

Introduction

The first assessment plan at Rio Salado College (RSC) was implemented in 1991. Since then, ongoing assessment initiatives aimed at increasing student learning have continued to demonstrate evidence of RSC's central focus on this work. Student learning outcomes are measured in five core areas: Critical Thinking, Writing, Information Literacy, Reading, and Oral Communication. These outcomes are assessed at the college level, the program level (as part of Program Review), and via the continuous improvement Plan-Do-Check-Act (PDCA) cycle at the course level. Collectively, these efforts provide a solid infrastructure for assessing and increasing student learning at RSC.

Over the years, RSC's assessment plan has progressed from a static document that was reaffirmed on a periodic basis, to a dynamic, ongoing, and evolving series of activities that are integrated across the teaching and learning spectrum.

The Learning Assessment Team includes representation from Faculty Chairs, Senior Administration, and Institutional Research, and has responsibility for coordinating all aspects of student learning assessment.

RSC maintains a public <u>Assessment of Student Learning website</u> so that the institution's assessment data and processes are transparent and available to all stakeholders.

Overview

During AY2018-19, Student Learning Outcomes focused work has continued in the areas of Reading, Information Literacy, and Oral Communication.

The ETS Proficiency Profile was administered to two specific RSC student groups: Adults Achieving a College Education program (Adult ACE) and the National Society of Leadership and Success (NSLS). The total mean score for this cohort was 424.0 out of 500. While the scores are lower than in years past and the current national average, there is now a benchmark in place for assessing this student population for RSC.

Program review is continuing as scheduled, with the addition of a closed incarcerated program pilot in AY2018-19.

Assessment work to improve both online instruction and assessment has been ongoing throughout the year, utilizing results from the Dynamic Assessment Data Display (DADD). Overall, DADD data demonstrate that close to 87% of RSC online students are performing at or above college level in the five institutional student learning outcomes.

In order to gain a more complete picture of RSC student performance in college-wide student learning outcomes across modalities, a mechanism for measuring achievement in print courses has been established in the DADD, and data will be analyzed beginning in AY2019-20.

PLAN-DO-CHECK-ACT cycles were completed at the course level in SPH245, MAT151, and BPC 110.

Details on these initiatives are provided below.

Student Learning Outcomes Work

Rio Salado College is committed to the assessment and improvement of the following collegewide Student Learning Outcomes:

- Critical Thinking
- Writing
- Reading
- Information Literacy
- Oral Communication

Overall Assessment of Student Learning Outcomes

During AY2018-19, over 1.2 million subjective assessment items were assessed by RSC faculty. Nearly half of these subjective items (582,054) were directly linked to one or more college-wide student learning outcomes. Overall, 86.5% of these items were assessed as being at or above college level. The table below shows student performance by learning outcome.

| RSC Student Performance by Learning Outcome | | | | | | | | |
|---|-------------|----------------|---------------|--|--|--|--|--|
| Student Learning | Assignments | Assignments at | Percentage at | | | | | |
| Outcome | Submitted | College Level | College Level | | | | | |
| Critical Thinking | 100,735 | 79,535 | 79.0% | | | | | |
| Information Literacy | 214,062 | 175,399 | 81.9% | | | | | |
| Oral Communication | 5,214 | 4,088 | 78.4% | | | | | |
| Reading | 94,943 | 76,105 | 80.2% | | | | | |
| Writing | 391,381 | 362,265 | 83.4% | | | | | |
| Total | 806,335* | 697,392 | 86.5% | | | | | |

Assignments submitted during the 2018-19 academic year. Snapshot taken on 8/6/2019.

The data demonstrate that RSC students met or exceeded the 80% college-level threshold in the areas of Information Literacy, Reading, and Writing. Critical Thinking fell just below the 80% target, and interventions to address this will be implemented during AY2019-20. Oral Communication, in its second year since implementation of the Oral Communication Grading Rubric, had 78.4% of students performing at college-level, and further focused work will continue in this area in AY2019-20.

Oral Communication

Since the Oral Communication grading rubric was launched in fall 2017, efforts have been made to incorporate assessments in every RSC academic discipline. In AY2018-19, the Oral Communication Coordinator continued these efforts, and all RSC instructional designers were trained on the rubric and tools used to assess oral communication so that they can better assist the faculty chairs with implementation in their curricula.

