Executive Summary and Plan for Action

Retention and graduation rates at research universities are matters of national concern. At the University of Arizona, retention rates have been relatively stable in recent years, at or somewhat below those achieved at comparable universities. The Arizona Board of Regents has requested that we increase these rates—through goals established for undergraduate education and minority recruitment and retention.

This paper is the product of a year long study by the University Enrollment Management Committee. It describes a number of University initiatives designed, at least in part, to improve student retention. Dedicated staff and
faculty, interested in helping students to succeed in their academic pursuits, coordinate these initiatives. Both University and national data suggest that quick, major increases in retention and graduation rates will be difficult to achieve. Thus, our next steps may be more difficult and less certain than those we have already accomplished.

The Context of Retention at The University of Arizona
In discussions about the U of A retention and graduation statistics, it is important that we balance criticism of our efforts with an appreciation for the context in which we operate. The University of Arizona, unlike many of our research or our scholarly peer institutions, has rather broad admission criteria—that is, many students are admitted to the U of A who would not be admitted to many other highly regarded, more selective, public research universities. The public policy adopted by the Arizona Board of Regents enhances access to the opportunity for higher education in the State’s public universities. It is therefore misleading to compare the U of A graduation and retention data with schools that restrict admission to a smaller proportion of the aspirants. The Arizona admission policy has some very distinct advantages—a larger number of students are given the opportunity to benefit from the university experience, and many who would not be admitted elsewhere are indeed successful here. But, there are important tradeoffs implicit in our more enabling admission policies—our faculty must be prepared to work with a wide range of student preparation and we will not have as high a retention rate as do many of our research peers. It is obviously important to have an admission policy that is realistically calibrated to University success. Admission standards have been increased substantially at Arizona in recent years in recognition of the importance of requiring our students to prepare better in high school for the demands of a university curriculum. At the same time, there is much to be celebrated in the ABOR policy—and we therefore should be cautious about our criticism of retention and graduation rates, and of the comparisons we make to other universities. This context of a strong research-orientated university coupled with enabling admission criteria is by no means an excuse for lack of diligence or effort given to retention issues. But it is necessarily part of the discussion.

Retention and graduation rates have many complex sources, not all of which are subject to modification by the University community. But our study suggests that we may have given insufficient attention to those that may be influenced by us—in particular, those subject to a commitment and a focus by everyone at the University. We see responsibilities for retention as a matter for everyone, although too often major segments of our community pay too little attention to their own responsibility. Needed, we believe, is a commitment to a “culture of responsibility” for retention—among faculty, staff and students.

The Student Responsibility
Students are responsible for entering the University with the requisite preparation and motivation. Students should prepare themselves for college by taking a full complement of challenging courses throughout their high school years. Once here, they have the responsibility to discover and use appropriate resources. Moreover, they must be responsible for a realistic understanding of the nature of academic work at the University, put forth the effort required both in and out of the classroom to succeed, and commit to approaching college work with the seriousness of mind that it presupposes. Students are responsible for meeting regularly with an academic advisor, for acting on advice given by their advisor, and for taking an active role in monitoring their progress toward completion of graduation, academic, and career goals.

The Faculty Responsibility
Faculty members are responsible for engaging students the moment they arrive on campus if not before. Every member of the faculty should demonstrate the belief that all first-year students deserve faculty attention, and that a public university must provide appropriate instruction for those whom it admits. The faculty are responsible for creating an inclusive environment for admitted students, providing timely feedback with regard to academic performance, and identifying quickly those who are struggling academically. They are responsible for ensuring that every first-year student receives timely and competent academic advice from the faculty. Furthermore, they are responsible for reviewing admission requirements and assessing the skill and knowledge levels of students in order to design courses that build upon these levels. Finally, and perhaps most importantly, the faculty are responsible for providing a course of study that engages the mind, prepares for the future, and promotes life-long learning.

The University Responsibility
The University is responsible for providing adequate information about the requirements for success, excellent advising services, a stimulating and inclusive learning environment, and programs of study suitable to legitimate diverse student needs. It is responsible for providing adequate opportunities to meet requirements in a timely fashion and the University should provide accessible, efficient and effective support services. The University is
responsible for providing a campus climate that is both attractive and engaging, and that enhances the likelihood that students will connect with faculty, other students, and ultimately, the University itself. The University has a responsibility to recognize and reward faculty and staff commitments to student retention.

Near-Term Recommendations
Consistent with the themes elaborated in this paper, and with the development of a campus-wide "culture of responsibility" for student retention, the University should consider the following near-term recommendations and assign responsibility for their implementation and monitoring to the units and/or individuals indicated. These persons and teams are responsible for the next steps, which include convening the appropriate members of the campus community and reporting back to both SPBAC and Enrollment Management by October 15, 1998. Longer term initiatives should develop as a function of Recommendation 14.

