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ABSTRACT
Results of a survey of public attitudes toward the actrivities conducted by Árizona's three public universities are presented, with a focus on, the total Arizona university system rather than individual institutions.. Priorities were assigned to the activities conducted by the three universities by all Arizona legislators and trustes, and random samples of registered votersh senior administrators, faculty, and students; from the lyniversities. Respondents also indicated how well they believed these activities 4 were being performed. After describing the 10 missions identified by: respondents, attention is directed to a breakdown of the relative importance assigned to the míssions by external groups (outside of the universities)/and groups internal to the universities, The missions in order of priority are as follows teaching programs and services, educational and cultural services, research and technicai assistance, health care for teaching and research, improving quality, student support services, broadening access; optimizing revenues, special emphasis on women and minorities, and intercollegiate athletics. Additional information about the activities assigned to each mission and their factor loadings is appended. Appended materials also describe survey development, sample selection, survey. administration to the constituent groups; response rates, and data analysis. The survey questionnaire is included. (SW)
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The Department of Higher and -Adult Education has been involved in preparing administrators, teachers and scholars in the fields of adult and higher education since the early 1960's. The Department offers individualized master's and doctoral programs emphasizing administration, teaching and research in adult, education agencies, community colleges, four-year colleges and universities, and state $ן$ and federal agencies. Sponsored publications, research, conferences and colloquia provide continuing opportunities for faculty and students to contribute to the generation and utilization of knowledge in the field.

MISSIONS AND PRIORITIES OF ARIZONA UNIVERSITIES:

A RESEARCH REPORT


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W. Shapard Woolf, Jr. and Gary L. Kleemann

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$\square$


Arizona State University provided the funding which made the first survey possible, Arizona Students Association, under the leadership of Neil Gut an of Arizona State University; funded the student survey.
-The Arizona Academy; Academy President James Simmons add Executive Director Shirley Agios gave the original impetus for the research.'

The Arizona Board of Regents; Regent President Esthor"Capin, and Executive Director Robert A. Huff endorsed the first survey.

Administrative support was given by President $\} \cdot$ Russell Nelson at Arizona" State University, President, Eugene M., Hughes at Northern Arizona University, and President Henry Koffler at the University of Arizona. Many people at each of the three universities helped in the administration of the survey; special recognition is due to Troy Crowder, Special Assistant to the President at Arizona State University, Richard D. Packard, Vice President for Academic ${ }^{\circ}$ Affairs at Northern Arizona University, and Terence Burke, Associate to the "President at University of Arizona.

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## $+$

Mary Pat Brady provided cheerful, dependable help in the processing of the surveys, and Dorlal Rel son and Dolores Shelby typed the fin ail manuscript prompt$1 y$ and carefully.

We thank all who assisted our research.




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## CHAPTER 1

## EXECUTIVE SUMMARY

This report is based upon two surveys completed during the 1982-83 academic year to develop background information for the Apri1, 1983, Town Hall on Postsecondary Education organized by the Arizona Academy (Richardson', Wolf, and Kimball, 1983). The first survey asked all Arizona legislators, the members of the Böard of Regents, a random sample of registered voters, a randpm sample of. members of the Arizona Academy, senior administrators and a random sample of faculty from the three Arizona public universities to assign priorities to the activities carried out by these three universities and to indicate how well they believed these activities were being performed. The.second survey, a - modified version of the first, asked a random sample of students at the three universities to also assign priorities and evaluate performance.

In addition to furnishing information for the Town Hall, the study involved an effort to answer several questions:

- 1. Can an operational definition of the missions of Arizona universities be developed by analyzing the actiyities ${ }^{7}$ in which they engage?

2. What are the differences and similarities among registered voters, legislators, members of the Arizona Academy, members of the Board of

Regents, administrotors and faculty in terms of the brioritios they assion to the major missions of Arizoria universitiles?
3. Which of the activitios conried out by Arizona unjuersition are reganded as most important by the groups deentified in 2, above, and by istudents who attend the three universities? Which are considered least' "important?
4. For which of the activities do the greatest differences exist between perceptions of importance and assessments of how well they, are being carried out? tó what extent are these perceptions of discrepancy between importance and performance common to all groups? To what extent are these specific priorities for improvement associated unlquely with a single group?