Each of the RSC academic departments has incorporated the Oral Communication rubric in at least one assessment. Additionally, during the fall 2018 All Faculty Meeting, a member of the Communication Department held a mini training for all adjunct faculty members on assessing oral submissions. Handouts were provided and the Oral Communication Coordinator was available to answer questions and offer help.

^{*}Note that because some assessment items are linked to multiple student learning outcomes, this total is higher than the distinct number of assessment items evaluated.

In AY2017-18, 75% of students performed at the college level in Oral Communication. After the rubric implementation and training, this percentage increased to 78.4% in AY2018-19, as shown above. Further focused work will continue in the coming year to increase the oral communication competence of RSC students above the expected threshold of 80%.

In addition to Oral Communication, significant work was accomplished in the areas of Information Literacy and Reading.

Information Literacy

During AY2018-19, a phase two study tested the impact of using the Ask a Librarian 24/7 Chat service on student performance in the area of Information Literacy. This project continued the work of an earlier study reported in AY2016-17. Library Faculty from participating MCCCD colleges evaluated anonymized student reference lists, thesis statements, and chat transcripts from selected online CRE101 courses. Specific course sections were required to use the service, while other sections were not. A normed rubric was employed to score both the quality of sources used in student projects and the students' level of engagement in the chat with a librarian, a variable not examined in the earlier study.

Findings indicated that while mean scores for the treatment group were higher when compared to the control, there was no statistically-significant difference in the quality of sources used between the two samples. This differs from the phase I study that showed a statistically significant difference for students who used Ask a Librarian. A possible reason for these findings may be the low number of student projects examined in the phase two study.

The study also examined the relationship between student engagement with a librarian in a chat and the quality of the sources selected. It was concluded that there was a statistically significant relationship between the two variables. Students who showed higher levels of engagement in their Ask a Librarian sessions were more likely to use higher quality sources.

Reading

In spring 2018, thirteen CRE101 lesson assignment rubrics were revised to align with the student learning outcome categories on the RSC Reading Rubric. Prior to the rubric revisions, data for CRE 101 did not include student performance on the Reading Student Learning Outcome due to the misalignment with the reading performance indicators. This is illustrated by the table below.

| CRE 101 Student Learning Ou | utcomes-Spring 2018 | | | |
|-----------------------------|---------------------|--|--|--|
| Overall | Overall 92% | | | |
| Critical Thinking | 63% | | | |
| Information Literacy | 76% | | | |
| Oral Communication | NA | | | |
| Reading | | | | |
| Writing | 93% | | | |

The revisions to the CRE 101 assignment rubrics included the addition of at least one category from the RSC Reading rubric related to the requirements of the course assignment. Reading student learning outcome data is now accessible for the CRE 101 course. As Illustrated by the table below, students in CRE 101 are performing slightly above the college-level threshold of 80% in reading.

| CRE 101 Student Learning Outcomes-Spring 2019 | | | | | |
|---|-----|--|--|--|--|
| Overall 91% | | | | | |
| Critical Thinking | 81% | | | | |
| Information Literacy | 82% | | | | |
| Oral Communication | 69% | | | | |
| Reading | 83% | | | | |
| Writing | 93% | | | | |

PLAN-DO-CHECK-ACT Cycles (PDCA)

In keeping with RSC's ongoing focus on relentless improvement, the following PDCA cycles were completed at the departmental level in 2018-19:

SPH245: PDCA Improvement Cycle for Oral Communication

PLAN: On 1/1/18, the new Oral Communication rubric was incorporated in the instructions for the final project in SPH245 (Hispanic Heritage in the Southwest). Baseline data were pulled

after 6 months, revealing that only 60% of the students performed at a college level on the Oral Delivery component of the rubric:

| SPH245: Oral Communication | | | | | |
|----------------------------|-------------------------------------|---------------|-----|--|--|
| 1/1/18-6/30/18 | Lesson 14 – Final Oral Presentation | Oral Delivery | 60% | | |

Since the baseline data did not meet the college-wide target of at least 80% of students performing at college level, intervention was needed.