### Recommendations

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<th>INITIATIVE</th>
<th>RESPONSIBLE AREA</th>
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<td>1</td>
<td>Commit to a rigorous program of comprehensive, standardized evaluation of all retention programs and implementation of improvements suggested by these evaluations.</td>
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<td>2</td>
<td>Assign each entering freshman a faculty advisor and assess the quality of faculty advising.</td>
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<td>3</td>
<td>Double the number of both Faculty Fellows and University Partners Advisors</td>
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<td>4</td>
<td>Add sufficient residence hall space to meet freshmen demand. Consider requiring all freshmen to live on-campus while attending to the financial needs that such a policy presupposes.</td>
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<td>5</td>
<td>Finish Gatekeeping course study and use its results to provide advice to freshmen.</td>
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<td>6</td>
<td>Continue to increase the high school preparation of prospective students; set near term goal of an average SAT of 1150 and Regents high school GPA of 3.50.</td>
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<td>7</td>
<td>Increase both merit- and need-based student financial aid substantially.</td>
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<td>8</td>
<td>Expand Early Outreach with feeder schools in low-income areas.</td>
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<td>9</td>
<td>Expand transition programs with Pima and Maricopa Community College.</td>
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<td>10</td>
<td>Enhance and expand New Start programs.</td>
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<td>11</td>
<td>Provide academic tutoring for mathematics, languages, writing skills, and Tier 1 courses, setting as a goal the availability of tutoring for any student.</td>
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Retention at The University of Arizona
"Toward a Culture of Responsibility"

Graduation and retention rates are often regarded as important indicators of institutional quality and commitment to undergraduate education. A recent national survey found that graduation rates are the most frequently used indicator in state-level assessment of public colleges and universities. In Arizona, rates are reported in the Undergraduate Education Goals Report, the ABOR Cohort Survival Report, the Minority Student Progress Report, and on the Arizona University System Annual Report Card. Next March the Federal government will begin requiring every higher education institution that receives any federal funding to disclose graduation rates annually.

At The University of Arizona (UA), we have been monitoring graduation and retention rates for more than ten years. These rates have been examined and decomposed to analyze the impact of programs on various student populations (e.g., conditionally admitted students, students of color, and Honors Program participants). To help us better understand our own students’ experiences, we have tracked trends since 1981, gathered data from our peers, participated in two national studies of graduation rates, and surveyed our students to discover why they leave. The attached graphs and tables show basic UA graduation and retention data, as well as a peer comparison.

The research literature on student retention confirms the importance of both academic preparation and student involvement on campus. The critical contribution of students’ academic preparation is illustrated by the attached graphs showing the relation between SAT scores and graduation rates, both nationally and for the UA, as well as by the expectancy tables which show predicted UA GPA, given combinations of high school GPA and test scores. The importance of student involvement is underscored by findings from a survey of University students, which are described below.

The following bullets help provide a foundation for campus discussion.

- Expectancy tables (Attachment 4) show a strong relation between academic characteristics of entering students and the probability of success. For example, students entering with a 3.50 high school grade point average (GPA) and SAT (old scale) combined scores of 1000 have an 85-91% chance of achieving a 2.00 GPA in their first year, whereas students entering with the minimum required high school GPA of 2.50 can have as low as a 30% chance of achieving a 2.00 GPA in their first year at the UA.

- First-year freshman retention is currently 77%, reflecting the fact that half of the students who leave the UA do so before the beginning of their second year (Attachments 6 and 7). Thus, many UA retention programs focus on the first year.

- Academic preparation is a strong predictor of success for all students, but holding academic preparation constant, underrepresented minority students have slightly lower probabilities of success (Attachment 5).

- During the past ten years, minority student graduation rates have increased in parallel with white student rates, but there is a 10 percentage point gap between majority and minority rates (Attachments 8 and 9). ABOR goals call for closing this gap.

- The current six-year graduation rate for first-time, full-time freshmen is 52%, up from 42% eleven years ago—an additional 6% are enrolled but not yet graduated (Attachment 1).

- SAT scores of entering students have risen commensurately during the same eleven-year span, reflecting the strong link between high school preparation and graduation rates (Attachment 2).

- The graduation rate for students transferring into the upper division has remained relatively constant (60-65%) during the past decade—about 10-20 percentage points higher than the rate for lower division
transfers, but 15 points below the rate for new freshmen who have achieved junior standing (Attachment 1).

- The average time taken to graduate is 5.0 years, however, about one in five entering freshmen graduate within four years.
- The UA ranks near the bottom of its AAU and ABOR peers on both five-year graduation rate and average SAT combined score (Attachment 3).

Many UA students are academically at risk by the end of their freshman year—20% of all freshmen do not earn a 2.00 GPA. Of those students who leave before their second year, fully half fail to achieve a 2.00. For these students, then, academic progress is a serious impediment to persistence at the University.

To learn more about students who leave, ABOR directed its three universities to provide information on the various reasons for student departure prior to graduation. These results illustrate the importance of students’ connection to the campus and the pursuit of their studies.

A telephone survey was administered to a sample of students who were enrolled at Arizona universities during the fall 1994 semester but, although eligible, did not return for the fall 1995 semester (exitors). For comparison purposes, a sample of students who were enrolled for both semesters (persisters) was also queried. In the case of the UA, all individuals were asked about their level of satisfaction with a number of their experiences, and to characterize certain aspects of their academic and social lives. The exitors were also asked about their reasons for leaving. Those persisters who indicated that they had seriously considered leaving were asked about their reasons for doing so.

