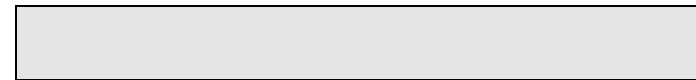




ARIZONA'S UNIVERSITIES: 1998 REPORT CARD



Arizona Board of Regents
Arizona State University
Northern Arizona University
The University of Arizona

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To the Citizens of Arizona:

The past year has brought many challenges and changes to Arizona's system of public universities. Arizona State University, Northern Arizona University and the University of Arizona are focused on providing excellent instruction, leading-edge research and responsive service to their communities in an environment of expanding enrollment, tighter fiscal resources and higher expectations from a variety of constituencies. The Board of Regents, responsible for the policy framework of the universities, hears from taxpayers, elected officials, students, employees and alumni who want to know more about the return on their investment in higher education, and how Arizona's universities stack up. With that in mind, the Regents are proud to present the second edition of the Report Card for Arizona's Universities. You will find a summary of progress in 20 key areas, including undergraduate education, quality of instruction, excellence and innovation, and the utilization of resources. We hope you find it to be informative and meaningful. It is a key to driving the improvement and forward progress of our public universities in Arizona. Your suggestions and comments are welcome. They help shape and refine future editions. The opportunity to engage you in a dialogue about the progress and performance of our universities is valuable.



— *Rudy Campbell*, President
The Arizona Board of Regents

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Purpose of the Report Card

Arizona's universities serve broad and diverse communities, striving for excellence while balancing changing public policies, finite resources, rising expectations and the dynamic needs of students. Arizona State University, Northern Arizona University and the University of Arizona are building on their achievements as outstanding instructional and research institutions. They are accountable for the progress they make and offer indicators of their performance and achievement. This annual report on university performance is designed to give the general public, elected officials, business leaders and consumers of higher education a summary of the universities' progress and milestones. It reflects up-to-date information that is collected and analyzed by the universities and the Board of Regents staff. It is designed to be a balanced, accurate reflection of where the universities excel and where they need to improve. The measurements in the report card are updated and refined as necessary: in some cases, information reported for an indicator may be slightly different than information used in previous editions. The date on the cover reflects when the report card was issued; the data inside generally reflect the operation of the prior full academic year.

The Process

The universities completed a self-assessment for each performance indicator. The self assessments were reviewed, along with other factors, by Regents in assigning grades to each indicator. The grades reflect a consensus of the Board and its best effort to measure value, assess trends, and establish benchmarks for

on-going improvement and communication. The indicators in the Report Card are a baseline against which future performance will be measured and reported.

Grading System

One of four levels is assigned to the progress the universities have made toward key benchmarks or institutional goals:

Superior Performance: Goals have been met or exceeded, or results compare favorably with established benchmarks, or a high level of baseline performance is shown, or a qualitative indication of excellence is demonstrated.

Satisfactory Performance: Progress has been made but performance has not met goals, or performance is above average, or performance exhibits competence and initiatives for improvement are underway.

Needs improvement: No evidence of positive change, or performance is below standard and no initiative for improvement is underway.

Unsatisfactory: Performance is below expectations.

Alignment with University System Strategic Plan

The Arizona Board of Regents has established seven strategic directions for improving the quality of the Arizona University System:

- 1) *Improve undergraduate education*
- 2) *Strengthen graduate education*
- 3) *Develop research and encourage economic development*
- 4) *Provide access to Arizona's universities*
- 5) *Capitalize on new technologies*
- 6) *Strengthen relationships with constituent groups*
- 7) *Improve efficiency*

The Report Card indicators align with the strategic directions in the following manner:

	Page
Improve undergraduate education	
• Access by undergraduates to regular faculty	4
• Satisfaction with academic advising	3
• Student retention and graduation rates	3
• Success of university alumni	4
• Ability to progress in academic programs	3
• Success of upper division transfer students	4
Strengthen graduate education	
• Success of alumni	4
• Student involvement in research projects	9-11
• Percent of graduates going on to professional/graduate school	5
• Nationally recognized programs	9-11
Enhance research and economic development	
• Patents, licenses, and inventions	6
• Grants and contracts	6
• Economic impact on local communities	9-11
• Contributions to economic development	9-11
Assure access to public higher education	
• Development of distance education programs	6
• Success of transfer students	4
Capitalize on new technologies	
• Students served by online courses and other alternative modes of delivery	6
Strengthen relationships with governmental, educational, and constituent groups (This Report Card itself is published and distributed to strengthen key relationships.)	
Improve Efficiency	
• Privatization efforts	7
• Teaching load	7
• Proportion of state funds used for instruction	7
• Administrative efficiency	7

