

# LEAP

2008–2009

Learning Excellence Assessment Process

A vibrant green tree frog with large red eyes is perched on a pink flower. The frog is the central focus, with its body angled towards the right. The background is a soft, out-of-focus green, suggesting a natural habitat. The overall image is bright and colorful, with a high-contrast aesthetic.

## Assessment Summary

Assessment—an ongoing process aimed at **understanding** & **improving** student learning.

# Arizona Western College General Education Outcomes

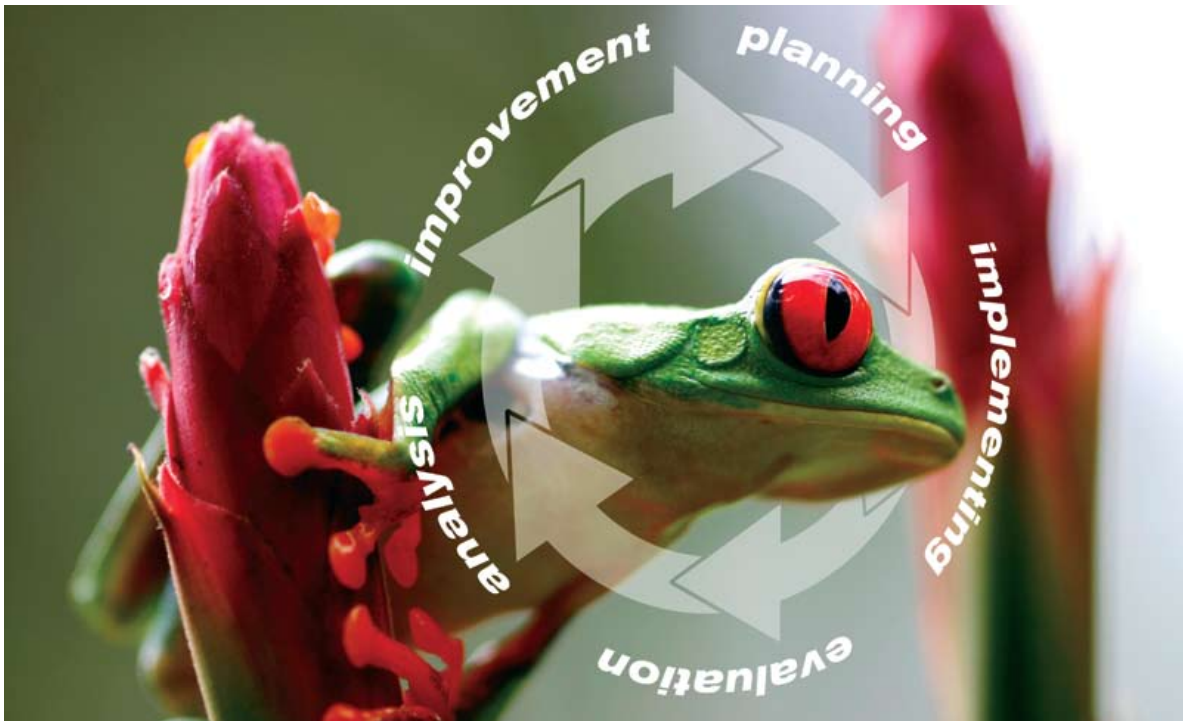
## Introduction

Community Colleges are facing internal and external pressures to increase quality of education and student learning. Standards established for accreditation by the Higher Learning Commission (HLC), North Central Association of Colleges and Schools and by various organizations that accredit academic programs (e.g. JRCERT, NLNAC, NATEF and ASE) stipulate that institutions assess how well the programs are meeting their objectives and be accountable for achieving student learning outcomes.

Assessment of student learning is more than a response to demands for accountability and a means for curricular improvement. Effective assessment is best understood as a strategy for understanding, confirming, and improving student learning. (Higher Learning Commission, 2007 March)

Assessment planning at all levels (course, program, and institution) begins with the understanding of an organization's mission and philosophy/values. The assessment program at Arizona Western College is designed to measure student learning at three outcome levels within the context of the College Mission, Purpose, and Values. AWC's Three Levels of Assessment of Student Learning:

- **Institutional Assessment** Assessment of campus-wide characteristics and issues.
- **Degree/Certificate/Program Assessment** Assessment of an academic, career and technical degree and certificates and support programs.
- **Course Cluster Assessment** Assessment of a set of courses not part of a program e.g. ESL, Reading.