When exitors were asked about their reasons for leaving, they tended to cite personal (29%) and financial (19%) as opposed to institutional factors as their primary reasons for leaving. Academic reasons related to grades (14%) and dissatisfaction with courses and faculty (12%) followed. While there is little doubt that attending the University is financially difficult for many, research literature suggests that exitors are fundamentally less attached to the student role than are persisters. That is, their affiliation with either the institution or the pursuit of academic matters is not so strong. The survey yielded numerous examples of this weak attachment:

- Eighty-two percent of the exitors were enrolled as full-time students as opposed to 93% of the persisters.
- Exitors were less engaged in the classroom, had fewer friends, and rated components of the educational experience lower than did persisters.
- Eighty-three percent of exitors were sure that their decision to depart had been right for them.
- Persisters were much less likely than exitors to say that faculty didn’t really care about what happened to students (26% versus 40%) and were more likely to say that teaching assistants tried to help students. They were also more likely to say that they participated in class as much as they wanted. They were much less likely to say that they never or seldom discussed their coursework, academic matters, or programs of study with faculty.
- Persisters rated the teaching by faculty and TAs higher. Additionally, they rated course content higher and gave marginally higher ratings to the academic quality of their classmates. These students were more likely to say that their courses were intellectually stimulating and were a little less likely to say that their studies seemed useless.
- Persisters were more favorable with regard to the advising that they received. Additionally, they were a little more likely to visit with their advisors about career matters and much more likely to discuss personal matters.
- Persisters were more likely to say that their courses demanded an excessive amount of time to achieve a good grade, and 29% of each group “discovered that they really didn’t like to study.”
- Exitors do not leave solely for the job market. While three-fourths were working at the time of the interview and two-thirds of those were working more than 30 hours per week, six in ten were taking classes and over 90% of the rest said that they intended to return to college.
- Persisters were more likely to have been working than exitors, but working exitors were more likely to have worked off-campus and to have worked longer hours than persisters.
- While about the same percentage of exitors as persisters were related to current or former UA students, the relatives of persisters were more likely to have graduated (71% as opposed to 58%).
There are certainly personal factors in the decision to exit or persist that are not captured in surveys of the type described here. It is important to note, for example, that over one-quarter of the persisters had seriously considered leaving. This group’s major concerns were categorized as personal (22%), financial (24%) and relating to courses and faculty (27%). These reasons are similar to those given by exiters, yet these students stayed. Despite their problems, the fact that these students remained in school suggests that persistence decisions are dependent upon individual perceptions regarding difficulty, combined with the influence students allow these perceptions to have over their decisions.

The UA data presented in this section are consistent with national retention theories and research showing that students who persist are 1) academically prepared and 2) connected to their campus, both socially and academically. These two factors provide a useful way to think about and evaluate retention efforts. For example, admission requirements, early outreach, and financial aid have a significant impact on student preparation, whereas residence life, advising, interaction with faculty and intellectual engagement, academic support, student life and career services are more concerned with students’ connection with the campus. Programs like Honors and tutoring may contribute more evenly to both areas. The data also show the importance of intervention while students are in the lower-division, particularly during their first year. The following sections provide brief outlines of many of the current UA retention initiatives.

Current Programs

Early Academic Outreach
The Office of Statewide Early Academic Outreach is responsible for directing the University's efforts in outreach to minority and economically disadvantaged students. Early outreach offers an array of year-round, multi-year programs beginning with students as early as middle school. The goal is to create the academic foundation necessary for excellence in school thereby expanding the overall pool of eligible in-state applicants to the University. The programs operate in 64 public schools in southern Arizona and will serve 4,000 students this year.

The Office provides leadership in developing linkages with various UA colleges and academic units in order to expand and enhance the Academic Preparation for Excellence (APEX) and Mathematics, Engineering, Science Achievement (MESA) academic preparation programs statewide. All outreach programs are coordinated with high school recruitment efforts directed by the Admissions Office to assure consistency across a full range of programs.

Current Initiatives:
Nationally recognized, APEX targets students in grades 6 through 12 to increase the college going rate of underrepresented minority groups. At the same time, MESA, touted in Science Magazine as one of the top programs of its kind in the nation, is designed to increase the number of underrepresented students in mathematics, engineering, and science professions. The APEX and MESA programs offer participating students and schools with:

1. Learning skills workshops
2. Tutoring programs
3. America Reads Federal Work Study program
4. PSAT/SAT workshops in partnership with The College Board
5. Academic design competitions
6. Admission, scholarship, and financial counseling
7. Campus visitations and faculty interaction, and
8. Summer Enrichment programs

Admissions
Retention related initiatives in admissions are constructed around two major strategies. The first strategy is based on data that suggest that retention is improved by recruiting and enrolling students who are prepared to study in the challenging academic environment of the University. Tactics have focused on improving the foundational preparation of all high school graduates and recruiting the best and brightest students in Arizona.

The second strategy is to provide comprehensive information to prospective students. Information about academic programs, services, and facilities is presented prior to initial enrollment to ensure that prospective students have realistic expectations about the University.
Current Initiatives:

- **Raising admissions standards**
  Implementation of new competency requirements beginning with the fall 1998 incoming class will increase the number of courses and depth of study completed by students prior to enrollment at the University. Competencies were increased from 11 to a total of 16 and GPA will be calculated using only ABOR competency courses. Unconditional and conditional admissions standards remain at pre-1998 levels. In addition, new provisions, effective with the fall 1998 incoming class, repeal the exemption from meeting competency requirements for students who have completed more than 36 transferable units.

- **Recruiting top scholars**
  An academic index has been developed to evaluate newly admitted students for Honor’s admission, tuition waivers and scholarships. This index combines several academic performance indicators to create a better selection criterion. Prior to fall 1998, new waivers were awarded based on rank in class, while scholarships were awarded on rank in class, GPA and/or test information. The new processes for waivers, scholarships and Honor’s admission combine all of this information as well as factors for strong and challenging courses. Additionally, GPA waiver and scholarship renewal criteria have been decreased from 3.50 to 3.35. We expect these changes to increase the number of better prepared students who enroll, while enabling more students to maintain the GPA required to retain their scholarships. Thus, fewer students will leave because they lose their waivers or scholarships in subsequent years.