Category 1: Improving the Quality and Effectiveness of Undergraduate Education

FIGURE 1.1
Percentage of Seniors

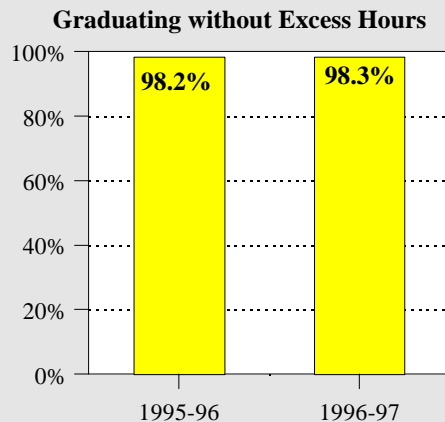
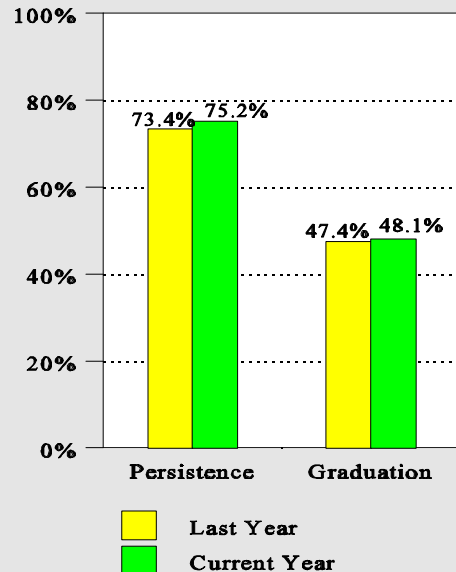


FIGURE 1.2
One-Year Persistence & Six-Year Graduation Rates



Ability of students to progress in their academic programs: Timely, efficient completion of studies toward a degree is important to students and to the universities. The universities track the percentage of general studies completed by the end of the sophomore year or survey students about course availability. All three universities reported improvement in their measures, indicating that the Arizona University System shows improvement in ease of access to required general education classes.

Rating: Superior _____ Satisfactory Needs Improvement _____ Unsatisfactory _____

Percentage of seniors graduating without excess hours: The current standard requirement for the completion of most baccalaureate degrees is 120 credit hours. Currently, more than 85% of undergraduate students are enrolled in programs that require 120 hours for graduation. The current convention regarding the level at which students are considered to have accumulated excess credit hours is 160 credit hours. The most recent data indicate that the percentage of seniors graduating with more than 160 hours continues to be very low and has decreased slightly since last year. (Figure 1.1)

Rating: Superior Satisfactory _____ Needs Improvement _____ Unsatisfactory _____

Rates at which students stay in school and graduate: The universities assess the effectiveness of the support they provide students by tracking how many freshmen return for their sophomore year and how many graduate within six years. Both the persistence rate and the graduation rate have increased in the past year. (Figure 1.2) These are positive trends in one of the key outcomes that the universities track and attempt to improve.

Rating: Superior _____ Satisfactory _____ Needs Improvement (+) Unsatisfactory _____

Satisfaction of students with academic advising: Academic advisors guide students in selecting and scheduling course work that leads to the completion of their degrees. More than sixty-three percent of students surveyed in the most recent year were satisfied or very satisfied with advising. This number remains relatively stable since two years ago, when satisfaction was last measured by all three universities and 63.9 percent of those surveyed reported satisfaction with advising.

