



WCET Outstanding Work (WOW) Award

2019 Nomination Form

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|--------------------------|---|
| Title of Nominated Work: | The DADD: Rio's D ynamic A ssessment D ata D isplay |
| Name of Organization: | Rio Salado College |
| Contact Person's Name: | Angela Felix |
| Contact Person's Email: | angela.felix@riosalado.edu |
| Contact Person's Phone: | 480.517.8282 |

Eligibility

WCET [members](#) (institutions, organizations, or corporations) in good standing are eligible to be nominated for a WCET Outstanding Work (WOW) award.

Institutions or organizations that received the WCET Outstanding Work award in 2018 are not eligible to submit a nomination this year, but they will again be eligible next year. A work nominated last year that did not receive the WCET Outstanding Work award may be updated and resubmitted using the 2019 criteria. See the WCET website for a list of [previous WCET Outstanding Work \(WOW\) award recipients](#).

Eligible works include use of technologies in:

- classroom instruction or in support services that assist students and faculty in meeting their goals, or
- serving students who are on-campus or at a distance, or
- settings that serve many institutions, many students.

Instructions

WCET's Outstanding Work (WOW) Award recognizes outstanding efforts by member institutions and organizations in applying an innovative, technology-based solution to a challenging educational need.

Nominations will be assessed based on the following criteria and point scale. The WCET Outstanding Work (WOW) Awards Committee reserves the right to not score submissions that fail to follow the submission format.

Well-written and complete nominations are encouraged for this competitive award. Please note the recommended word limit for each criterion.



Award Criteria and Scoring

1. What is **the educational need** or problem being addressed?
 - 300-word limit suggested. 5 points.
2. What is **the goal** of the nominated work relative to the need or problem addressed in item #1?
 - 250-word limit suggested. 3 points.
3. How has the work made a positive **impact** in addressing the need? Include the measurable outcomes and state why these are significant. If it is too early to measure the impact, what are the metrics of “success” and the intended measurements?
 - 300-word limit suggested. 5 points.
4. What is **creative and/or innovative** in the way that technology, personnel or other resources are used in this work?
 - 250-word limit suggested. 3 points.
5. How will the nominated work be **sustained** (e.g. long-term planning around your initiative to address staff, financial, and other resource needs)?
 - 250-word limit suggested. 3 points.
6. Why is this work an important and/or **significant contribution to the field** of technology-enhanced teaching and learning in higher education?
 - 300-word limit. 5 points.
7. Is it a model or approach that could be **workable for others** to address a similar need or problem? Provide some **“lessons learned”** that would help others as they consider adapting your approach for their own institution/organization.
 - 300-word limit suggested. 5 points.
8. Relative to the nominated work, what are you **most proud of**?
 - The committee is interested in your response; however, no points are assigned to this item.
 - 250-word limit suggested.

If applicable, please provide any website URLs, documents, screen-shots, or resources related to your nominated work. If this site is password protected, please provide a password the committee can use only for purposes of reviewing your nomination. *Please note, your nomination will be judged based on content in the nomination form and not on the additional resources.*

Submission Instructions

Nomination materials must be received by **Monday, March 13, 2019 by 5:00 pm Mountain Time**



Submit your nominations as a PDF email attachment to the WCET Awards team at wcetawards@wiche.edu with the subject line "WOW Award Submission." You will receive an acknowledgement for every submission as it is received by WCET.

Awardee Selection

The WOW Awards Committee, comprised of WCET member volunteers, will review all nominations and will select the recipients. The WCET Outstanding Work Awards Committee may grant a maximum of five awards and reserves the right to grant fewer than five awards.

Questions

Contact Mollie McGill, 303-541-0306 or mmcgill@wiche.edu if you have questions about the process of nominating or the status of nominations, or the suitability of a potential nomination.

Nominee Submission:

1. What is **the educational need** or problem being addressed? (300-word limit suggested.)

Institutions of higher education often struggle with the need to document interdisciplinary student learning outcomes assessment work, not only to meet regulatory requirements, but also to identify achievement gaps and inform curricular improvements.

One of the most challenging aspects of this work is that even though college-level outcomes such as Critical Thinking, Writing, Reading, Information Literacy, and Oral Communication are taught across the curriculum, efforts to assess and document student performance in these areas are typically isolated to the general education courses that explicitly teach these skills: First Year Composition, College Critical Reading, Public Speaking, etc. Though it is important to include snapshot data from such courses when reporting on student performance on institution-wide outcomes, this approach is not sufficient to capture the learning that occurs over time across all courses and programs, and it does not reveal curricular weaknesses that may need to be addressed in courses that are not part of the general education core.