DO: In July 2018, the Oral Communication rubric and associated instructional components were added to Lessons 8 and 9 to facilitate the students' exposure to the rubric earlier in the course and to give them an opportunity to build their skills along the way, with the goal of increasing their overall performance on the final oral presentation. The Lesson 8 assignment was designed with less rigorous expectations than Lesson 9, in hopes that the students would incorporate the feedback from Lesson 8 when preparing their oral assignment for Lesson 9.

CHECK: Though average student performance for the Lesson 8 and 9 assignments did not meet the target, performance on the Final Oral Presentation increased significantly, which was the desired outcome.

| SPH245: Oral Communication | | | | | | |
|---|-------------------------------------|---------------|-----|--|--|--|
| 7/1/18-4/30/19 Lesson 8 – Oral Assignment Oral Delivery 77% | | | | | | |
| 7/1/18-4/30/19 | Lesson 9 – Oral Assignment | Oral Delivery | 61% | | | |
| 7/1/18-4/30/19 | Lesson 14 – Final Oral Presentation | Oral Delivery | 87% | | | |

ACT: The revised Lesson 8 and 9 oral assignments have been embedded in SPH245. Though overall student performance decreased from Lesson 8 to Lesson 9, this could be due to the increased complexity of the Lesson 9 Assignment. Ultimately, the addition of the Oral Communication rubric and related instructional components in Lessons 8 and 9 positively correlated with an increase in average performance on the Final Oral Presentation in SPH245.

MAT 151 PDCA Improvement Cycle for Critical Thinking – Midterm and Final Exams

PLAN: Midterm and Final Exams in MAT 151 (College Algebra) consist of 30 questions, with three separate versions for each question. The assessment improvement task was to revise each version of each question as needed to more clearly reflect the correlated learning

activities, as well as rephrasing to ensure that the language was clear and consistent with the content language in the learning module.

DO: After review of the performance on each version of each question, those items which were either unclear or on which student performance was particularly poor were examined for improved form.

CHECK: Previous versions of the questions were compared with results from AY2018-19. The results below summarize student performance on the various versions of the midterm and final exam questions:

| Midterm | | | Final | | | | | | |
|----------|----------|----------|------------|---------------------------|----------|----------|----------|--|--|
| All 3 | Just 2 | Only 1 | No version | All 3 Just 2 Only 1 No ve | | | | | |
| versions | versions | version | improved | versions | versions | version | improved | | |
| improved | improved | improved | | improved | improved | improved | | | |
| 13 | 10 | 1 | 6 | 14 | 2 | 3 | 11 | | |

A high-level scan indicates that, in many cases, the differences were minor, even when student performance worsened. There were a few items where the increase in performance was dramatic, and a few where the decrease was dramatic.

ACT: Since overall student performance on the exams increased, the new versions of the questions are being retained.

The next PDCA cycle will focus on those items where student performance declined as well as those that have proven persistently difficult, to determine whether refinements can be made to improve performance. Also, individual items where there is a discrepancy in performance among versions might be examined to see if there is any non-equivalence evident in the phrasing and content.

BPC110: PDCA Improvement Cycle

PLAN: BPC110 was revised in spring 2017 to use a third-party application, TestOut, which required students to complete MS Office projects in a simulated environment. Students did not create MS Office projects in each Office application until the Final Exam Project at the end of the course.

DO: After a student survey revealed this as problematic (students commented that it was difficult to transfer knowledge from a simulated environment to the actual Office applications for the exam), the course was revised again. The new version of the course, which included hands-on usage in each MS Office application in the last two lessons prior to the Final Exam Project, was developed for the fall 2018 term.

