

THE UNIVERSITY OF ARIZONA¹

STUDENT OUTCOMES ASSESSMENT PLAN

“Assessment is a means for focusing our collective attention, examining our assumptions, and creating a shared academic culture dedicated to continuously improving the quality of higher learning. Assessment requires making expectations and standards for quality explicit and public; systematically gathering evidence on how well performance matches those expectations and standards; analyzing and interpreting the evidence; and using the resulting information to document, explain and improve performance.”²

Mission

The University of Arizona’s mission defines its educational aspirations. “The University of Arizona, a public, land-grant, research and educational institution, is dedicated to preparing students for an increasingly diverse and technological world and to improving the quality of life for the people of Arizona and the Nation. The University provides distinguished undergraduate, graduate, and professional education; excels in basic and applied research and creative achievement; and integrates these activities and achievements of regional, national, and international significance into everyday life.” (See Appendix F for The University of Arizona Strategic Plan).

A major goal of the University is to “educate the learner of tomorrow” by transforming educational activities to focus on learning as well as teaching. The University of Arizona community is actively exploring ways to be a more student-oriented research university by focusing on new ways to facilitate learning. Instructional systems are being devised and implemented that respond to various student learning styles. In response to this goal for improving student learning, student outcomes assessment has become a vital component of the University’s activities, and a powerful tool for improving the quality of education at the University.

¹ See Appendix A for a profile of The University of Arizona.

² Angelo, Thomas, “Reassessing Assessment,” AAHE Bulletin, Volume 47/Number 8, April, 1995. This definition of assessment was adapted by the University of Arizona.

Conceptual Framework

Knowledge, intellectual skills, habits of mind, and personal growth and development are at the core of the graduate and undergraduate educational experiences at the University of Arizona. A rigorous and coherent education should provide students with the knowledge and critical faculties that are increasingly necessary for living intelligently and effectively in a complex and changing world. The knowledge, skills, and habits acquired can help to create a foundation for a lifetime commitment to learning, personal development, and social responsibility. Elaboration of these aims provides an anchor for assessing the quality and the outcomes of the educational experiences at the University.

The contents and domains of Student Outcomes Assessment include:

- **General and Liberal Education**
- **Discipline-Based Knowledge**
- **Creation and Understanding of New Knowledge**
- **Critical Thinking**
- **Lifelong Learning Skills**
- **Career Preparation**

Assessment of undergraduate student learning at the University of Arizona was formalized in 1987 by a faculty task force charged with developing an assessment plan for undergraduate education.³ The University has continued to develop student outcomes assessment activities and has more recently developed a more formal approach for graduate student assessment. Student outcomes assessment activities have evolved into a dynamic, longitudinal process that monitors all students' growth and progress. It includes:

- **Baseline measures**⁴ of entering students (placement exams, student characteristics),
- **Value-added assessment**⁵ (institutional impact, repeated assessment of the same qualities on the same students done at various points in a student's career),
- **Outcomes**⁶ (final comprehensive exams, exit interviews, capstone courses, alumni surveys, employer surveys).

³ See Appendix B for "Plan for Assessing Undergraduate Education at the University of Arizona: Task Force on Assessment of the Quality and Outcomes of Undergraduate Education," May 15, 2087.

⁴ See Appendix C for examples of baseline measures.

⁵ Astin, Alexander, Assessment for Excellence, MacMillan Publishing Company, 1991.