In addition to assessing learning outcome performance at the institution level, colleges and universities need to be able to drill down to the individual student level to ensure equity among populations. Without the ability to identify achievement gaps, curricular changes informed by macro-level data have the potential to result in negative unintended consequences for particularly vulnerable student



populations. The question is how to effectively identify and document how every student performs on the college-level learning outcomes, in each course they take, from matriculation to graduation.

2. What is **the goal** of the nominated work relative to the need or problem addressed in item #1? (250-word limit suggested.)

The goal of Rio Salado College’s **Dynamic Assessment Data Display (DADD)** is to provide a tool by which the institution can demonstrate transparency and accountability in its assessment practices. Using the DADD, faculty can quickly and easily identify courses, assignments, and student learning outcomes where students are not performing at a college level. The results can then be sorted by student population to reveal potential achievement gaps.



Assessment Data Display

The Assessment Data Display shows student performance on subjective assessments between **7/1/2017** and **6/30/2018**. Definitions may be found on page 2.

For questions, please contact Institutional Research.

Summary Table

| | |
|----------------------|------------|
| Overall | 83% |
| Critical Thinking | 80% |
| Information Literacy | 83% |
| Oral Communication | 79% |
| Reading | 80% |
| Writing | 83% |

| Prefix | Course | Effective Date | Lesson | Dimension | Critical Thinking | Info Lit | Oral Comm | Reading | Writing | Std Count | % Stds@CL |
|--------|--------|----------------|------------------------------|------------------------|-------------------|----------|-----------|---------|---------|-----------|-----------|
| ACC | ACC105 | 5/2/2016 | Course Introduction Essay | Dimension | | | | | | 73 | 90% |
| ACC | ACC105 | 5/2/2016 | Lesson 1 Short Answer Essays | Critical Thinking | Y | Y | | | | 64 | 88% |
| ACC | ACC105 | 5/2/2016 | Lesson 1 Short Answer Essays | Key Concepts and Terms | | | | | | 64 | 89% |
| ACC | ACC105 | 5/2/2016 | Lesson 1 Short Answer Essays | Understanding | | Y | | | | 64 | 88% |
| ACC | ACC105 | 5/2/2016 | Lesson 1 Short Answer Essays | Writing | | | | | Y | 64 | 86% |
| ACC | ACC105 | 5/2/2016 | Lesson 2 Problem 1 | Dimension | | | | | | 56 | 95% |
| ACC | ACC105 | 5/2/2016 | Lesson 2 Problem 2 | Dimension | | | | | | 58 | 95% |
| ACC | ACC105 | 5/2/2016 | Lesson 2 Problem 3 | Dimension | | | | | | 61 | 98% |



| Lesson | Dimension | Critical Thinking | Info Lit | Oral Comm | Reading | Writing | Std Count | % Stds@CL | Dev Ed Std Count | % Dev Ed Stds@CL | Former Dev Ed Std Count | % Former Dev Ed Stds@CL | Dev Ed Rtdg Std Count | % Dev Ed Rtdg Stds@CL | Dev Ed Eng Std Count | % Dev Ed Eng Stds@CL | Dev Ed Mat Std Count | % Dev Ed Mat Stds@CL |
|------------------------------|------------------------|-------------------|----------|-----------|---------|---------|-----------|-----------|------------------|------------------|-------------------------|-------------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|
| Course Introduction Essay | Dimension | | | | | | 337 | 78% | 17 | 71% | 45 | 84% | 15 | 73% | 23 | 78% | 53 | 87% |
| At-Home Midterm Exam: Part 3 | Critical Thinking | Y | Y | | | | 213 | 70% | 12 | 67% | 26 | 73% | 9 | 78% | 12 | 92% | 35 | 80% |
| At-Home Midterm Exam: Part 3 | Key Concepts and Terms | | | | | | 213 | 66% | 12 | 67% | 26 | 73% | 9 | 78% | 12 | 92% | 35 | 80% |
| At-Home Midterm Exam: Part 3 | Understanding | | Y | | | | 213 | 46% | 12 | 42% | 26 | 54% | 9 | 44% | 12 | 58% | 35 | 63% |
| At-Home Midterm Exam: Part 3 | Writing | | | | | Y | 213 | 62% | 12 | 50% | 26 | 65% | 9 | 67% | 12 | 83% | 35 | 69% |
| At-Home Final Exam: Part 3 | Critical Thinking | Y | Y | | | | 169 | 75% | 6 | 83% | 18 | 83% | 6 | 100% | 11 | 91% | 25 | 84% |
| At-Home Final Exam: Part 3 | Key Concepts and Terms | | | | | | 169 | 70% | 6 | 83% | 18 | 78% | 6 | 100% | 11 | 82% | 25 | 80% |
| At-Home Final Exam: Part 3 | Understanding | | Y | | | | 169 | 57% | 6 | 83% | 18 | 67% | 6 | 83% | 11 | 82% | 25 | 72% |
| At-Home Final Exam: Part 3 | Writing | | | | | Y | 169 | 61% | 6 | 67% | 18 | 61% | 6 | 100% | 11 | 73% | 25 | 64% |