Rating: Superior _____ Satisfactory _____ Needs Improvement Unsatisfactory _____

Category 1 (continued): Improving the Quality and Effectiveness of Undergraduate Education

FIGURE 1.3
Percentage of Lower-Division Students
With 2 or More Classes Taught by Regular Faculty

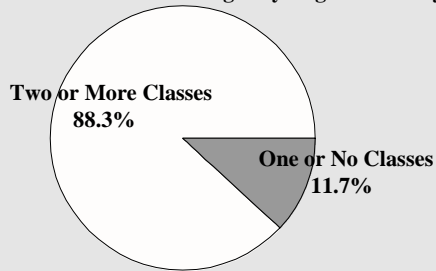
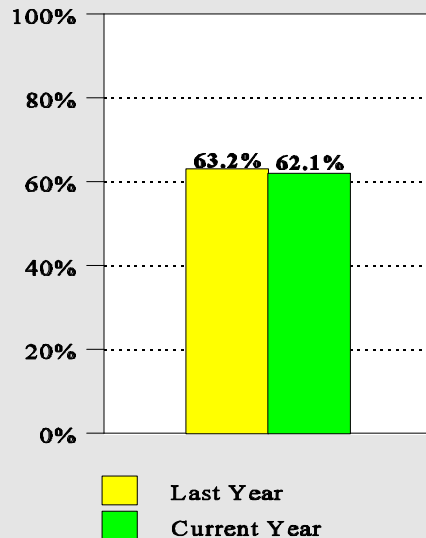


FIGURE 1.4
Four-Year Graduation Rates of
Upper-Division Transfer Students



Success of alumni: Arizona employers or employers who interview on campus are surveyed regarding their satisfaction with Arizona University System graduates. There is strong agreement among employers that graduates are satisfactory or better (across the system, the percentages ranged from 75% rated *very good* or excellent to 95% rated good or excellent). Survey results indicate gradual improvement in these measures.

Rating: Superior _____ Satisfactory (+) Needs Improvement _____ Unsatisfactory _____

Percentage of graduates going on to graduate/professional schools: In the most recent surveys of graduates or upper-division students from each university, 61.9% intend to go to graduate or professional school. This percentage appears to have decreased slightly from previous reports.

Rating: Superior _____ Satisfactory Needs Improvement _____ Unsatisfactory _____

Access to regular faculty by undergraduate students: The universities measure the classroom contact of lower-division students with regular faculty (tenure and tenure track faculty, instructors, and lecturers are included as regular faculty; graduate teaching assistants and associates, and part-time faculty paid on a per-class basis, are not). 88.3% of lower-division students have two or more courses taught by regular faculty. (Figure 1.3)

Rating: Superior _____ Satisfactory Needs Improvement _____ Unsatisfactory _____

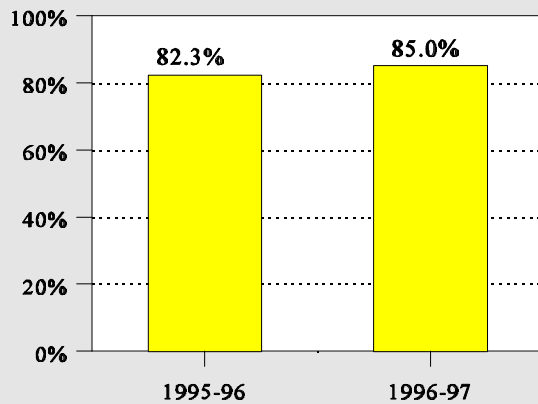
Success of Transfer Students: This indicator measures the completion rates of students who enter the universities at the junior level or above, usually from an Arizona community college. The most recent data show that the percentage of transfer students who graduate within four years is 62.1%, a slight decrease from last year's results. (Figure 1.4)

Rating: Superior _____ Satisfactory Needs Improvement _____ Unsatisfactory _____

Category 2: Demonstrating the Quality of Instruction

FIGURE 2.1

**Percentage of Faculty With
"Good" or "Excellent" Teaching Ratings**



Percentage of faculty with "good" or "excellent" teaching ratings: The universities track students' ratings of the teaching performance of faculty. The most recent data show that about 85% of faculty were rated as "good" or "excellent" by students. These ratings have increased since the previous year. (Figure 2.1)