## **Institutional Assessment**

The assessment process includes **planning, implementing, evaluation, analysis** of the resulting information, and **planning** for improvement. Responsibility for assessing the learning outcomes for general education belongs to the Learning Excellence Assessment Process (LEAP) Committee. In 1999-2000, AWC faculty decided that the initial General Education learning outcomes to be assessed would be communication skills, critical thinking, quantitative analysis, and technology applications. These four core skills are considered the most important basic common denominator for our students in degree programs and AGECE Certificates. It is important to note that our General Education course list is expansive rather than restrictive. Students have many options to choose from the areas of arts, humanities, social and behavioral science, physical and biological sciences. Assessing the student learning outcomes regarding content of each General Education course occurs when students' learning outcomes in the degree program containing that course area assessed. By focusing our initial student learning outcomes assessment in General Education on the four core skills rather than on the content of art, humanities, and science, the college can continue to provide a broad selection of General Education courses for its students to explore and at the same time assess learning outcomes.

Competencies to be assessed and/or assessment instruments may be expanded or modified for subsequent cycles as the committee sees fit. Both direct and indirect indicators may be used. Results and analysis of evaluations are posted on the AWC LEAP website. Feedback, including ideas for improvement, is compiled and distributed by the Director of Assessment and Program Review to the LEAP Committee, lead faculty, and the Vice President for Learning Services. The Director of Assessment and Program Review completes the annual report forms for the General Education assessment.

General Education assessments including all assessments in programs, certificates and course clusters are compiled by the Director of Assessment and Program Review and develop the institutional student learning outcomes assessment annual report.

### **Assessment in programs, certificate and course clusters**

The process used to assess student learning outcomes for degrees/programs, certificates, and special area course clusters is the same process which includes planning, implementing, evaluation, analysis of the resulting information, and planning for improvement. The competencies, tools and criteria for success may differ from the institutional assessment. Learning competencies will be prioritized and selected by the faculty involved in each degree/program, certificate, and special course cluster. Indicators will be chosen or developed to measure learning outcomes in the chosen competencies. One faculty member and or lead faculty should be responsible for compiling results and sharing those results with other faculty members in the program, certificate, course cluster. They should develop strategies to improve learning based on the results as indicated. An Academic Achievement Report (AAR) and annual reports should be completed and routed to the dean or associate dean for review using the AWC ACRES system. The AAR's should then be routed to the Director of Assessment and Program Review to be included in the institutional student learning outcomes assessment annual report. Posting assessment reports on the division web pages is encouraged. The LEAP website also has a link to all AAR's that have been completed.

### **Student Learning Outcomes Assessment Report**

Faculty report annually their findings related to assessment (of the program/degrees, certificates and course clusters) and their plans for improvement. The LEAP Committee reports annually their assessment report on General Education: communication skills, critical thinking, quantitative analysis, and technology applications. These reports become part of the institutional assessment report. The Director of Assessment and Program Review coordinates and develops the report.

## What is assessment of student learning?

The primary purpose of the assessment of student learning outcomes is to measure student academic achievements, identify program success, and make changes as necessary to improve student learning. Assessment is an ongoing process that helps us understand what we do, how well we do it and are our students learning what we say they are. We do assessment all the time but we just do not think of it as assessment. The best scenario to explain assessment of student learning is knowing that during the semester we use exams and assignments to assess how well students have learned the material and we assess how well they have learn the course content at the end of the semester by assigning grades. Further, before we begin our next semester, we assess what has worked, what students have learn and didn't learn and how we can try to improve on them. All these assessment practices have been occurring at Arizona Western College. We also systematically document the assessment of student learning by using the Academic Achievement Report (AAR). (see Figure 1) The AAR is an assessment table with five (5) sections that is used for assessment improvements:

- Statement of Purpose
- Intended Student Learning Outcomes
- Tools for Assessment and Criteria for Success
- Summary of Data Collected
- Use of Results

Figure 1

The screenshot shows a web browser window titled "ACRES" displaying the "Academic Achievement Report" form for Arizona Western College. The form includes a header with navigation links, a title, and a green informational box with due dates for sections 1-5. Below this are input fields for Department, Assessment for (with radio buttons for Certificate, Course Cluster, Degree, Non-Academic Program\*, and Other), Assessment for (dropdown), and Course/Program Title. A note explains that the first three fields must be filled before saving. At the bottom, there are five text input fields corresponding to the sections: 1. Statement of Purpose, 2. Intended Student Learning Outcomes, 3. Tools for Assessment and Criteria for Success, 4. Summary of Data Collected, and 5. Use of Results. "Cancel" and "Save Changes" buttons are at the bottom.