- **Increasing applications from highly qualified students**
  Changes in the scholarship awarding process and revised messages conveyed to high school counselors and students have increased the number of top students applying by the first deadline (November 1st). Pre-printed applications were mailed to all Arizona students in the top 15% of their class to encourage early applications. Earlier indication of serious interest by prospective students, as expressed by application, allows a more intensive and thorough effort to recruit students.

- **Development of a new model to recruit in-state transfer students**
  The transfer center is located within the office of admissions in order to provide more comprehensive services to prospective transfer students. Keys to the development of this new model will be: a) early (i.e., in high school) identification of prospective transfer students; b) tracking and continuous contacts during enrollment in community college; c) academic advising services during enrollment in community college provided by the UA transfer center; d) one-stop shopping for transfer students in a central location; and e) eventual elimination of the need for on-campus UA registration and orientation programs for Arizona community college students.

- **Minority student recruitment**
  Our model for recruiting minority students is characterized by personal attention, both in the high school setting and through telephone contact. We make personal visits to students in high school, telephone calls to parents and students at their homes, and provide on-campus programs to orient students who have never been on a college campus, to introduce them to both college life and available services. We hope to demystify college for first generation students by assisting them with each phase of the process and promoting realistic expectations about college. The current goal is that 32% of the incoming freshman class and 33% of new transfers be minority students.

- **Orientation**
  Orientation programs are another retention effort in the pre-enrollment phase of college. Orientation is designed to provide new students with academic connections, academic advising, initial registration assistance to obtain a full course schedule which meets academic program requirements, an introduction to University services, campus life, and faculty expectations. Orientation/registration programs are held primarily during the early summer and both students and parents are encouraged to attend. Parents are an integral part of the retention formula and are best able to assist and encourage their student if they have also been introduced to University services and expectations. Orientation currently serves almost all 4,500 new freshmen each summer and about 1,300 (56%) of the new transfer students.

**Advising**

Current Initiatives:
• **First Year Center**
The University College’s First Year Center, located in Bear Down Gym, is an academic unit developed in the fall 1996 semester to support freshmen as they become acclimated to the University. The First Year Center provides: academic advising for freshmen in the Colleges of Science, Humanities, Social & Behavioral Science, and the University College; an evening study center for all freshmen; evening tutoring for all freshmen in basic proficiency courses as well as introductory courses in economics, accounting and history; and assistance toward exploring academic fields for all University students.

• **University Partners Advising Program**
In its first year, this is a faculty-based advising program for at-risk freshmen. The nine faculty members who currently participate are assigned to first-year students admitted with academic deficiencies and/or conditional aptitude. Faculty participants have extensive, intrusive contact with their assigned students and teach them through either an independent study or Freshmen Colloquium arrangement. An evaluation of this program is underway.

• **Mentoring for Undecided Students**
This program, in its second year, provides mentors to students who do not have access to a college mentor due to their undecided status. About 1,100 students from the fall 1997 freshman class met this condition. Currently 136 UA professionals contact an average of eight undecided students during their freshman year. These are voluntary relationships whose success depends mainly on the student’s outreach to the mentor. No formal evaluation has taken place.

• **Faculty Fellows**
This program provides faculty presence in high student contact areas such as residence halls and cultural centers. This is a very popular faculty-student contact program as reported by both students and faculty alike. There are currently 15 faculty fellows. No formal evaluation has taken place.

• **Courses in Common**
For the past four years, freshmen have had the opportunity to take three of their first semester courses with the same 20 students. This method of course scheduling aims to provide students with an opportunity to share their interests, concerns and experiences in order to get off to a strong academic beginning. An average of 200 students each year chooses to participate in this program. For the last two years, we have provided two clusters of students with the opportunity to share not only three classes but also a wing in their residence hall. During the 1997-98 academic year, a Freshman Academic Specialist was assigned to mentor two clusters. The purpose of these additional components is to increase the program’s effectiveness. Although preliminary evaluation finds no significant effects on retention, this is very popular program that receives positive reviews from students at the conclusion of their first semester.

• **Pre-transfer Advising**
Based on the belief that retention of transfer students depends on decisions made before the student actually enrolls in the University, UA academic advising has been provided to community college students at each of the state’s two-year institutions. The purpose of this advising is ensure that community college students have the correct academic preparation for a seamless transition to the University, and that the timing is in the students’ best academic interest (i.e., that they transfer with basic proficiencies completed and a major declared).

• **Finish in Four!**
In line with our commitment to help students finish their bachelor’s degree within four years, Finish in Four! (FIF) is an agreement between individual students and the University that outlines the responsibilities of each and provides a detailed plan for completing undergraduate courses and requirements within four years. During the three years this program has been in place, approximately 1,900 students have participated. A grant from the National Association of Academic Advising will fund an evaluation of the program in 1998, at the end of its first four-year term.

• **University Advising Initiative**
The Advising Center for Exploratory Students (ACES) assists all students through the major exploration process. Information and assistance is provided by two professional advisors and 10-14 volunteer peer advisors using a variety of resources, including the annual Meet Your Major Fair, workshops, presentations, and major/career tools (e.g. Strong Interest Inventory, Myers-Briggs Type Indicator and computerized career exploration software). Advising is available to undecided students who are not
secure in major selection, and those who do not meet the requirements of their current major. Additionally, ACES staff work with undecided, first-time probationary students to promote their academic success.