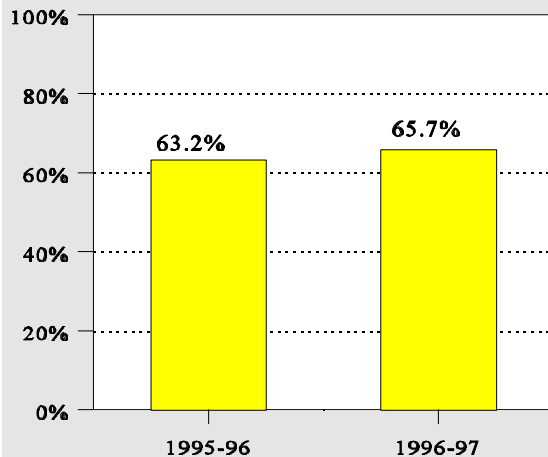
Rating: Superior Satisfactory Needs Improvement Unsatisfactory

Overall student/alumni satisfaction with faculty: The universities survey students and alumni to determine their level of satisfaction with faculty interest and concern in students, their education, and their career plans. Combining data from the most recent survey from the universities indicate that 72.7% are satisfied or very satisfied. For the two universities where data over time are available, it would appear that this percentage is increasing.

Rating: Superior Satisfactory Needs Improvement Unsatisfactory

FIGURE 2.2

**Top High School Scholars Enrolling
at Arizona's Public Universities**



Top Arizona high school scholars attending Arizona universities: The universities strive to attract and retain top student scholars (as defined by the top 10% of the previous year's high school graduating class). 65.7% of the top high school graduates from 1995-96 entered an Arizona university in 1996-97, showing an increase from the previous year's 63.2%.

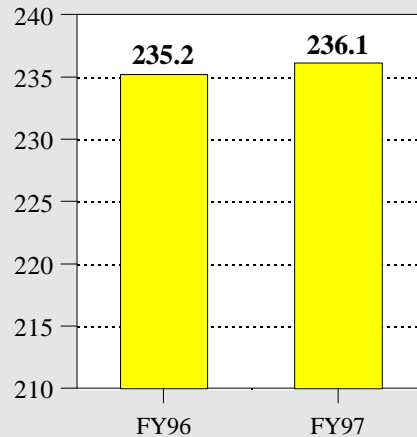
Rating: Superior Satisfactory Needs Improvement Unsatisfactory

New National Merit Scholars entering Arizona universities each year: Strong instructional programs enable the universities to attract top student scholars from throughout the United States. In 1997, 116 new National Merit Scholars entered Arizona's public universities, up from 103 in 1996. This 13% growth in National Merit Scholars enrolled exceeds the 2% growth in the source of potential National Merit Scholars who might enroll — Arizona high school graduates.

Rating: Superior Satisfactory Needs Improvement Unsatisfactory

Category 3: Demonstrating Excellence & Innovations

FIGURE 3.1
Research Grant and Contract Expenditures
(in millions)

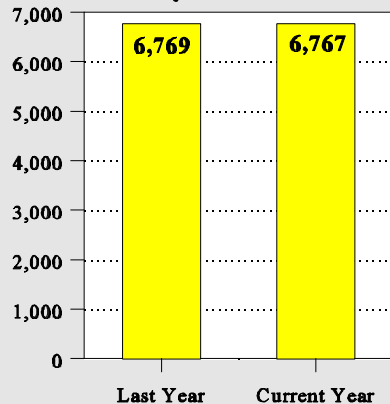


New patents and licenses: Through intensive research by faculty and students, universities document new patents, apply for additional patents, grant licenses for using technological breakthroughs, and make disclosures of new inventions. The average number of patents and licenses in a year (using a three-year average) has increased to 43 for the period from FY95 to FY97, up from 32 for the period from FY94 to FY96. (The Regents have elected not to grade this item, pending a thorough review of technology transfer at the universities.)

Research grant and contract expenditures: Research at the universities expands the body of knowledge and provides opportunities for students to participate in leading-edge studies. The universities track the level of external research funding on a yearly basis. The most recent data show that research grant and contract expenditures have remained fairly stable, increasing from \$235.2 million in FY96 to \$236.1 million in FY97. (Figure 3.1)

Rating: Superior Satisfactory _____ Needs Improvement _____ Unsatisfactory _____

FIGURE 3.2
Student Registrations in
Electronically Delivered Courses



Use of new technology to deliver instruction: Technology provides new dimensions for classroom instruction as well as service to a broader community. The most recent data indicate that there were 6,767 students registrations in courses that were provided via electronic delivery modes. This number is relatively stable from last year. (Figure 3.2.)