## Assessment Process and Timeline at AWC

The assessment process includes **planning, implementing, evaluation, analysis** of the resulting information, and **planning** for improvement. After the initial planning phase when the assessment cycle begins, assessment should be a circular, ongoing process that promotes the improvement of learning. This assessment cycle is applied to assess learning in program, degrees, certificates, and course clusters at AWC.

### Planning Fall Semester (August–September)

#### The Statement of Purpose, Intended Student Learning Outcomes, Tools for Assessment, and Criteria for Success

Assessment is a continuous improvement process. In order to improve, you need to know where you are today and where you would like to go. During this phase, faculty identify the persons responsible for the assessment process, develop and articulate the programs (or certificate or course cluster) mission, goals and outcomes. Programs, certificates and course clusters utilize the AAR template (figure 1) to document the planning of student learning outcomes assessment.

- Section one of the AAR template requires a statement of purpose, mission statement and/or values for each areas to be assessed. If there is no statement of purpose, mission or values, one should be created. The goals of a program/certificate/degree/course must concur with those of the division/department or college and ultimately with the goals of the institution.
- Section two of the AAR template, faculty come to consensus on three to five learning outcomes that students should meet after having completed the certificate/degree/course cluster.
- Section three of the AAR template, faculty describes the assessment tool or tools to be used to measure the outcome and the criteria for success.
  - Faculty select one or two tools to measure each of their selected outcomes. At least one tool should be a direct measure.
  - Consider using existing course assessment tools (with modification when needed) to measure the selected outcomes or brain storm new ones.
  - For each student learning outcome, faculty should describe where they would like to be within a specified time period (e.g. 15% improvement in student performance within two years). Also, determine what standards are expected from students in the program.

Sections 1-3 are entered into the ACRES system using the AAR Form by the end of September.

### Implementing (September–April)

During the implementing phase, faculty are involved in teaching the program and measuring the outcomes of the program as specified in the planning phase. Faculty review the results (of the previous year) and plans and implements changes that will improve student learning (if needed). After the plan has been developed, the plan must be implemented by faculty.

### Evaluation (September–April)

Members of the administration and faculty take part in the evaluation process by examining the value and importance of each assessment tool selected during the planning phase.

## Analysis (May)

### Summary of Data Collected

The purpose of this phase is to analyze the results and determine what actions need to be taken to improve the program. After the data has been collected, the results need to be analyzed. The results are summarized in a meaningful way and information gained should be distributed to all faculty to obtain their ideas and feedback on what actions are needed and how to improve the program.

## Improvement (August-September)

### Use of Results

The results of the assessment must be used to identify changes to improve the program. These changes could be to the content of the curriculum, facilities, etc. Faculty review all of the information obtained from the assessment process and determine how this will affect the assessment plan for the next academic year. This is the continuous improvement cycle and the planned changes should be implemented. In some cases, the changes are easy to implement, while in other instances the proposed changes will have to be implemented over a period of time or through a series of steps.

## Arizona Western College Student Learning Outcomes

### General Education: Communication

Learners provide writing that:

- provides a clear, specific thesis and awareness of audience
- fully develops examples to support thesis in logical, coherent manner
- demonstrates original thinking, depth of analysis, and comprehension of material used
- shows high proficiency in standard English grammar, spelling, and punctuation.

### General Education: Critical Thinking

Learners will demonstrate:

- the ability to take charge of their own thinking
- an intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.

