than 65% (64.15%) were able to do so in 2000-2001 (data not available for 1999-2000). However, since that time, the percentage of students scoring at or above college level has increased (72.10 % in 2001-2002; 88.53 % in 2002-2003; and 83.07 % in 2003-2004). Students performed best in 02-03 when the average score was 3.27. Overall, students have improved the average score by 0.16 points from 98-99 to 03-04.

#### Evidence of Skill in the Reading Competency

A substantial improvement in the percentage of students scoring at or above college level in Reading is evident. In 1998-1999, just 66% of students were able to achieve this goal but over 90% (92.35%) did so in 2000-2001 (data not available for 1999-2000). College level skills have been maintained since this time with 91.72% of students in 2001-2002, 90.29% in 2002-2003, and 93.5% in 2003-2004. Students scored best on the assessment in the most recent year, 03-04. Their average test score of 3.12 was 0.04 points higher than the average score (3.08) students received the first year the assessment was given.

#### Evidence of Skill in the Problem Solving Competency

Since 2001-2002 (data not available before this time), about 90% of students have scored at or above college level in Problem Solving (90.23% in 2001-2002, 91.23% in 2002-2003, and 89.95% in 2003-2004). Students' best year came in 02-03 when the average score was 3.35.

#### Evidence of Skill in the Critical Thinking Competency

While 78% of students scored at or above college level in Critical Thinking in 1998-1999, the percentage of students able to do so since then has remained at or near only 50% (54.03% in 2000-2001; 45.92% in 2001-2002; 54.88% in 2002-2003; and 48.42% in 2003-2004 with no data available for 1999-2000). Students received the highest average score (3.06) in 98-99. Students' average scores have fluctuated every year the assessment was given with the lowest average (2.31) in 99-00.

#### Evidence of Skill in the Information Literacy Competency

The percentage of students scoring at or above college level since 2000-2001 (data not available before this time) has remained close to 100% (97.01% in 2000-2001; 99.08% in 2001-2002; 98.7% in 2002-2003; and 99.14% in 2003-2004). The average score on the information literacy assessment has not changed greatly with a high average of 3.40 in 2000-2001 and an average low of 3.32 in 2001-2002.

A majority of the lowest overall average scores came in the second year that the assessment was offered except for the Problem Solving assessment which had its lowest average score in the first year it was handed out.

#### Academic Profile Summary: 2001 – 2004 Comparison

Three years of baseline data shows that Rio Salado Students continue to perform well on the Academic Profile Exam (AP). (See Appendix A for more detailed analysis of AP trend data)

- Every year Rio Salado students scored higher, on average, on all sections of the AP than the national comparison sample.
- In general, the difference between the overall group scores (dual, distance, graduate) on the AP is not statistically significant.
- Overall average scores seem to be relatively stable with little movement over the past four years (453 to 456).

- Rio students have performed best on the College Level Reading section when compared to the other sub-sections.
- Every year, a majority of students scored at or above the college level for the local writing section.
- Students' average scores on the local writing section have decreased each year since 2002 (3.22 to 3.14).
- On the local writing section, "Graduate" students have outperformed the other two student groups.

#### Methodology from 1998 to 2003

For six academic years prior to the 2003 – 04 year, faculty-developed competency assessments for Writing, Reading, and Information Literacy and standardized competency assessments for Critical Thinking and Problem Solving were administered to students in the spring semesters to measure skill levels in these competencies across the curriculum. Baseline data were established for reference for all future improvements. Additionally, nationally norm-referenced exams, first the CAAP and then the Academic Profile (AP), were administered as multiple measures of students' skills.

Participation in the nationally norm-referenced exams has been voluntary and participating students were given a small monetary incentive. These exams assessed skills in humanities, social sciences, natural sciences, college level reading, college level writing, critical thinking and mathematics. Students have been divided into three cohorts for analysis, students with 45 or more credits, distance learning students, and dual enrollment students. Scores were also compared by age categories. Rio Salado students were also compared to a national comparison group as part of the norm referencing process. In addition, the Academic Profile also contained a locally developed essay exam. Students were required to complete a short essay in response to one of five prompts. These essays were scored using the Rio Salado Writing Competency Rubric.

The five competency assessments (Writing, Reading, Critical Thinking, Information Literacy, and Problem Solving) have been administered to students in various general education classes. Assessments were administered in both distance learning and in-person classes. To ensure the validity of the results. Preventative measures were taken to prohibit students from selecting specific assessments.

#### Methodology for 2004-05

Baseline data were not collected during 2004-05 for the Writing, Reading, and Critical Thinking competencies since this was the second year into the first three-year cycle of broad data collection. Institutional Research worked with the Information Literacy Competency Coordinator to collect data on Information Literacy using a new assessment instrument. (See the Information Literacy Competency Coordinator's report on page 10.) Problem solving was

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removed as a separate or independent college competency since it was determined this was really a subset of Critical Thinking. (See the Problem Solving Competency Coordinator's report on page 12.) The Competency Coordinators continued their work on improving student skills and use of these skills by working directly with faculty chairs on curriculum improvements.

#### Highlights of 2004-05 Work on Teaching, Assessment and Learning

- The 6<sup>th</sup> Annual Learning Experience On Assessment and Learning for Adjunct Faculty was held, with approximately 400 adjunct faculty attending.
- Five Outstanding Adjunct Faculty were recognized for Contributions to Assessment
- A full time faculty learning goal became part of the college strategic plan.
- All full time faculty meetings were conducted with Student Assessment and Achievement as a standing agenda item.
- Five faculty chairs were involved in training for our work on a college and department level balanced scorecard (BSC).
- The VP for Academic Affairs, the faculty co-coordinator for assessment and the Associate Dean for Applied Programs participated in the regional HLC / AAHE Assessment Conference in Chandler.
- 80% of the full time faculty participated in a workshop on integrating rubrics into course design and assessment feedback purposes.
- In May, the full time faculty end-of-the-year retreat focused on teaching, learning and assessment. (Appendix D) As a result of this retreat, monthly Learning Luncheon Brown Bag discussions started in June with the purpose of talking about research and teaching, assessment and learning issues at Rio.
- The VP for Academic Affairs approved funding for Rio Learning Outcomes Grants for department or program level teaching, learning and assessment research and improvement projects. Six grants were approved and funded in June for work to occur during the 2005-06 academic year. (See Appendix C.)
- The Rio Salado College 2004-05 Student Learning Outcomes Report was written and distributed to all full time faulty.
- A Rio Salado College 2004-05 Student Learning Outcomes Highlights Report was written and distributed to all adjunct faulty.
- More than 60% of full time faculty participated in district Assessment Forum activities.
- The college established an instructional design department to work with faculty chairs on curriculum development and revisions.