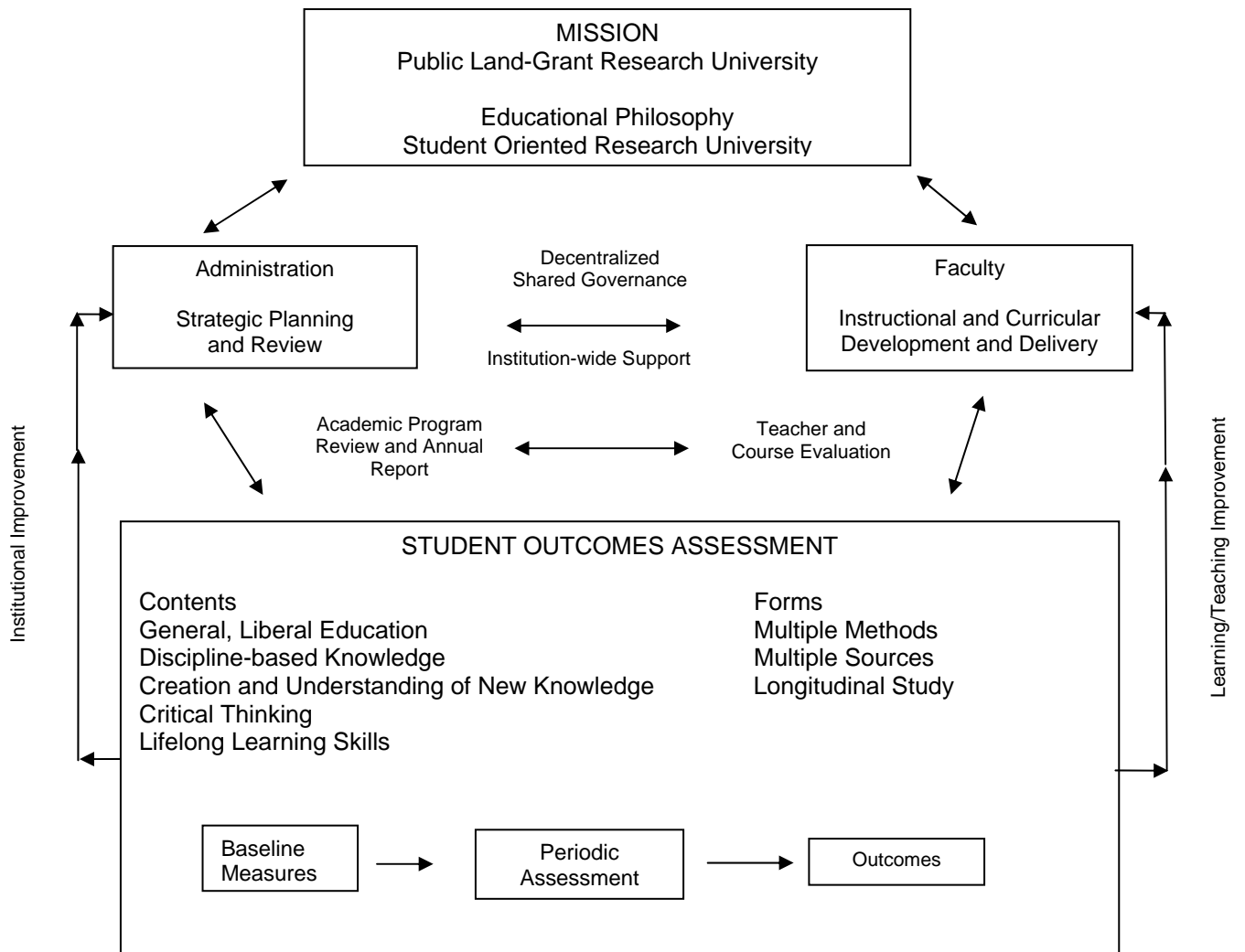
⁶ See Appendix D for outcomes measures

Assessment Design

The assessment design encompasses a multidimensional view of quality and multiple forms of assessment, including quantitative and qualitative measures that evaluate the Institutional environment, assess student outcomes, and study the relations between the environment and student learning.

Figure 1 provides a conceptual framework that relates the Student Outcomes Assessment to the University’s mission, philosophy, and the roles of the administration and faculty.

Figure 1. A Conceptual Framework for Student Outcomes Assessment at the University of Arizona



Guided by the University's Mission and educational philosophy⁷, supported by faculty and administration, the framework for Student Outcomes Assessment provides a firm foundation for improvement of teaching and learning. The University of Arizona plan for student assessment is decentralized, is faculty driven, and is integrated into the evaluation and planning processes of each academic unit. The development of assessment plans at the program, department, and college levels reflect the nature of the academic discipline, the goals of the particular program, and the success of students being served by the programs. Student assessment is linked to the evaluation and planning processes of the University of Arizona through the Academic Program Review (APR) and the University's strategic planning processes⁸. Teacher and course integration of student outcomes assessment with academic program reviews and curriculum development forms a continuous feedback mechanism that ultimately influences the University's ability to achieve excellence.