The DADD puts critical data directly into the hands of the faculty. Instead of relying on guesswork or anecdotal feedback from a handful of students, faculty are able to use performance data from all students to make informed decisions on instructional interventions. On-demand access to data that can be filtered by date range means that faculty can quickly check the effectiveness of interventions, thus shortening the time to complete each improvement cycle. The institution, in turn, is able to report on student achievement of the college-wide learning outcomes via assignments across the curriculum that have been tagged with one or more of the college-wide learning outcomes.

A sample version of Rio's Dynamic Assessment Data Display, with some reduced functionality, can be accessed at:

<https://ep.riosalado.edu/resources/bi/External%20Reports/WCET%20Assessment%20Data%20Display/AssessmentDataDisplay.rdl?Web=1>

Use the following login credentials:

Username: external\wcet.wow

Password: NuSEU#4*8d6W

- How has the work made a positive **impact** in addressing the need? Include the measurable outcomes and state why these are significant. If it is too early to measure the impact, what are the metrics of "success" and the intended measurements? (300-word limit suggested.)

Data such as the following are included in the Assessment of Student Learning Reports available on Rio's public [Assessment of Student Learning](#) site:



Just under 900,000 online subjective assessment items were assessed by Rio faculty over the 2017-18 academic year. Over half of these subjective items (452,000) were directly linked to one or more college-wide student learning outcomes in the DADD. The data show that, overall, just over 80% of Rio Salado students performed at a college level in the areas of Critical Thinking, Information Literacy, Reading, and Writing. However, only about 76% of Rio Salado students performed at a college level in the area of Oral Communication, which fell below the 80% target.

The narrative goes on to detail the curricular interventions designed to improve instruction and assessment of students' Oral Communication skills. Data will be pulled from the DADD to check the effectiveness of the interventions, and the results will be posted publicly in the 2018-19 Assessment of Student Learning report.

Real-time access to student learning data available via the DADD has enabled faculty to more quickly identify and remediate curricular issues, resulting in measurable improvements across the curriculum. This work has also made a positive impact on the college's ability to maintain transparency and accountability in internal and external assessment reporting, which contributed to Rio Salado being named an Excellence in Assessment Designee by the National Institute for Learning Outcomes Assessment (NILOA) in 2017.

4. What is **creative and/or innovative** in the way that technology, personnel or other resources are used in this work? (250-word limit suggested.)

Rio's DADD is the product of applying principles of intentional innovation to arrive at a solution that supports faculty ownership of learning assessment. On the personnel side, faculty learning outcome coordinators serve as subject-matter experts to review assignment rubrics across all disciplines and tag the dimensions within each rubric that assess skills embedded in a given outcome. For example, the Critical Thinking Coordinator may tag an assignment dimension that requires students to analyze an interaction presented in a Psychology course, or the Information Literacy Coordinator may tag a dimension that requires a student to evaluate an online source in a Physics class. In this way, faculty members teaching the courses can focus on content while the learning outcome coordinators do the work on the back end, providing a creative approach to the problem of "content" faculty not engaging in college-wide student learning outcomes work.

On the technology side, the original DADD was an Excel interface that faculty had to download to their computers. To address access, training, and responsiveness concerns, a web-based dashboard was developed to improve the usability and portability of the DADD. Additionally, changes were made to the underlying data infrastructure, increasing the responsiveness of the tool. Most recently, assessment item performance has been disaggregated by the following categories: Co-curricular students, students



in current or former developmental education courses, gender, ethnicity, and students receiving Pell grants. Faculty can easily identify equity gaps in assessment performance and implement interventions specifically designed to narrow these gaps for high-risk and underrepresented populations.