CHECK: In order to determine whether this course revision improved student learning, data were reviewed from Final Exam Project scores for BPC110 from spring 2017 through spring 2019, as of 5/9/2019 (4172 – 4192, 7 terms). A total of 109 unique students took the exam during the timeframe (76 pre-course update and 33 post-course update). The maximum exam score is 280 total points. The table below shows the average exam scores per term, as well as the average score of pre-course update and post-course update.

| Term Students | | Max Score | Min Score | Average Score | Average % | |
|---------------------------------|-------------|-----------|------------|---------------|-----------|--|
| Spring 2017 22 | | 269 | 192 | 243.0 | 86.8% | |
| Summer 2017 10 | | 273 | 3 200 249. | | 89.5% | |
| Fall 2017 | 18 | 275 | 0 | 200.6 | 71.6% | |
| Spring 2018 | 21 | 277 | 0 | 228.7 | 81.7% | |
| Summer 2018 5 | | 258 | 236 | 247.4 | 88.4% | |
| Fall 2018 10 | | 271 | 185 | 249.9 | 89.3% | |
| Spring 2019* 23 | | 280 | 0 | 239.1 | 85.4% | |
| Pre-Update version (4172-4184): | | 277 | 0 | 230.2 | 82.2% | |
| Post-Update ver 4192): | sion (4186- | 280 | 0 | 242.4 | 86.6% | |
| Differ | ence | +3 | - | +12.2 | +4.4% | |

^{*}Spring 2019 final exams were still being completed at time of the assessment.

The data indicate that the average exam score from the updated lessons is higher than the average score from spring 2017 through summer 2018. The fall 2018 average score is the highest in the timeframe, 2.5 points higher than the previous term's average, and 49.3 points higher than the lowest average earned in fall 2017. The post-update lessons also produced a student with a perfect exam score, three points higher than the next maximum score earned in spring 2018. The greatest difference in maximum scores is between summer 2018 and spring 2019. The 22-point difference would change an exam grade by 7.8%.

ACT: Owing to the marked improvement in student success, the updated version of the course was retained.

Assessment Data Display

RSC's Dynamic Assessment Data Display (DADD) is a web-based dashboard tool used by Faculty Chairs to monitor student performance in online assessment items. Chairs can quickly identify where students are not performing at desired levels and evaluate the effectiveness of curricular changes. Below is a snapshot of data available via the DADD for the Department of Languages:



Assessment Data Display

The Assessment Data Display shows student performance on subjective assessments between **7/1/2018** and **6/30/2019**. Definitions may be found on page 2.

For questions, please contact Institutional Research.

| Sullillary lable | |
|----------------------|-----|
| Overall | 83% |
| Critical Thinking | 68% |
| Information Literacy | 86% |
| Oral Communication | 80% |
| Reading | 71% |
| Writing | 85% |

Summary Table

| Prefix | Course | Effective Date | Lesson | Dimension | Critical Thinking | Info Lit | Oral Comm | Reading | Writing | Count | %Stds@CL |
|--------|--------|----------------|---------------------|--------------|----------------------|-------------|--------------|---------|---------|-------|----------|
| AHU | AHU245 | 8/21/2017 | Lesson 1 Assignment | Dimension | | | | | | 121 | 96% |
| AHU | AHU245 | 8/21/2017 | Lesson 3 Assignment | Dimension | | | | | | 136 | 82% |
| AHU | AHU245 | 8/21/2017 | Lesson 4 Assignment | Dimension | | | | | | 94 | 92% |
| AHU | AHU245 | 8/21/2017 | Lesson 5 Assignment | Dimension | | | | | | 102 | 83% |
| AHU | AHU245 | 8/21/2017 | Lesson 6 Assignment | Dimension | | | | | | 64 | 89% |
| AHU | AHU245 | 8/21/2017 | Lesson 7 Assignment | Dimension | | | | | | 128 | 87% |
| AHU | AHU245 | 8/21/2017 | Midterm Exam Essay | Analysis | Y | Υ | | Υ | | 23 | 87% |
| AHU | AHU245 | 8/21/2017 | Midterm Exam Essay | Evaluation | Y | | | | | 23 | 91% |
| AHU | AHU245 | 8/21/2017 | Midterm Exam Essay | Inference | Y | | | Υ | | 23 | 87% |
| AHU | AHU245 | 8/21/2017 | Midterm Exam Essay | Presentation | | | | | | 23 | 96% |
| AHU | AHU245 | 8/21/2017 | Midterm Exam Essay | Requirements | | | | | | 23 | 87% |