NCA Framework

This description of the Student Outcomes Assessment Plan follows the framework provided by the North Central Association (NCA). This plan elaborates on the review criteria and the hallmarks of assessment plans identified by the NCA including: the linking of institutional mission, goals, and objectives to the assessment program; evidence of faculty participation in the development and implementation of the plan; evidence that assessment will lead to improvement; an appropriate and realistic timeframe; and provisions for administration and periodic evaluation of the plan and program.

1. How the institution links mission, goals and objectives for student learning and academic achievement to its plan for student assessment.

The multiple planning processes of the University, including Strategic Planning and Budgeting, Continuous Organizational Renewal (CORE), and the implementation of plans requested by the Arizona Board of Regents, provide a framework linking mission, goals, objectives, and strategies to student assessment planning and implementation activities. These multiple processes provide the means of carrying out continuous self-evaluation and renewal. Student outcomes assessment takes place as one aspect of evaluation, particular complementing curricular, program, and faculty review. Institutional values, mission, goals, objectives, and sub-objectives have been developed along with specific criteria for evaluation and assessment.

⁷ See Appendix E for Philosophy of Education and Assessment.

⁸ See Appendix F for University of Arizona Strategic Plan.

⁹ See Appendix G for Teacher and Course Evaluation.

2. Evidence of faculty participation in the development of the plan and an institution-wide conceptualization and scope.

Faculty have contributed to the development of the Student Outcomes Assessment Plan through their: a) participation on the Committee that drafted the plan; b) review, comment, and adoption of the plan by the Undergraduate and Graduate councils; c) participation as Faculty Senate representatives in the processes; d) participation in University strategic planning and evaluation; e) immediate assessment of students; f) development and review of curricular programs; and g) development of departmental and college strategic and assessment plans.

3. Evidence that the assessment plan will lead to institutional improvement when implemented.

A fundamental purpose of assessment is improvement, both of student learning and of the institutional learning environment. At the University of Arizona, assessment is linked intrinsically to self-evaluation and renewal processes. Student assessment, in conjunction with curricular and program review, faculty review, and administrative planning and budgeting, provides multiple opportunities for institutional improvement and advances in learning. Evidence of improvement is discernible through the tracking of the students and subsequent refinement of educational program in response to results. Evaluation of the unit assessment plans is a critical step to ensure the utility of the program, as are periodic reviews and continued updating of the University Student Outcomes Assessment plan. Because of the widespread involvement of faculty, campus-wide committees, departments, colleges, and schools, support units, and administration, the plan will stimulate improvement of student learning at the University.

4. Appropriate and Realistic Timeframe.

The timeframe for implementation of the assessment plan is synchronized with the University's strategic planning and budgeting processes and the Academic Program Review schedule for all academic units. This timetable covers the period from the present (1995) through (1999-2000). It is coordinated with the seven year cycle of academic program reviews in which approximately 15% of the academic units are reviewed each year. By 1999-2000, a significant portion (over 70%) of all units will have adopted plans and begun participation in the evaluation process.

The University of Arizona Student Outcomes Assessment Plan has been subjected to campus-wide review. On-line discussions of the plan and open forums are planned as part of the development process in academic year 1995-96. Comment, evaluation, and update of the plan is also scheduled in the third year of the time frame prior to the next NCA self-assessment.