- **Pre-professional Advising**
  Students pursuing majors in all UA colleges who are interested in entering the professions of law, medicine, dentistry, podiatry, or optometry are advised on appropriate curriculum, professional school admission requirements, and application processes by advisors in the Office of Academic Services. Approximately 1,200 currently enrolled undergraduates have expressed an interest in law, and over 300 apply to U.S. law schools annually. Approximately 2,100 undergraduates are interested in health professions, and each year over 300 apply to medical or dental schools.

- **College Advising and Other Initiatives:**

  **Agriculture**
  A faculty mentor is provided to each freshman student. Each department offers a Freshmen Colloquium which their freshmen are encouraged to take. A general Freshmen Colloquium designed for students interested in agriculture is also offered. Additional College of Agriculture initiatives include, but are not limited to the following:

  - **Multicultural Activities Coordinator**
    - Works closely with students from ethnically diverse backgrounds to ensure that they access services critical to their success.
    - Provides advising and referrals, coordinates cultural activities, and acts as a liaison to the cultural centers.
    - Coordinates the local chapter of Minorities in Agriculture, Natural Resources, and Related Sciences, which fosters student development, cohesion and advancement.

  - **Career Placement Coordinator**
    - Works individually with students to assist them in making connections between their academic and professional goals.
    - Provides resume and cover letter assistance, referrals, and permanent or internship position announcements.
    - Coordinates Career Discovery Day to connect business professionals with students.

  - **Coordinator for Native American Activities**
    - Contributes to student persistence by conveying realistic depiction of university life while conducting recruitment activities at Arizona tribal schools.
    - Serves as ombudsperson to all Native American undergraduates in College of Agriculture.

  - **Minority Apprenticeship Program**
    - Provides research experiences for minority students preparing for careers in conservation and resource management in the School of Renewable Natural Resources.

  - **Teaching preceptorship**
    - Undergraduates selected as preceptors can earn 2-3 units of credit by assisting with the teaching of introductory Environmental Science courses.

  - **Business and Public Administration**
    - BPA has mandated academic advising for all freshmen and offers a two credit course intended to acquaint their freshmen with the problems, pleasures and possibilities of enrollment in the college.

  - **Engineering**
    - All freshmen take an introductory three credit class meant to provide career planning, academic guidance, and advice. All freshmen have the option of clustering courses during their first semester. Additionally, the
newly established Center for Academic Support provides tutoring, a collaborative learning environment, and student-centered presentation facilities (team rooms, computers, scanners, color printers, etc.) for all undergraduates.

**Fine Arts**
Each freshman is assigned a faculty mentor. Significant emphasis is placed on individualized direction provided by these faculty mentors.

**Humanities**
Faculty members in the College of Humanities mentor their own majors and also sponsor a mentoring program for undecided students. Additionally, they sponsor a variety of Freshmen Colloquia designed to acquaint students with their majors.

**Science**
In addition to mandatory advising, all freshman are encouraged to enroll in a Freshmen Colloquia designed to acquaint science majors with science disciplines.

**Social and Behavioral Science**
In addition to mandatory advising, all freshmen are encouraged to enroll in college sponsored Freshmen Colloquia which will assist them with major selection.

**University**
All students in the Colleges of Science, Social & Behavioral Science and Humanities, as well as undecided students who have the University College as their home colleges have mandatory fall academic advising meetings during their freshman year and mandatory career and placement information meetings during their first spring semester. All probationary freshmen are required to attend a series of academic success workshops designed to help them achieve good academic standing at the end of their first year. The Office of Academic Services (OAS) requires lower-division, undecided, and pre-professional majors who could have been academically disqualified at the end of the fall semester to attend The Academic Success Series (TASS) of study skills workshops in the spring. The Probationary Readmission Program (PRP) in the OAS accepts readmission applicants contingent upon proof of academic improvement from another institution and acceptance of an academic contract limiting course load and setting a minimum GPA requirement during the student’s first semester back at the UA. Longitudinal studies on the retention and graduation rates of students who completed TASS or were readmitted under the PRP are in progress.

**Financial Aid**
The type and availability of financial support plays a vital role in students’ enrollment and persistence decisions throughout their undergraduate, graduate and professional careers. The Office of Student Financial Aid (OSFA) provides a comprehensive array of $201 million in scholarship, waiver, grant, work, stipend and loan programs to two-thirds of the UA student body (24,863 people). Continuing students receive about 88% of total aid. In addition, many continuing students utilize the temporary loan program to assist them with cash flow needs at various times.

**Current Initiatives:**
- Individualized, personal financial advice for students and parents through in-person, telephone, email “Ask Aid”, Student Link, written and recorded options covering a broad range of aid, budgeting, payment, indebtedness and work issues.
- Timely mailings regarding aid applications, loan counseling availability, academic progress monitoring, availability of new scholarships and other aid, and other important information.
- Free scholarship search services on the World Wide Web and through a dedicated personal computer located in Old Main.
- Twenty-four hour access to on- and off-campus job listings on Cat Traks.
- Reengineering of aid processes to simplify, streamline, and automate.
  - Participate in the U.S. Department of Education’s premiere Experimental Sites for regulatory relief which allows students to get money earlier and with less paperwork than before.
  - Automate to support rapid identification and resolution of conditions that would otherwise delay aid delivery.
Proactive interactions with funding agents (i.e., outreach efforts, grant writing, and donor relations) to insure that the maximum aid is available to the broadest range of students. Recent examples include founding the America Reads employment program which employs 200 students off-campus in career related jobs and implementation of the ABOR mandated community service program for nonresident waiver recipients.