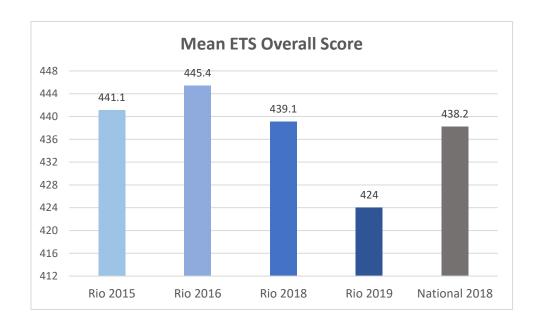
The current iteration of the tool pulls data for online assessments only. Over the last academic year, chairs that oversee print-based correspondence courses have identified specific assignments that align with RSC's College-wide Student Learning Outcomes. Data from those assignments are in the process of being incorporated into the DADD in order to gain a more complete picture of RSC student performance. The AY2019-20 Learning Assessment Report will include results across both online and print-based modalities.

The ETS (Educational Testing Service) Proficiency Profile

For the past 10 years, RSC has assessed college-wide student learning outcomes across various student groups at the institutional level through the ETS Proficiency Profile, a nationally-standardized assessment designed to measure academic competence in the domains of *Critical Thinking*, *Reading*, *Writing* and *Mathematics*. Additionally, the reading and critical thinking domains are aligned with three academic content areas: *Humanities*, *Social Sciences*, and *Natural Sciences*. The platform provides the RSC with an externally-validated assessment of outcomes and allows for comparison analyses to peer institutions across the country.

In AY2018-19, two specific RSC student groups were invited to complete the ETS Proficiency Profile assessment: Adults Achieving a College Education program (Adult ACE) and the National Society of Leadership and Success (NSLS). Both groups were invited by their program directors to participate voluntarily. All students were offered a gift bag including small RSC marketing items such as water bottles and drawstring bags for their participation. A total of four test sessions were offered during March 2019; AACE students were tested at three RSC locations, and NSLS at one location. A total Of 43 students participated in the assessment; 37 from Adult ACE and 6 from NSLS.

ETS provides an overall score as well as a breakdown in proficiency levels for the academic skills assessed from the cohort. The figure below shows RSC's ETS mean values from the past four assessment years, as well the 2018 National comparative cohort average. The total mean score for the 2019 cohort of ETS students was 424.0 out of 500. RSC's average score is 14.2 points lower compared to other Associate degree-granting institutions completing the ETS Proficiency Profile in 2018. While the scores are lower than years past and the current national average, there is now a benchmark in place for assessing this student population for RSC.



Co-Curricular Assessment of Honors Students

The Honors Program at RSC provides intellectually-stimulating learning opportunities for academically-outstanding students. The program includes scholarships, distinguished multidisciplinary classes, Honors Forum Lectures, and cultural opportunities. All scholarshipeligible students in the Honors Program are required to engage in the community by attending co-curricular activities. Students are then required to report on these activities in a non-credit course, HONORS100.

Since AY2016-17, the Honors Program has assessed the writing skills of scholarship-eligible students in HONORS100. Students must earn a minimum score of 70% on the written portion of the co-curricular assessment in order to be considered "college-level." The HONORS100 course provides students with a detailed grading rubric for the written co-curricular assessment, which explains the college-level writing requirements (essay length, format, and accurate spelling, grammar, and punctuation).

Baseline data were collected during AY2016-17, AY2017-18, and AY2018-19. Of the 475 co-curricular assessments submitted by scholarship-eligible Honors students, 95.8% were written at or above college level. This far exceeds the college's writing skills target of 80% students scorning at college level, so no intervention is needed at this time.

Program Review

Rio Salado College has adopted and implemented a formal academic Program Review model and process that is systematic, comprehensive, and sustainable. Every review contains the same foundational components, including program goals, student learning outcomes, program resources, and co-curricular outcomes, which are addressed by utilizing a template of questions and data sets. The Program Chair highlights best practices, areas for improvement, and recommendations for future actions. Learning Assessment Team members examine the completed review and provide feedback, which is then submitted to the Vice President of Academic Affairs for final action. Once the evaluation cycle has been completed, the review is posted to the RSC public <u>Assessment of Student Learning website</u>.