### General Education: Quantitative Analysis

Learners will:

- identify and extract relevant data from given mathematical or contextual situations
- Select known models or develop appropriate models that organize the data into:
  - tables or spreadsheets (with or without technology)
  - graphical representations (with or without technology)
  - symbolic/equation format
- Obtain correct mathematical results and state those results with the qualifiers

- Use the results to:
  - determine whether they are realistic in terms of the original situation
  - determine whether the mathematical model/representation of data was appropriate
  - describe a trend in a table, graph, or formula and make predications based on trends
  - draw qualitative conclusions in written form

### General Education: Technology Applications

Learners will:

- demonstrate a working knowledge of computer basics by opening and closing a program; by creating, saving, printing, finding, renaming, copying, moving and deleting files
- perform basic word processing operations including document creation, editing, formatting, printing, saving and retrieving a document
- perform basic spreadsheet operations including creating, editing, formatting, printing, saving and retrieving a worksheet including the use of formulas, simple functions, and the copy command
- demonstrate the ability to use the Internet in order to access information resources, evaluate their credibility, and apply them
- demonstrate the ability to send and receive E-mail including attachments.

### AWC's General Education Assessment of Student Learning Outcomes— Academic Achievement Reports for 2007-2008

(one template/report is conducted for each General Education Outcome)

#### General Education: Communication

Statement of Purpose	Intended Student Learning Outcomes	Tools for Assessment and Criteria for Success	Summary of Data Collected	Use of Results
Arizona Western College graduates will demonstrate competency in communication, critical thinking, quantitative analysis and technology applications. (Learning Centered Values from Arizona Western College Vision 2012: A Vision in Progress pg. 5)	Learners provide writing that provides a clear, specific thesis and awareness of audience; fully develops examples to support thesis in logical, coherent manner; demonstrates original thinking, depth of analysis, and comprehension of material used; and that shows high proficiency in standard English grammar, spelling, and punctuation.	100% of writing samples evaluated with a 5 point locally developed rubric will receive a score of 3 or high	A total of 50 essays were randomly selected from a total of 250 writing samples. Average scores were as follows-and indicated in the graph below.  Thesis 3.3; Thesis Support 3.1; Analysis 3.1; Comprehension 3.2; and Grammar, Spelling and Punctuation at 3.0	Results indicate that 100% of the writing samples evaluated scored 3.0 through 3.3 meeting the criteria for success. The collections of essays increased compared to last year from n=37 to n= 250. Preliminary discussions have begun in developing a committee to review and research strategies being used in programs for writing across the curriculum. A few writing artifacts collected were identified as journals and general reports and were not meeting standards for writing that met the outcomes. The English department will be re-introducing, reviewing and updating The Writing Guide for students.

## General Education: Critical Thinking

Statement of Purpose	Intended Student Learning Outcomes	Tools for Assessment and Criteria for Success	Summary of Data Collected	Use of Results
To enable graduates to participate with active, discerning commitment in the practical, political, ethical, and aesthetic aspects of community life.	<p>Learners will demonstrate the ability to take charge of their own thinking.</p> <p>Learners will demonstrate an intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.</p>	Graduates will earn scores to put them in the 50th percentile (national norm) or above on the CAAP standardized exam for critical thinking.	<p>215 graduates took the critical thinking test.</p> <p>59% in Fall 2007 and 60% in Spring 2008 indicated no effort or response to performance report.</p>	<p>The self performance report by students left the LEAP Committee to report that the assessment for 07-08 be unsuccessful. With the high percentage of students reporting no effort or no response to their efforts; the committee recommends communicating to faculty and students the importance of placing effort.</p> <p>The APR office will provide the outcomes data to the IR office for a more in-depth study of the findings for a comparison report by majors and degrees.</p>