This chapter provides an overview of selected finding from the surveys. Chapters $2-5$ provide a more detalled look at survey results. The appendix describes the development and administration of the surveys, selection of respondents, response rates and procedures for analysis. The appefidix also includes a copy of the first'survey instrument and sample pages from the second survey, as well as more detailed information about responses.

The results presented in this report represent one of a number of different ways the data might have been analyzed and presented. We have chosen to focus on the total Arizona university system rather than individual institutions. Doctoral dissertations currently in progress by several of the coauthors of this monograph will provide a more complete anaylsis includingopaggregated data by institution and by the demographics of respondents?

## Resuits

The results of our analysis of the survey rosponses are summarized in the order in which thay are discussed in the monograph. In addition, the final chapter contains a more comprehenstve summary of the survey results.

## Missions and Priorities

$\therefore$ *
An analysis of alf responses to the 66 activities included in the first survey produced ten recognizable mission eategories, each represented by at least two activites and in combination accounting for all but 11 of the acti. vities. These missions in order of the priority assigned to them by all responding groups were:

1. Teaching Programs and Services
2. Educational and Cultural Services
3. Research and Technical Assistance
4. Health Care for Teaching and Research
5. Improving Quality
6. .Student Support Services
7. Broadening Access
8. Optimiţing Revenues
9. Special Emphasis on Women and Minorities
10. Intercolleglate Athletics


Within the Arizona system, there was at-least some overall support for each of the missions but not all groups assigned the same priorities among the ten
missions. While there was general agreement among all groups about the importance of the first three missjons, there were substantive differences of opinion in five of the remaining areas.

1. Regents assigned a much higher priority tooffirmative action involving women and minorities than did any other groups. External groups withBut exception assigned this mission their lowest priority.
2. External groups in general and legislators in particular assigned a much higher priority to activities designed to optimize: revenues from other than tax sources than did regents or internal groyps.
3. Faculty and administrators gave a substantially higher priority to activities related to improving quality than did regents who assigned this mission their second lowest priority.
4. Registered voters were more interested in broadening access to university services than were legislators. For this mission category, all other groups seemed to occupy a middie ground.
5. All groups except regents assigned to intercollegiate athletics their lowest or next to lowest priority. Regents: ranked this category ahead of improving quality and optimizing revenues.

## Most and Least Important Activities

After the ten missions were identified, responses to individual activities
were analyzed to identify the most and least important activities for each : group.

While' the student survey included $1 \bar{s}$ activities not common to the first survey as well as modifications to 8 other statements, it was possible to compare their responses on many activities to those from the other groups. The responses from voters, legislators and academy members were aggregated into a single external group. Similarily, administrators and faculty were merged into a single internal group. (Their disaggregated responses are available in the appendix.) This grouping simplified the identification of the most fand least important activities for each respondent group.

1. Professional programs are an extremely high priority for all groups.

Programs in arts and sciences have a much lower priority for everyone except internal groups. The difference in the priorities of the Regents and the faculty and administrators, as distinct/from the external groups, is even more marked in terms of the relative value they assigned to requiring arts and science courses in ál degree programs.
2. While the mission having to do with providing educational and cultural : services ranked second in overall priority, none of the activities associated with this mission ranked in the top ten activities for any group. Instead, activities related to teaching and research predomi-. nated in the most important activities. External groups attached much higher priority to technical assistance'to apply research results than did internal groups.
3. Special efforts to recruit women and minority faculty produced the greatest contrast, with such activities being among the top ten priorities for regents and the bottom fifteen for externals.
4. In general, there was more agreement on the least important activities than on the most important. With the exception of activities related to affirmative action, only leasing facilities for profit, increasing ' tuition for out-of-state students and developing new programs in veterinary medicine, dentistry and opthalmology ranked in the top half of priorities for at least one group and the bottom ten for another.
5. While this summary has stressed differences; agreenent about relative priorities was the rule; significant differences were fairly limited.