As part of its work over AY2018-19, the Assessment Team considered various updates to the Program Review template to more explicitly align the foundational components with the RSC Strategic Plan. In February 2019, the Team approved Version 6.2 of the template, which includes the following verbiage:

Rio's Academic Program Review Process is an essential component of the College's Strategic Plan. The 2016-2020 work is guided by the goals of Pillar 3: Accountability,

Assessment, and Quality Assurance, and supports Strategic Pathway 7: Grow a Culture of Accountability Through College-wide Quality Assurance Processes. In addition, data relating to student enrollment, learning, persistence, goal attainment, satisfaction, and institutional accountability are aligned with the college-wide Key Performance Indicators that measure progress toward achieving the goals of the College's Strategic Plan.

During AY2018-19, reviews were completed for the following programs:

- General Business: The review was completed, with evaluation scheduled for fall, 2019.
- Automotive Technologies: This is a program exclusively for incarcerated students. The
 review was conducted as a pilot to assess the effectiveness of modifying the standard
 Program Review template to fit this specialized population. Evaluation is scheduled for
 fall, 2019.
- Early Childhood Education Post Baccalaureate: This program was submitted for mandatory review by the Arizona Department of Education (ADE). In order to avoid duplication of effort, the required ADE approval documents were submitted in lieu of completing RSC's Program Review template.
- Teacher Education Special Education Post Baccalaureate: The approval documents for ADE were submitted for this program, as well.

Though six programs were scheduled to undergo comprehensive review in AY2018-19, Administration of Justice and Nanotechnology were moved to the next cycle in order to capture three complete years of data. With the addition of Accounting and Community Dental Health Coordination, a total of four reviews are currently scheduled for 2019-20, with the possibility of adding an Educational Service Partnership (ESP) or Incarcerated program (or both), based on the results of the pilot reviews in those areas.

Significant Accomplishments in Learning Assessment Work, 2018-19

- In total, 86.5% of submitted online course assignments were assessed as being at or above college level (the target threshold is 80%).
- The 19th Annual Assessment and Learning Experience meetings were held on September 13th and 15th, 2018, with 612 adjunct faculty members awarded professional development certificates for attendance
- Eight Outstanding Adjunct Faculty members were recognized for *Contributions to Assessment of Student Learning* at the Outstanding Adjunct Faculty Reception held in October, 2018.
- An RSC team attended the Higher Learning Commission Annual Conference in Chicago in April, 2019.
- Four Program Reviews were conducted.
- Three course-level PLAN-DO-CHECK-ACT assessment cycles were completed.
- A pilot Program Review was initiated of Automotive Technologies, one of the programs for incarcerated students.
- Adjunct faculty completed 405 Adjunct Faculty Development (AFD) workshops during AY2018-19. RSC offers 32 AFD workshops, with four more scheduled to launch in fall, 2019.
- Phase II of an ongoing multi-college research study investigated the impact of the Ask a Librarian Service on student performance, conducted collaboratively by Library and Reading Faculty.
- The 2018-2019 Learning Assessment Report was compiled and posted to the RSC public website for access by all internal and external stakeholders.
- RSC submitted an application for the WCET Outstanding Work (WOW) Award for developing and implementing the Dynamic Assessment Data Display (DADD).
- Dr. Angela Felix was invited to serve as a reviewer for the NILOA Excellence in Assessment award. (RSC won the EIA Award in AY2016-17.)
- A process was implemented to assess college-wide student learning outcomes in print courses through the DADD, with data analysis to begin in AY2019-20.

Learning Assessment Team Members, AY2018-2019

Dr. Angela Felix, Faculty Chair, Program Review Coordinator, Critical Thinking Student Learning Outcome Coordinator

Dustin Maroney, Interim Dean, Student Affairs; Assessment Co-Coordinator

Hazel Davis, Faculty Chair, Assessment Co-coordinator; Information Literacy Student Learning Outcome Coordinator, HLC Accreditation Faculty Chair

Dr. Jennifer Shantz, Faculty Chair, Writing Student Learning Outcome Coordinator

Julie Cober, Faculty Chair, Oral Communication Student Learning Outcome Coordinator

Dr. Karol Schmidt, Interim Dean, Institutional Effectiveness

Rosslyn Knight, Faculty Chair, Reading Student Learning Outcome Coordinator

Sarah Stohr, Residential Faculty

Zach Lewis, Interim Associate Dean, Institutional Research