Rating: Superior _____ Satisfactory (-) Needs Improvement _____ Unsatisfactory _____

Progress toward implementing collaborative on-line academic degree programs: In September 1996, the universities instituted a workgroup to collaborate on technology delivered education. The tri-university MBA Certificate in International Business is being planned, and the Master's of Engineering degree program is moving forward. A marketing survey of the need for off-campus education has been initiated.

Rating: Superior _____ Satisfactory _____ Needs Improvement _____ Unsatisfactory

Category 4: Improving the Utilization of Resources

FIGURE 4.1
Student Credit Hours

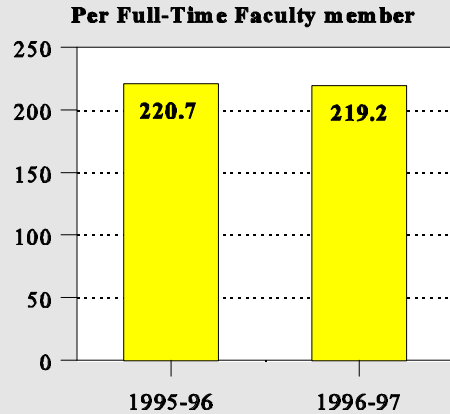
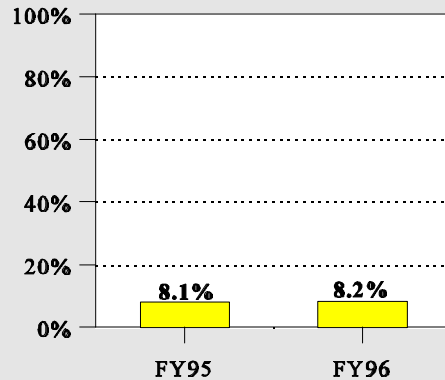


FIGURE 4.2
Administrative Costs as a Percentage of Total Expenditures



Privatization of university functions: Arizona's universities have systematically shifted in-house, auxiliary services and functions to private vendors when feasible and financially practical. At least 66 separate auxiliary functions are performed in whole or in part at all three universities by private vendors. (ABOR will conduct thorough review of privatization at universities in 1998.)

Rating: Superior _____ Satisfactory _____ Needs Improvement (+) _____ Unsatisfactory _____

Participation of faculty in instructional activities: Ranked and full-time faculty are the primary teaching resource of the universities. Faculty contact with students is tracked to ensure that students have contact with faculty. When total student population is included, faculty contact with students has decreased slightly, from 220.7 student credit hours (the credit hours of each course multiplied by the number of students enrolled) per full-time faculty member in 1995-96 to 219.2 in 1996-97. (Figure 4.1) Freshmen and sophomore contact with ranked and full-time faculty has increased at all three institutions each of the last three years.

Rating: Superior _____ Satisfactory _____ Needs Improvement _____ Unsatisfactory _____

Proportion of state operating budget used for educational activities: Providing quality instruction and strong instructional resources is a high priority for Arizona's University System. The universities track the percentage of state operating resources, including general fund appropriations and tuition and fees, used for instruction and student-related expenditures. This has remained relatively constant, decreasing slightly from 67.7% in FY95 to 67.4% in FY96.

Rating: Superior _____ Satisfactory _____ Needs Improvement _____ Unsatisfactory _____

Efficient use of resources for primary institutional functions: The foremost missions of the universities are to instruct students, conduct research, and provide public service. The universities track the portion of their resources earmarked for those core functions and the portion that is used for administrative purposes. Administrative costs as a percentage of total expenditures remained relatively constant, increasing slightly from 8.1% in FY95 to 8.2% in FY96. (Figure 4.2)

Rating: Superior _____ Satisfactory _____ Needs Improvement _____ Unsatisfactory _____