Targeted on-campus outreach to populations with special funding issues and needs (e.g., Honors Program participants, Students served by any of the four cultural centers, Colleges of Nursing and Pharmacy, Arizona International College, New Traditional Students, Arizona Graduate Program in Public Health, International Programs for Study Abroad, and Native American students receiving tribal support.)

Targeted off-campus outreach to prospective community college transfer students and to community college officials, informing them of aid options, deadlines, and procedures.

Curriculum

Current Initiatives:

- **General Education Reform**
  Acting on an initiative instituted by Provost Paul Sypherd in 1994, the Faculty Senate approved, in March 1997, the implementation in fall 1998 of a University-wide general education structure, replacing the previous college-based general education system. A major impetus behind this effort was the belief that, given the characteristics of our undergraduate population, the college-based system posed barriers to graduation and retention. Fewer than 20% of graduating seniors at the UA have the same major that they began college with. No small part of these student shifts involve leaving one college and entering another. Where colleges do not share a general education program, changes in student objectives can mean that courses taken toward fulfillment of general education requirements in one college do not meet the requirements of the new college. Furthermore, differences among colleges in general education can create major difficulties in ensuring that space available in courses meets student needs.

Because the new general education structure is University-wide, it ensures that students who move between colleges or majors will not lose general education units. Furthermore, since all students draw from the same set of general education courses, monitoring student needs in this area will be greatly simplified. Finally, and perhaps most importantly, because the new general education structure allows for clear distinction between foundational general education work and introductory coursework in given disciplines, the expectations of the former can be better targeted to its audience and the latter can be raised. Both developments should contribute to student success.

- **Freshmen Colloquia**
  Freshmen Colloquia are one unit courses designed for first year students at the UA in an effort to address locally the problem of student alienation common to large campuses. The courses bring first year students into small-group contact with professors allowing students to pursue interests either related to or remote from their projected majors. They allow students to see how professors think about their fields, and provide a wonderful opportunity for students to develop continuing, mentoring relationships with faculty members. Although preliminary evaluation has not found significant retention effects, the First Year Colloquium Program has been very successful. In the fall 1997 semester, over 90 Colloquia were available, affording roughly 25% of new freshmen the opportunity to participate. Another 50 Colloquia were offered in the spring 1998 semester.

- **Bachelor of Liberal Arts**
  This new degree is designed to provide broad, rigorous study in liberal arts for undergraduates interested in a high-quality university education without the disciplinary specialization associated with majors. The degree will provide students with a college-level general education that emphasizes the skills and attitudes of mind necessary for a life of learning and a wide range of career or post-baccalaureate degree options. The intent of this proposed program is to provide exposure to a range of knowledge in the liberal arts by requiring substantial additional general education courses in both Tier I and Tier II. Additional courses designed to emphasize written expression, international studies, oral communication, economic and business appreciation, critical analysis, and computer skills will also be required. Advanced study at the upper-division level will be ensured by a 36 unit thematic emphasis, which will require approval, by a faculty advisor. The degree will involve a minimum of 120 units.
• **Gatekeeping Course study**
  A sharper focus on students’ courses and grades may help us design better retention strategies. Gatekeeping courses, those that lower-division students must take in order to progress toward higher academic levels, are critical to students’ success and retention. In collaboration with the University of Texas, University of Minnesota, and The Ohio State University, the UA recently embarked on a research study to investigate the impact of these courses. The study also examined the "behavioral curriculum" to look for patterns of course taking that impede academic progress. Results of this study were reported at a national conference in May 1998.

**Honors College**
The Honors program is built around the idea of creating a community of scholars at the UA. We connect Honors students with faculty and other academically oriented students early in their undergraduate years. Our interest in retention is twofold. First, we are concerned about students’ continued enrollment and academic progress. Second, we are concerned about students’ continued eligibility for the Honors program (i.e. maintenance of the required 3.50 grade point average).

Honors students are recruited based on their academic talent and are therefore less likely to leave school due to poor academic progress or academic disqualification. Those Honors students who do leave because of academic disqualification are more likely to be transfer students, minority students, and students majoring in engineering. Overall, the retention rate of Honors students is considerably higher than that of non-Honors students. Presumably the result of better academic preparation, this difference has averaged 19.5 percentage points over the last ten years.

The Honors Center has undertaken a number of specific retention efforts over the last four years. These include contacting incoming freshmen who have pre-registered for too many units (i.e. more than 18) or too many Honors units (i.e. more than 5), contacting freshmen and transfer students who have pre-registered for less than a full load, using the Academic Index to identify and support Honors students who may be academically at risk, co-hosting (with the cultural centers) events to recognize the achievements of minority students, and targeting some of our student-faculty interaction programs at incoming freshmen and transfer students.

Many of the programs and activities offered by Honors enhance retention by strengthening Honors students’ ties to faculty and other students. These activities include a pre-college summer program, recruitment activities for high school students, an Honors specific orientation, National Merit Scholar receptions, student-faculty lunches, four Honors residence halls, activities sponsored by the Faculty Fellows, philanthropic and social activities of the Honors Student Association, plays performed by the Honors Players, faculty mentors for Honors students, Honors academic advising, research opportunities, newsletters, and an Honors listserv used to inform the Honors community.

**Student Life**

**University Housing**
National research as well as studies here at the UA demonstrate that students who live in residence halls tend to achieve higher grades and to persist at higher rates than their counterparts who live off-campus. The University operates 17 residence halls, housing over 4,700 students. While our mission is to provide housing accommodations for all students who want to live on-campus, the greatest demand is from freshmen. About 75% of a typical freshman class chooses to live in University residence halls. Likewise, about 75% of the residents in the halls are freshmen. Retention and academic success are currently enhanced in University residence halls through programmatic and technological efforts.