5. Provisions for appropriate administration of the assessment program.

Development and implementation of each unit's Student Outcomes Assessment Plan within this decentralized campus is a responsibility of each individual unit. Reviews of plans occur within departments and colleges. Progress on the development and implementation of plans is reported through the strategic planning and budgeting process to the Provost and Senior Vice President for Academic Affairs. The Provost also is charged with monitoring periodic review and updating of the plan. Administrative support units serve as resources and instruments for improvement. Thus, administratively, faculty, departments, colleges, support units, Vice Provosts, and the Provost each have a role in development, coordination, response, and improvement of Student Outcomes Assessment Plans.¹⁰

Administration and Implementation

Administrative responsibilities for assessment rest primarily within the Office of the Provost, but emanate directly from the faculty through departments, colleges, and campus-wide committees such as the Graduate and Undergraduate Councils. The assessment of student outcomes at the University of Arizona is a multi-tiered process which incorporates the principle that the professorate is both the primary determinant of curricular requirements and the primary source of information about student achievement within those curricula. Accordingly, assessment activities have evolved into a mixture of formal and informal procedures with varying degrees of central and local input and control. This plan, by focusing on the value of student outcomes assessment as a tool for institutional improvement and renewal, represents an increased emphasis on the formal aspects of the assessment process. It does so by linking academic unit assessment procedures to the septennial Academic Program Review process and by providing campus-wide mechanisms to support local assessment initiatives.

Procedurally, each academic program or department will develop a written plan that identifies the intended educational outcomes of the program, the methods that will be used to measure these outcomes, and the means by which the measures are used to improve the program. Each academic unit's plan will be a component of its septennial Academic Program Review. The policies and procedures of each unit's plan will be evaluated by both the Provost and the internal and external academic program review committees responsible for review of the unit.

Program level assessment plans will be expected to identify:

- What students should know and be able to do after completing the program;
- How student outcomes are measured;
- What roles the faculty plan in the assessment process;
- How assessment information is used to strengthen the program and improve outcomes.

¹⁰ See Appendix H for Role of Faculty, Departments and Colleges.

More specifically, departments are asked to respond to the following questions as part of their Academic Program Review (See Appendix K):

1. Student Outcomes

- A. What should students know, understand, and be able to do after completing the course work?
- B. How are these outcomes related to the mission and goals of the college, and to those of the University?
- C. How are faculty involved in the development and implementation of student outcomes assessment?

2. Assessment of Student Outcomes

- A. What methods are used to assess student outcomes?
- B. How are the data collected to insure their reliability and validity?
- C. Is the timetable for implementation of the unit assessment plan feasible?

3. Utility of Results

- A. How are the results used to improve learning and instruction?
- B. How are the results incorporated into the strategic planning and curricular review processes?
- C. What are the feedback mechanisms for sharing the results with instructors and students, and with internal and external review or accrediting bodies?

The University of Arizona's Student Outcomes Assessment Plan fosters improvement in the institution's assessment activities in three ways. First, through the sponsorship of the Graduate and Undergraduate Councils, it provides mechanisms for the dissemination of assessment information and the development of policies. Second, through the creation of a campus-wide Student Outcomes Assessment committee, it provides resources to support departmental and college level efforts to develop and improve assessment programs. Third, through its incorporation in the Academic Program Review and other reporting and review processes, student outcomes assessment becomes an integral part of the curricular development, strategic planning, and decision making processes of the University.

Timeframe

As indicated, student outcomes assessment activities have been on-going at various levels at the University of Arizona.¹¹ The activities listed in Table 1 have been proposed (some are already in progress) to ensure further university-wide participation in the design, implementation, and evaluation of student outcomes assessment. There are three stages involved: Development of the Assessment Plan, Campus-wide Awareness of Student Assessment, and Continuous Self-Study and Institutional Improvement Based on Outcome.

Table 1. Time frame for Student Outcomes Assessment

Development of Assessment Plan

1995	March	-	Student Outcomes Assessment Committee appointed by Vice Provost, Academic Planning
	April	-	Presentations to Undergraduate and Graduate Faculty Council
	May	-	Academic Program Reviews (APR) Criteria and Schedule mailed
	June	-	NCA Associate Director's visit and workshop on Assessment
	30 July	-	Complete Assessment Plan Drafted
	1 August	-	College Annual Reports Due
	August	-	Administrative Review and Revision of Draft