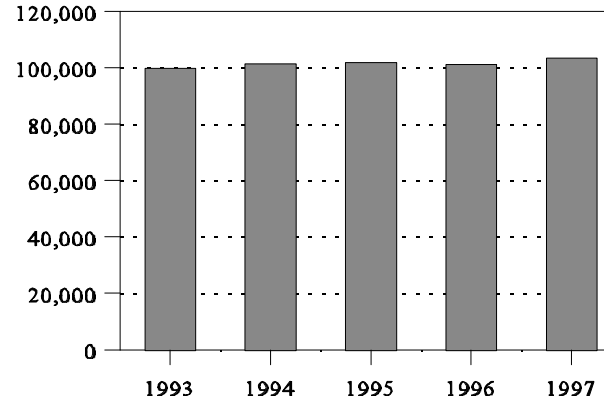
Scope, Size and Character of the Arizona University System

The following facts and figures provide further explanation of the condition of the Arizona University System and offer greater context to the indicators presented in the body of the Report Card. They represent a snapshot of the system as of Fall 1997:

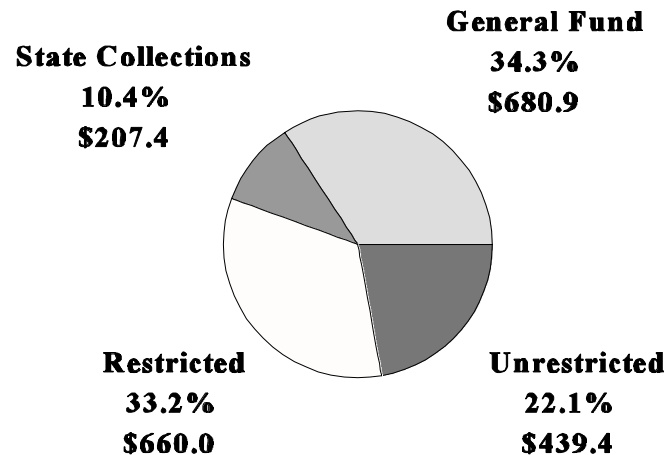
- Enrollment levels and patterns: More than 103,000 students enrolled at three main campuses, three branch campuses, and more than 220 centers and sites around Arizona
- Number of degrees awarded by type of degree:

Baccalaureate degrees	+14,000
Graduate\professional degrees	+6,000
- Sources and uses of funds: Funds are divided into four main categories: general fund revenues (appropriations from the State), collections (tuition and fees in support of the state operating budget), designated funds (auxiliary enterprises including bookstores and dormitories) and restricted monies (gifts, grants, and contracts). For FY 98, revenues from all sources are estimated at \$2 billion.
- Economic impact on local communities: Arizona's universities receive funding from the state, and the universities give back technology, trained workers, payroll, local purchases, and a broader tax base to the economy of the state. The overall annual economic impact of the universities to be more than \$4 billion.
- Number of employees: The University System employs more than 22,000 who live and work in communities throughout the state.
- Value of Building System: It is estimated that the replacement cost of the more than 1,700 buildings is

**Arizona University System Enrollment
Fall 1993 - Fall 1997**



**Arizona University System Sources of Funds, FY98
Total: \$2 billion**



Arizona Board of Regents 1997-98 Accomplishments

Arizona has been well served by a strong tradition of three large, autonomous institutions operating within a policy framework established by its citizen trustees, the Arizona Board of Regents. Members of the Board meet almost monthly to consider the challenges and opportunities facing public higher education in Arizona. The Board initiates reforms and improvements where appropriate, and defines the standards and expectations of institutional performance. In the past year, Board initiatives have been most significant in the following areas:

Reforming the Capital Development Process — Through the involvement of capital assets experts from business and industry, the Board identified and began implementing more than two dozen recommendations to improve the way capital projects are developed, approved and implemented for the university system's \$3.5 billion building infrastructure. In addition, the Board initiated reforms to the way the universities plan, schedule and utilize the space contained inside those buildings.

Defining Workloads of University Faculty — The Board reviewed and authorized the implementation of a new set of measures to track faculty instructional activity, in line with its emphasis on improving the quality of undergraduate education. Benchmark levels and goals for future performance are being formulated.