**Current Initiatives:**
- Faculty Fellows in the halls.
- Housing clusters for selected Courses in Common sections.
- O'odham Ki, a wing which supports the unique needs of Native American students.
- Tutoring services and workshops provided in conjunction with the Mathematics Department, Writing and Student Learning Centers, and the University Library.
- ResComp, an Ethernet network provided to student rooms, allowing high speed Internet access for residents with computers. Other efforts include collaborating with The Center for Computing and Information Technology (CCIT) to make six computer labs available for students who do not own
computers and establishing a new cable television system that will allow a number of distance learning opportunities to be broadcast directly to students’ rooms.

Dean of Students
National research regarding student retention, persistence, and the quality of the student experience affirms the role that out of class experiences have on the success of college students. Ernest Boyer (1987) concluded that “the effectiveness of the undergraduate experience relates to the quality of campus life and is directly linked to the time students spend on campus and the quality of their involvement in activities.”

Current Initiatives:
- Over 10,800 students participate in more than 300 student organizations. Involvement in clubs and organizations provides students with the opportunity to develop communication skills, gain leadership experiences, and build support networks. Leadership development opportunities have been increased through the granting of credit for leadership courses by the College of Agriculture.
- The Faculty/Student Interaction Program provides funding to bring students (primarily freshmen) and faculty together outside the classroom. During the fall 1997 semester approximately 450 faculty were involved with over 2,000 students through this program.
- Formal assessments of the campus climate were initiated in 1996.
- The minority resource centers play a critical role in the acclimation and success of minority students on campus. In 1997 these centers served about 7,000 students.
- Service Learning focuses on providing opportunities for students to serve the community through volunteer activities which complement their academic coursework. During the 1996-97 academic year about 5,300 students participated in 117 community service activities.
- UA Presents has developed many initiatives to link students with performers. Receptions have been held in residence halls; pre-performance seminars have been offered to students; and an artist-in-residence program has been developed.

Health and Wellness
Health and Wellness includes the Campus Health Service, Campus Recreation, the Center for Disability Related Resources (CeDRR), and Strategic Alternative Learning Techniques (SALT). All efforts are aimed at creating a supportive campus environment by mitigating the adverse impact of health problems and disabilities on students’ lives.

Current Initiatives:
- Provision of primary medical care by the Campus Health Service to treat illness or injury.
- Counseling services to meet the psychological needs of students.
- Support for students with disabilities, including responsibility for University ADA commitments.
- Programs designed to reduce smoking, binge drinking and other harmful health behaviors.
- Sexual assault and relationship violence assistance through the OASIS Center.
- A full range of intramural, sport club, and general recreation activities to promote healthful campus lifestyles.
- Campus employment opportunities for a large number of students.

Career Services
Career Services offers a variety of programs designed to assist students to develop and implement career plans, gain career related experience prior to graduation, seek part-time work while enrolled at the University, and gain professional employment after graduation. This mission is implemented by providing students with the opportunity to have: A career plan related to their academic goals; Career experiences prior to graduation; and Development of job placement alternatives. Career Services collaborates with the colleges and other campus units to deliver its services.

Current initiatives:
- Provision of mandatory career planning workshops for all second semester freshmen in the Colleges of Humanities, Science, Social and Behavioral Science, and the University College.
Courses covering career-related issues through the Colleges of Education, Business and Public Administration, and Engineering.

Continuous access to job listings through Cat Traks.

Career Week, an annual event where employers recruit students for career opportunities prior to graduation.

Computerized tools, including career planning software in Business and Public Administration, Internet access, Career Search (a database containing information about 800,000 employers), and the Career Services Web Site.

Career placement services, including a 24 hour telephone scheduling system.

University of Arizona Alumni Career Connections, a network of alumni who share their employment experiences and insights with students.

Career Briefs on various majors are being developed and will become part of the Career Services website.

Tutoring and Academic Support

Current Initiatives:

University Learning Center
The University Learning Center (ULC) provides opportunities for both scholastic and social/affective support, encouraging involvement in the University. Its approach is consistent with the major theories of student development, student retention, and learning assistance in higher education. In addition to the First Year Center and University Partners programs described above, highlights of ULC activities include:

Tutoring
Training of undergraduate tutors and preceptors to work with faculty who teach general education and foundational science and math courses.

Learning strategies instruction
Provision of both general and course-specific strategies (e.g. reading texts, notetaking, and exam preparation) as well as interactive web-based instruction.

Math Readiness Testing
Testing of entering students and analysis of test results that are used by departments such as Mathematics, Chemistry, and Molecular and Cellular Biology to improve placement and retention in mathematics and foundational science courses.

The College Level Exam Program (CLEP)
A credit-by-exam resource for students to increase their likelihood of completing an undergraduate degree in a timely manner.

Computer-based testing
Testing for graduate school entrance (currently GRE, GMAT) which, in conjunction with the ULC fee-based Test Preparation Courses for GRE, GMAT and LSAT, contributes to Graduate School recruitment and enrollment.

Minority Student Services
The Office of Minority Student Services (MSS) provides ethnic minority, economically disadvantaged, and first generation college students with academic, social and personal assistance. Services and programs are directed at first year students to increase their development of critical skills. Students eligible for services are contacted either by mail or telephone. Programs include New Start, MERITS (Maximizing Educational Results in Two Semesters), Math Science Learning Center and SEP (Student Encouragement Program). During the fall 1997 semester, 87.4% of the new freshmen minority students participated in at least one MSS program. Anglo students represented 8% of MSS participants.