Campus-Wide Awareness of Student Assessment

1995			
	October	-	Assessment Plan Presentation to Graduate/Undergraduate Councils
	December	-	Presentation and Discussion by Provost's Management Group
		-	Presentation to President's Cabinet
		-	Presentation to SPBAC
		-	Report to Academic Council
		-	Final Review and Revision of NCA Plan
	20 December	-	NCA Student Assessment Plan mailed
	December 95		
	To January 96	-	Pew Roundtable discussion of Student-Centered Research University

1996			
	January	-	Faculty Senate Review of Plan
	February	-	Support, Service, and Administrative Units Annual Reports Due
	March to		
	May	-	Faculty development workshops and forums for academic departments regarding student outcome assessment

Continue Self-Study and Improvement Based on Outcomes

1996-1999			
		-	Strategic Plan Reviews
		-	Academic Program Reviews including Student Outcome Assessment Plans
		-	Review Departmental and Collegiate Annual Reports
		-	NCA Student Assessment Plan/Process Review and Evaluation by Office of Academic Planning and Support
1999		-	Review, evaluate and update NCA Assessment Plan in preparation for NCA site visit

¹¹ See Appendix 1 for Previous Assessment and Planning Initiatives.

The time frame for the University's assessment activities is tied formally to the seven-year cycle of the Academic Program review process (See Table 1). In 1999, by the time of the University's next accreditation site visit by the North Central Association, approximately 70% of all academic units will have been reviewed and formalized their student assessment programs. In addition, by the end of this academic year, members of the University community will have had an opportunity to participate in a discussion of the student-oriented University as part of the Pew Higher Education Roundtable. The discussion has included a review of the University of Arizona Student Outcomes Assessment Plan. In addition to the discussions and the information provided through the activities of the Student Outcomes Assessment Committee, information will continue to be available to the campus community through a variety of means such as listservs, publications in the campus newspapers, and workshops among others.

Institutional Improvement

Improving the quality of undergraduate and graduate education is central to the mission of the University of Arizona. Quality of teaching and learning is valued and the improvement of educational performance is a primary goal. With the increased campus-wide awareness brought about by the implementation of this comprehensive Student Outcomes Assessment Plan, information about learning outcomes will be an integral part of the University's decision making process. Student assessment, in conjunction with program review, faculty review, and administrative planning and budgeting, provides opportunities for improvement in student learning processes. Evidence of improvement will be discernible through the feedback mechanisms and subsequent refinement of educational programs in response to assessment outcomes. Evaluation of unit assessment plans is a critical step to ensure the utility of the Student Outcomes Assessment Plan.

Improvement of Teaching

An essential part of the University of Arizona's mission stipulates that the institution provide "distinguished undergraduate, graduate, and professional education." This mission is fulfilled by offering the best in teaching and teaching-related activities at both the undergraduate and graduate levels, but is especially true at the graduate level where research and teaching are essentially indistinguishable. Excellence in basic and applied research, scholarship, and creative achievement is often furthered by significant interactions between faculty and graduate students. Oftentimes, this mutual endeavor helps fulfill the University's second goal, namely to "initiate and carry-out significant scholarly and creative research integrated with the educational experience."

There has been an increased emphasis on teaching at the University of Arizona. This emphasis has already resulted in the strengthening of the relationship between faculty and graduate students, and faculty interactions with undergraduates. Teaching awards, such as the Five-Star Teaching Award, are now some of the most coveted among faculty. The creation of these types of awards, as well as the new Professorships in Undergraduate

Teaching, provides evidence of greater progress in this area than in the past. These awards also provide for closer tracking and monitoring of activities related to teaching.

In addition, graduate student achievement often is enhanced through teaching, that is, through the creative exercise of transferring and communicating knowledge, as well as by offering practical advice to undergraduates. By furnishing graduate students with strong role models in the area of teaching, the next generation of researchers, scholars, and creative artists should be even better equipped to meet the needs of all those who seek an education beyond the secondary level at various institutions of higher learning throughout the United States.

Improvement of Learning

The University of Arizona Student Outcomes Assessment Plan seeks to encourage and, especially, maintain the collaborative search for and discovery of new knowledge. The faculty mentor in particular can be of invaluable assistance to the individual student. Especially in association with individual faculty members and/or teams of researchers, the student's thinking skills are greatly expanded. Through various fellowships, research assistantships, internships, and other programs, many of which are sensitive and responsive to the needs of diverse individuals, the student can see one's own research realized and, through this process, also gain a greater sense of self-esteem.