5. How will the nominated work be **sustained** (e.g. long-term planning around your initiative to address staff, financial, and other resources needs)? (250-word limit suggested.)

From a functional perspective, the DADD is currently being sustained by automated business processes that require little oversight. The data are updated nightly alongside other business processes that are regularly monitored. Access is granted based on standard processes for onboarding new faculty.

As new courses are developed, or as existing courses undergo changes to their assessments, it may become necessary to identify rubric dimension names that have not previously been evaluated for alignment with student learning outcomes. This is a task that Rio's learning outcomes coordinators perform at regular intervals to ensure timely inclusion into the DADD.

The work of evaluating student performance and seeking ways to improve student learning is a long-standing part of the culture at Rio. A faculty member serves as a co-chair of the college's Learning Assessment Team, which meets monthly to monitor and support this ongoing work. Additionally, the college's annual budget includes funding for RioLOGs (Learning Outcome Grants) to support faculty efforts to improve learning outcomes. The administration of these mini-grants has become more strategic, as funding can now be dedicated to improve outcomes in the areas with greatest need as supported by data.

6. Why is this work an important and/or **significant contribution to the field** of technology-enhanced teaching and learning in higher education? (300-word limit.)

Technology solutions designed to enhance teaching and learning often bring limitations. Such restrictions typically require faculty to adapt the teaching to work within the constraints of the technology. Rio's DADD was designed to not require any adaptation by faculty in the classroom. The tool links student performance in the classroom with non-instructional student information in a way that allows faculty to identify gaps in student learning that would not otherwise be recognizable. By connecting data in this way, faculty remain free to determine what and how to assess learning within their classroom. The tool then adapts to their assessment practices. It truly is technology that supports teaching and learning without putting artificial limitations on assessment practices.



The initial version of the Dynamic Assessment Data Display did not include the ability to filter by student population. This addition occurred after initial implementation and was incorporated as part of the ongoing development process. Because of this integrated development, faculty are able to identify achievement gaps among special student populations and work to reduce them. Without this technology solution, faculty would be limited in this effort by what they could individually observe within their own classrooms. The DADD allows college-wide assessment at scale in order to benefit student learning.

This solution has dramatically shortened the time needed to implement and evaluate curricular changes, as faculty have ready access to real-time data and are quickly able to identify a need, implement a change, and monitor progress.

7. Is it a model or approach that could be **workable for others** to address a similar need or problem? Provide some **"lessons learned"** that would help others as they consider adapting your approach for their own institution/organization. (300-word limit suggested.)

Rio's DADD could be adopted by other institutions of higher education. The tool does require capturing student performance at the rubric dimension level into a database. As many institutions are adopting the practice of having students submit homework assignments through an online learning management system, even for in-person classes, this requirement would be met as long as grading is also captured in the system.

The work of aligning rubric dimensions to student learning outcomes was completed by faculty who are subject-matter experts in each of the outcomes to ensure accurate assignment of the student learning outcomes to the varied rubric dimensions. While this was facilitated by Rio's standardized curriculum and assessment model, such a model is not a requirement for this work to be completed.

Rio's Learning Assessment Team members discussed the possibility of creating recommended rubric dimension names to be considered by faculty when developing courses. However, this approach was abandoned, as it would require all faculty to become subject matter experts in each student learning outcome. The organic approach of allowing faculty to assess what they determine to be most important in the classroom, and aligning those assessments to the student learning outcomes behind the scenes is key to ensuring successful implementation.

Rio's DADD integrates seamlessly with Rio's Student Information System. This is an important consideration for other institutions considering adopting a similar practice, as it allows the work of identifying student populations to take place behind the scenes.



Finally, this tool is most effective when implemented in a culture that already embraces assessment activities. If access to data is a key obstacle preventing the establishment of such a culture, a tool like this may help in bridging that gap. However, the tool alone will not solve anything without the support of faculty engaging in this work.

8. Relative to the nominated work, what are you **most proud of**? (250-word limit suggested. Optional)

As a community college with an open-enrollment policy, Rio is committed to providing a high quality education to any student who applies. As not all students are equally prepared for the rigors of higher education, this tool has allowed faculty to identify gaps in curriculum and assessments. By supporting existing efforts to improve student learning, the DADD has contributed to significant increases in student learning among underserved and underrepresented populations. By conducting assessment at a college-wide scale, and incorporating the DADD, Rio is better able to achieve its mission to reinvent the learning experience to change students' lives.