General Services
Computer lab facilities are available in both the main MSS office and the Math Science Learning Center. Additional services include short-term emergency loans, MERITS registration waiver, resource library, referral, advocacy, and student employment opportunities.

Math Science Learning Center
The Math Science Learning Center provides tutorial assistance and supplemental instruction in a range of
subjects including mathematics, science, engineering, business, social and behavioral sciences, and foreign languages. Other services include final exam review sessions, exam files, resource library of course texts, and a computer laboratory. During the fall 1997 semester, 1,038 students used the Math Science Learning Center.

**New Start**
New Start is a six week summer program which includes an academic component, comprehensive university orientation, and residential life experience. The 350 students who participate in New Start take a three unit course in either Mathematics, English or Anthropology and receive tutoring through the Math Science Learning Center. Peer advisors provide daily workshops on a variety of topics to facilitate a successful transition and orientation to the university. Ninety-four percent of students who completed the summer 1997 New Start program enrolled for the fall 1997 term.

Other campus departments and offices also provide services designed to improve the retention of minority students. The College of Engineering and Mines, for example, has a substantial Minority Engineering Program and offers summer workshops for underrepresented groups.

**Integrated Learning Center (ILC)**
Designed to provide a "common experience" for UA freshmen, the ILC will combine first year courses, advising, tutoring, and an information commons in one location. An academic home base for all freshmen, it will provide both physical and personal links to the University.

**Writing Skills Improvement Program (WSIP)**
This program was developed to assist minority and economically disadvantaged students in improving their English usage and writing skills. A staff of professional tutors offers both regularly scheduled and drop-in tutoring, as well as two workshops each semester to assist students in composition and writing related classes. Each summer, WSIP offers a Summer Institute for Writing to minority and economically disadvantaged high school students.

**Conclusion**
Retaining students to graduation is a national, state and local issue. As discussed in this paper, the University has a considerable amount of information about the issues and has an array of programs and activities designed, at least in part, to address student retention. We can, however, do more. Retention and graduation rates have many complex sources, not all of which are subject to modification by the University community. But our study suggests that we may have given insufficient attention to those that may be influenced by us—in particular, those subject to a commitment and a focus by everyone at the University. We see responsibilities for retention as an important matter for everyone, although too often major segments of our community pay too little attention to their own responsibility. Needed, we believe, is a commitment to a "culture of responsibility" for retention—among faculty, staff and students.

Consistent with the themes elaborated in this paper, and with the development of a campus-wide "culture of responsibility" for student retention, the University should consider the following near-term recommendations and assign responsibility for their implementation and monitoring to the units and/or individuals indicated. These persons and teams are responsible for the next steps, which include convening the appropriate members of the campus community and reporting back to both SPBAC and Enrollment Management by October 15, 1998. Longer term initiatives should develop as a function of Recommendation 14 below. The recommendations are:

1. Commit to a rigorous program of comprehensive, standardized evaluation of all retention programs and implementation of improvements suggested by these evaluations (Center for Research on Undergraduate Education and Student Research Office).
2. Assign each entering freshman a faculty advisor and assess the quality of faculty advising (Academic Deans with the Provost).
3. Double the number of both Faculty Fellows and University Partners Advisors (Vice President for Undergraduate Education and Vice President for Campus Life).
4. Add sufficient residence hall space to meet freshmen demand. Consider requiring all freshmen to live on-campus while attending to the financial aid needs that such a policy presupposes (Director of Residence Life and Vice President for Business Affairs).
5. Finish Gatekeeping Course study and use its results to provide advice to freshmen (SRO and Associate Dean of University College).

6. Continue to increase the high school preparation of prospective students; set near term goal of an average SAT of 1150 and Regents high school GPA of 3.50 (Director of Admissions).

7. Increase both merit- and need-based student financial aid substantially (President, Provost, Vice President for Undergraduate Education, and Director of Student Financial Aid).

8. Expand Early Outreach with feeder schools in low-income areas (Assistant Dean of University College).

9. Expand transition programs with Pima and Maricopa Community Colleges (Director of Transfer Center).

10. Enhance and expand New Start programs (Vice President for Campus Life).

11. Provide academic tutoring for mathematics, languages, writing skills, and Tier 1 courses, setting as a goal the availability of tutoring for any student from 8 a.m. to 12 p.m. (Vice President for Undergraduate Education).

12. Complete the Integrated Learning Center project (Vice President for Business Affairs and Vice President for Undergraduate Education).

13. Expand efforts to meet the needs of minority students by enhancing retention-focused activities of colleges and support units (Vice President for Campus Life, VP for Undergraduate Education, Academic Deans).

14. Convene "University Conversation on Retention" for spring 1999 (Vice President for Campus Life and Vice President for Undergraduate Education).

Attachment 1: Graduation Rates

The University of Arizona
GRADUATION RATES

<table>
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<th>Year</th>
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<th>First-Time Full-Time Freshmen 6-Year Rate</th>
<th>Upper Division Transfers 4-Year Rate</th>
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Attachment 2: Graduation Rates and SAT Scores

The University of Arizona
Graduation Rates and SAT Scores
1981-1991

Attachment 6: One Year Retention Rates

The University of Arizona
One Year Retention Rates
1981-1996
Attachment 7: First Year Retention

FIRST YEAR RETENTION

Attachment 8: Six-Year Graduation and Retention Summary

<table>
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<tr>
<th>Category</th>
<th>Percent Graduated</th>
<th>Percent Still Enrolled</th>
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