Improving Transferability of Community College Credits — in conjunction with the state's community colleges, the Board adopted a new Arizona General Education Curriculum that enables students to complete and transfer a large block of lower division, general education requirements from the community colleges to the university of their choice. The collaborative effort also produced common courses for majors shared by all three universities.

Focusing the Setting of University Tuition — Identifying funding priorities for the universities at the start of the budgeting cycle, and keeping those priorities visible through the tuition setting process, was a high priority accomplished by the Board in the current cycle. In addition, the Board approved tuition increases for the ASU and UA law schools to bring those rates more in line with national averages for public law schools.

Delivering Education Through New Technologies — The first course in a new, collaborative MBA certificate in International Business, designed to be available through electronic means, was offered in Fall 1997. A collaborative masters of engineering program for delivery through telecommunications is under development.

Requiring Community Service — In the spirit of serving communities in Arizona, the Board approved and the universities implemented policies which require undergraduate non-resident recipients of tuition waivers to volunteer in the local community. The policy has mobilized hundreds of student volunteers from the universities.

Arizona State University Campus Highlights



- ◆ ASU students garnered national recognition by winning numerous highly selective Marshall, Goldwater, Truman, Fulbright, Udall, and Public Policy and International Affairs fellowships and awards.
- ◆ Satisfaction with the ASU educational experience among ASU graduates continues at the rate of 92%.
- ◆ Persistence for freshmen students reached an all-time high of 75.4%.
- ◆ Minority enrollment reached 18.7%, establishing a new high for the 15th year in a row. Freshmen persistence reached ten-year highs for each minority student group.
- ◆ ASU provides Arizona a competitive workforce, granting over 9,500 bachelor, masters, and doctoral degrees in 1996-97, 46% of all state university degrees granted.
- ◆ Expanding research activities continue to provide a foundation for a strong student educational experience. The MARS Discovery Program, the Institute for Human Origins, and the NSF-supported Long-Term Ecological Research Center are but three examples of ASU's growing excellence in basic research.
- ◆ Eight ASU teams were recognized at the 1997 Governor's Spirit of Excellence Awards ceremonies, including four teams receiving the Governor's Award of Excellence. No other state agency or university received more awards in this year's program.
- ◆ Dr. Vincent Waldron of the ASU West College of Human Services received the Arizona Teacher of the Year Award from the Carnegie Foundation for the Advancement of Teaching.
- ◆ ASU West and Glendale Community College (GCC) established the University-College Center as a partnership to enable students to transfer seamlessly from GCC to ASU West.
- ◆ In partnership with Intel and Motorola, ASU East began development of a Microelectronics Manufacturing Teaching Factory that mirrors an actual microchip factory so students can learn clean room manufacturing processes.
- ◆ President Clinton awarded ASU mathematics professor Joaquin Bustoz \$10,000 and the first presidential mentoring award for his work with minority students in his field.

The ASU intercollegiate athletics program featured a national champion in women's golf and PAC-10 champions in football, wrestling, and men's golf. Numerous individual accolades were awarded to ASU coaches and athletes.