## General Education: Quantitative Analysis

Statement of Purpose	Intended Student Learning Outcomes	Tools for Assessment and Criteria for Success	Summary of Data Collected	Analysis and Use of Results
Arizona Western College graduates will demonstrate competency in communication, critical thinking, quantitative analysis and technology applications.	<p>Learners will demonstrate the ability to :</p> <p>(1) identify and extract relevant data from given mathematical or contextual situations.</p> <p>(2) select known models or develop appropriate models that organize data into:</p> <p>(a) tables or spreadsheets (with or without technology); or</p> <p>(b) graphical representations (with or without technology); or</p> <p>(c) symbolic/equation format.</p> <p>(3) Obtain correct mathematical results and state those results with qualifiers.</p> <p>(4) Use the results to:</p> <p>(a) determine whether they are realistic in terms of the original situation; or</p> <p>(b) determine whether the mathematical model/ representation of data was appropriate; or</p> <p>(c) describe a trend in a table, graph, or formula and make predictions based on trends; or</p> <p>(d) draw qualitative conclusions in written form.</p>	<p>100% of the graduates will correctly answer 6 or more questions.</p> <p>Additionally, 75% of participating graduates will correctly answer each multiple-choice question on a locally designed test that addresses all of the target outcomes for quantitative skills.</p>	<p>The G.E. Quantitative Analysis test was randomly administered to graduates in Summer 2007, Fall Semester 2007 and Spring Semester 2008 with a total of 225 graduates being tested.</p> <p>Of the 225 graduates tested, 74 (32.88%) of the graduates correctly answered 6 or more questions.</p> <p>Percent of correct responses per question follows. A table showing which of the stated outcomes each question relates to is on the next page.</p> <p>Q1: 206 of 225 graduates (91.55%)</p> <p>Q 2: 224 of 225 graduates (99.55%)</p> <p>Q3: 94 of 225 graduates (41.77%)</p> <p>Q4: 156 of 225 graduates (69.33%)</p> <p>Q 5: 109 of 225 graduates (48.44%)</p> <p>Q 6: 65 of 225 graduates (28.88%)</p> <p>Q 7: 107 of 225 graduates (47.55%)</p> <p>Q 8: 120 of 225 graduates (53.3%)</p>	<p>74 (32.88%) of graduates met the criteria for success.</p> <p>Overall, students scored below 75% on questions 3-8; however, over 91% of students successfully answered questions 1-2. Questions 1-2 continue to show success rates.</p> <p>In a four year comparison, data indicates that students are scoring 69% and below in questions 3-8. Results reviewed by the LEAP Committee determined that since the objectives of the quantitative analysis come directly from the Mathematical Association of America (MAA) the question however were designed in-house at AWC.</p> <p>For 2008-2009, the committee recommended that we wait for the embedded findings prior to revising any questions to the exam.</p>

## General Education: Technology Applications

Statement of Purpose	Intended Student Learning Outcomes	Tools for Assessment and Criteria for Success	Summary of Data Collected	Use of Results
Arizona Western College graduates will demonstrate competency in communication, critical thinking, quantitative analysis and technology applications.	<p>Graduates will:</p> <ul style="list-style-type: none"> <li>• Demonstrate a working knowledge of computer basics by opening and closing a program; and by creating, saving, printing, renaming, and deleting files.</li> <li>• Perform basic word processing operations including document creation, formatting, printing, saving and retrieving a document.</li> <li>• Perform basic spreadsheet operations including, editing, formatting, and retrieving a worksheet including the use of simple functions.</li> <li>• Demonstrate the ability to send and receive E-mail and use the internet</li> </ul>	<p>In a hands-on exam, 80% of the graduates will:</p> <ul style="list-style-type: none"> <li>• Create a document with first line indents, adjust margins, fonts, spacing, insert a header and save the document.</li> <li>• Open and close a program; create, save, print, rename, and delete a file.</li> <li>• Open an existing spreadsheet file, use a function to total values, format the values to currency without decimal places, enter and edit a label.</li> </ul>	<p>237 graduates were assessed and were able to perform the following:</p> <p>Word Processing:</p> <ul style="list-style-type: none"> <li>• 61.6% created margins</li> <li>• 84.4% use d proper fonts</li> <li>• 91.6% used proper spacing</li> <li>• 72.6% inserted headers</li> <li>• 85.7% indented properly</li> </ul> <p>File Management:</p> <ul style="list-style-type: none"> <li>• 94.1% were able to open and close a program</li> <li>• 88.2% saved a file</li> <li>• 80.2 Renamed File</li> <li>• 82.7 Deleted File</li> <li>• 77.2 Moved a file</li> </ul> <p>Spreadsheet Results:</p> <ul style="list-style-type: none"> <li>• 66% Sum Function</li> <li>• 21.9% Currency Format</li> <li>• 81.4 Enter Label</li> <li>• 81.0 Edit Label</li> </ul>	<p>Student scores ranked highest in:</p> <ul style="list-style-type: none"> <li>• Fonts, spacing and indenting in word processing</li> <li>• Entering and editing labels in spreadsheets</li> <li>• In File management graduates were highly success in opening and closing programs</li> <li>• Student scores were weakest in the area of currency formatting in basic spreadsheet operations. This outcome continues to be looked at and consideration for improvements to be implemented at the end of 2008-2009.</li> </ul>