1. Search and Discovery of New Knowledge

The mutual study of an object of inquiry and the common pursuit of knowledge on the most basic and practical levels of research often create new areas of technology, industry, and forms of education that are of relevance to everyday life in the region, the nation, and the world. In this way, the University seeks to fulfill its goal to "achieve an environment and culture that supports all members of the University community."

2. Preparation of Independent Learners

An important by-product of the entire process of education is that the student's learning is further developed and refined. In such a culture of collaboration the student's chances for useful service and gainful employment are often enhanced greatly. In these ways also, the University's vision of achieving "quality academic programs that will prepare independent learners for tomorrow's world" can be fulfilled.

3. Linking Graduate and Undergraduate Education

Links between graduate and undergraduate education are beginning to be fostered by the new Undergraduate Research Grants program, a collaborative endeavor of the Vice President for Research and the Provost. Through enhanced and more consolidated efforts in the area of assessment, gaps between undergraduate and graduate education are being bridge.

4. Realizing the Vision of a Student Oriented Research University

One of the goals of the Assessment Plan is to help realize the vision of a student-oriented research university for the University of Arizona.¹² In concert with several reviewing agencies such as the Undergraduate Council and the Graduate Council, and selected administrative units, the Provost's Office can ensure that the University of Arizona Student Outcomes Assessment Plan continues to be implemented with ever greater awareness of the needs of current and future students.

Conclusion

As stated in the University of Arizona's mission, the University is "dedicated to preparing students for an increasingly diverse and technological world" and to providing "distinguished undergraduate, graduate, and professional education." To reinforce this pledge further, a major goal of the University's current strategic plan is to "educate the learner of tomorrow" by transforming educational activities to focus on learning as well as teaching. The University's student assessment plan, spelled out in this document, is designed to improve the University's educational processes and improve student learning and performance.

Assessment of instructional programs and student achievement is very important to University faculty, administration, and staff. The process described in this document is the product of much deliberation and study by members of each of these groups; however, the group that was most heavily involved in the assessment design, as it should have been, was the faculty. University personnel feel that his assessment process complements the University's mission and strategic goals and fully support its implementation.

Student assessment processes described in the plan have been shown to be inextricably linked to the University's mission, goals, and objectives. Further, feedback mechanisms have been implemented through the institutional strategic planning processes, Arizona Board of Regents' initiatives, and legislatively mandated strategic planning processes. Note that each of these processes requires that goals and objectives in a unit plan must be linked to institutional goals and must contain measureable objectives. This feature of the plan makes it easy to determine if satisfactory progress toward a particular goal has been achieved.

Faculty have been involved actively in developing the assessment plan and designing the assessment activities. Indeed, most of the assessment activities described in the plan were designed by faculty, and have been in use for some time. The incorporation of these assessment activities in the NCA student assessment plan was a natural extension of their use by faculty, departments, or other units.

¹² See Appendix J for "Toward a Student-Oriented Research University: Phase I Report"

The fact that the University administration will review plans and accomplishments in the student assessment realm for academic units, and that this same administration will be held responsible for meeting institutionally developed goals approved by and reported to the Arizona Board of Regents and State authorities, indicates that institutional improvement will occur. Further, the University administration and faculty are committed strongly to institutional improvement in this area; and since faculty have developed many of the goals, they will have a vested interest in seeing that the goals are achieved.

Since the time frame for implementation of the assessment plan is synchronized with the University's planning and budgeting process and its academic program review schedule, the assessment process should not prove to be onerous for the academic or other units that must perform the various functions involved. Further, the assessment process should be well under way by the start of the next NCA accreditation visit. Thus, the time frame is both appropriate and realistic.

Close administrative review and monitoring of the assessment process follows as a consequence of the process' being part of the normal, periodic planning and program review activities. This ensures that this important function will receive the attention of the administration necessary to achieve its goals.