Northern Arizona University Campus Highlights

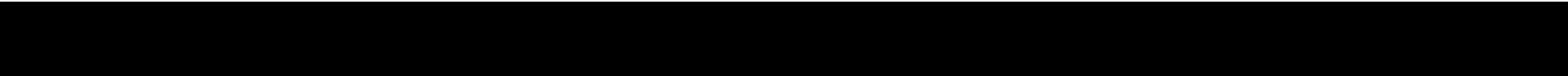


- ◆ The North Central Association of Colleges and Schools gave NAU high marks in its site evaluation visit and stated that accreditation would be continued until the next comprehensive evaluation scheduled in 2007-2008.
- ◆ 93 percent of freshmen and sophomores have two or more classes taught by full-time faculty.
- ◆ A survey of NAU graduates revealed that 95 percent have obtained employment after graduation and over half report an intention to pursue graduate education.
- ◆ Nearly 40 percent of all seniors report involvement in research projects either in or out of the classroom.
- ◆ A group of NAU public relations students and the Center Against Substance Abuse in Flagstaff earned a top industry award for their community relations campaign against the use of methamphetamines. The Copper Anvil Award, bestowed by the Public Relations Society of America Phoenix Chapter, honors excellence in public relations programming.
- ◆ Dr. Paul S. Keim was selected as the first E. Raymond and Ruth Reed Cowden Endowed Chair of Microbiology. The was the first endowed chair in the College of Arts and Sciences. Dr. Keim is an internationally recognized molecular geneticist.
- ◆ Two additional endowments were established: the *Frances B. McAllister Endowed Chair in Community, Culture, and Environment* and the *Catharine B. Adel Music Endowment*. The McAllister endowment will make possible innovative and interdisciplinary curricular opportunities to prepare the next generation of citizens for responsible roles in community, cultural, and environmental organizations. The Adel endowment will enhance NAU's K-12 music outreach programs in the community.
- ◆ NAU undergraduate business students in the Students in Free Enterprise (SIFE) program won Rookie of the Year Honors from the country's top corporate leaders at a prestigious international business competition. SIFE is a non-profit organization dedicated to free enterprise education.
- ◆ NAU's forensics team won 13 final places at the L.E. Norton Individual Events Tournament. The team currently is ranked third in the nation.
- ◆ NAU, Coconino Community College, and the City of Page dedicated a building which houses CCC's Page campus, the Page Public Library, and NAU's Distance Learning Center. In addition, four new Interactive Instructional Television sites were dedicated at Page, Bullhead City, Nogales, and Pima Community College in Tucson.
- ◆ NAU's student quality team in postal services won the Governor's Award for Excellence and the team from the Registrar's Office won the Spirit of Excellence Award.

The University of Arizona Campus Highlights



- ◆ University of Arizona students are among the best in the nation, winning prestigious fellowships and research support from many sources, including Fulbright, Rhodes, Ford, Goldwater, Udall, Flinn, Truman, Marshall, Churchill, Luce, Muskie, AT&T, Hughes, NASA, NSF, NIH, and the U.S. Air Force.
- ◆ Currently, 211 National Merit Scholars attend The University of Arizona.
- ◆ More than 1,700 undergraduates have signed on to our “Finish in Four!” program.
- ◆ Teaching undergraduates is of the highest priority for The University of Arizona faculty, with nearly three-quarters of classes at 30 or fewer students and an overall ratio of one professors to 20 students.
- ◆ The University of Arizona is one of the ten best universities to integrate teaching and research for undergraduates, says the National Science Foundation. NSF awarded the University five hundred thousand dollars so we can share this knowledge with other institutions.
- ◆ More than 1,200 students with disabilities pursue higher education at The University of Arizona, which is one of the most accessible campuses in the nation.
- ◆ The University of Arizona continues to be recognized for its world-class faculty members, who include a Nobel Prize winner, 15 elected members of the National Academy of Sciences, three MacArthur “Genius” Award recipients, one Pulitzer Prize winner, and a Vetlesen Prize winner, to name just a few.
- ◆ College of Agriculture researchers, working with colleagues from USDA and the cotton industry, used new biological tools to control a serious whitefly problem that threatened Arizona’s 1996 cotton crop.
- ◆ Cancer research and treatment is a continuing concern at The University of Arizona, where our medical professionals recently have won \$23 million in research grants for their work, improving the lives and odds of survival for many patients.
- ◆ Various rankings place several of The University of Arizona programs in the top ten nationally, including Hydrology, first; Management Information Systems, fourth; Anthropology and Analytic Chemistry, fifth; Pharmacy and Nursing, sixth; Astronomy, seventh; Creative Writing and Geosciences, ninth; and Sociology, tenth.
- ◆ The University of Arizona College of Law extends service to the community with four legal clinics specializing in child advocacy, immigration, domestic violence, and American Indian tribal law. The clinics provide free legal services to targeted members of the community, while providing hands-on experience to the law students who handle their cases.
- ◆ The University of Arizona’s receipt of seven Governor’s Excellence Awards in four years places it among the best quality efforts in State government.
- ◆ The University of Arizona Athletic Department boasted two national champion teams this year: The Men’s Wildcat Basketball Team and the Women’s Wildcat Softball Team. The entire intercollegiate athletic program was ranked 6th nationally for 1995-96 by the National Association of Collegiate Directors of Athletics Sears Directors’ Cup.



Arizona Board of Regents 1998

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