### What is different as a result of student learning outcomes assessment?

#### Examples of Institutional Use of Assessment Results

In General Education Communication Student Learning Outcomes, the following was revealed:

- Writing artifacts collected and evaluated were identified as journals and general reports and were not meeting the writing criteria of the outcomes. Though the criteria for success were met, faculty felt the writing artifacts could improve.
- The LEAP Committee is geared to train and educate faculty on writing across the curriculum—what this means and what we should be doing needs to be re-addressed.
- The Writing Guide provided to students at the campus bookstore was found to be outdated and in dire need of revision. During 2008-2009, AWC English faculty have been working diligently to update the guide as a reference for student use. The Writing Guide will be posted electronically to facilitate student use.
- Faculty have expressed the need to replace the questions to the communication assessment and update the writing assessment rubric. An English Department ad-hoc committee has also been working on updating this portion during 2008-2009.

In General Education Quantitative Analysis Student Learning Outcomes, the following was revealed:

- 33% (n=74) of the graduates that were randomly selected for this assessment met the criteria success of being able to answer six or more questions. Students demonstrate difficulty in identifying and extracting relevant data from given mathematical or contextual situation and using the results given to draw qualitative conclusions in written form. (Question 3 and 6 at 42% and 27%).
- As a result of these outcomes, in Fall 2008, the LEAP Committee reviewed the objectives and voted to keep them as they met the Mathematical Association of America (MAA) objectives.
- During 2008-2009, the LEAP faculty representative is spearheading efforts to imbed the questions of this assessment into Math 142, 151, and 187 during Spring 2009.
- Data collected for four years indicate that students continue to have difficulty in questions 3 and 6. As a result of this data, math faculty will be revising the questions of the assessment as they relate to these outcomes but keeping the same objectives to meet the MAA standard during 2008-2009.

## **Additional Highlights of Student Learning Outcomes Assessment**

### **Degree/Program**

In the Associate in Arts degree in History, the results of the summary of data collected from the student learning outcomes during 2007-2008, resulted in the following changes for 2008-2009:

- Include a portion/selection of the historical vocabulary on all exams. This will build a stronger knowledge base for the exit exam.
- Include a section of the major historical concepts on all exams.
- All AWC History faculty, both full time and associate, will use the same practice and formula to ensure continuity in the History Program.

### **Certificate Program**

In the Certificate for Air Conditioning (and the A.A.) student "Role Play" real life customer service calls in A/C-2 & 4. Students found out that it is important to learn more than one language if one is to live and work in Yuma County. The speech rubric will continue to be used as the grading template. The use of Blackboard to assess technology was incorporated during 2007-2008 but failed due to students not having email accounts. For 2008-2009, faculty will work with the evening students to obtain Toro accounts and continue the use of e-mailing assignments.

### **Course Cluster:**

In developmental Mathematics, a 4 credit hour Pre-Algebra class meeting daily would provide a greater opportunity to improve overall student success and retention. Data compiled through the AWC OIERG will be used to compare success and retention rates for the newly implemented 4 credit hour Math 71 (2008-09) to that of the 3 credit hour Math 72 previously offered (2007-08).

## **Conclusion**

Arizona Western College is committed to ongoing assessment for continuous improvement of student learning and to program excellence. AWC's acceptance to the Higher Learning Commission Academy for Assessment of Student Learning in February 2009, demonstrates its dedication and desire of its commitment to the process of student learning.

Arizona Western College offers educational, career, and lifelong learning opportunities through innovative partnerships which enhance the lives of people in Yuma and La Paz counties.

### Assessment Committee Members

Charlie Balch  
Professor of CIS (Co-Chair)

Bertha M. Avila  
Director of Assessment and Program Review (Co-Chair)

Nancy Blitz  
Director of Center for Teaching Effectiveness

Mary Rhona Francoeur  
Director of Nursing and Allied Health / Professor of Nursing

Stephen Moore  
Professor of English

Judy Watkinson  
Professor of Early Childhood Education

Rita Brown  
Professor of Math

Fred Croxen  
Professor of Geology

Lee Altman  
Professor of HVAC

Mat Anderson  
Associate Dean from Business and Liberal Arts Division

Leticia Martinez  
Director of Testing Services

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Mary Schaal  
Director of Institutional Effectiveness, Research and Grants

Marcus Johnson  
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# LEAP