## Discrepancies. Between Priorities and Accomplishment

Beyond assigning priorities to activities, respondents were asked to indicate how well an activity was being performed. For each activity, there were three possible conclusions for each respondent:

1. An activity was being performed less well than its assigned importance.
2. An activity was being performed at the same level as its assigned importance.
3. An activity was being performed at a higher level than its assigned importance:

Efficiency considerations in a system with constrained resources suggest that an activity should be performed at no higher level than its assigned importance unless allactivities of greater importance are also being performed at least as wellas their importance merits. We found relatively few activities that any group thought were being performed better than their assigned importance. In contrast, there were many activities that one or more groups identified as needing substantial improvement:

1. There was a high degree of consensus about the importance of and need for improvement in counseling for drug and alcohol abuse, special assistance for the handicapped, academic advising, use of computers in the undergraduate curriculum, and research opportunities for training students and updating faculty.
2. There. was less consensus about the importance, but considerable agreement on the need to improve, the recruitment of recognized scholars and outstanding students, research.opportunities in general and gontinuing education for the professions.
3. There were also priorities unique to three of the four groups: externals, increasing out-of-state tuition; regents, affirmative action and broadening access; students, improving student services and teaching.


One major purpose of the study reported in this monograph was to define missions of Arizona universitiessobed on the activities in which they engages It was reasone that such a definition would be more useful to state policy makers than the more general categories of teaching, research and service commonly used to categorize the functions of a university. $\because$ Prior to developing the survey used to define missions in this study the Institutional Goals Inventory developed by Peterson and Uh1 $\int_{0}(1973)$ was examined by university administrators and determined not to be useful to the types of issues facing. administrators, board membens and legislators in Arizona. As an al ternative, administrators and board members contributed to the development of a set of act ${ }^{\circ} \mathrm{vities}$ which they believed were representative of the range of missions assigned to Arizona universities. Students were not involved in the development of the original survey.

Thé process used in creating mission definitions involved factor analyzing responses to the relative importance of activities included in the survey? Factor analysis is a statistical teechnique that examines intercorrelations among responses and then groups items according to their commonalities. The process assumes that if activities are closely related, people should follow a pattern in evaluating their importance. Since the activity statements were randomly ordered in the survey instrument, the patterns among items that emerged from factor analysis provide a a guel as to how university missionyis
def ines the the kinds of a variety of constituents, the majority of whom ere not employees of the system.
Le scribing mission from the bytom up rather than the fop down has some important adyantages in improving communication between hose who work for universities and those who support? this approach has been demonstrated in a previous application to the community college system in Arizona (Richardson Doucette, and Armenta, 1982).

Q The following ten missions, reported in overall order of priority, emerged from the analysis. Following a description af these missions, we examine a breakdown of the relative importance assigned to them by external groups (ragistared voters, Arizona Academy, legislators) internal groups (faculty and administrators), members of the Board of Regents and students. Means above 3.0 ind cate support for the mission; means below 3.0 indicate lack of \$support or opposition to the mission. A optional information about the activity items. assigned to each mission category and their factor loadings appears in the Appendix. The discussion in the following chapters uses shortened forms of the activity items, the complete items as they appeared in the survey are listed at the end of this chapter in Table 2.2 by mission category for reference pour-
$\therefore: 18$

## Mission-1. Teaching Programs and, Sefices

Activity items that were groupet in this category included thosenaving to - do with offering graduate or undergradeate degree programs in the arts and sciences or in professional fields, including medicine and daw. Also grouped here were items on academic advisement, requifing. iberal education courses in undergraduate degree programs and student government and student publications This mission was clearly recognizable ds tfe traditional teaching mission. of partjcular interest was the inclusion of advisement and student development, actiryties which are sometimes perce ${ }^{\text {sived by }}$ biterfal groups as supplementary or even peripheral to the teaching rote.
$m=\frac{\text { Mission 2. Educational and Culturar Services }}{e^{*},}$
This mission encompassed acitivities involving educational and cultural.

* programs, either offered specifically for the community or open to the general public Films, speakers; art exhibitions and creathe vertso performances were included; as were public television and radio. . Also a part of this mission was
*eroviding information to kep the public aware of the programs and services available.

Mission 3. Research and Technical Assistance

The terfatems included within this mission categQry contained rationales, of related to both basic and applied research. This distinction did not seem : important to respondents, other than faculty. Providing technical क्वsistance to apply the results of research was viewed as an integral part of the role by ${ }^{4}$
other respondents: thus agricultural extension was viewed as art of the research and technical assistance mission, rather than the more narrowly defined community service included in Mission 2 .

Mission 4. Health Care for Teaching and Research

The fourth mission in terms of overall importance focused in the area of
health care services for the general public, offered in conjunction with a teaching hospital or on a fee-for-service basis to train medical or other health science students, Clearly, the public attaches considerable importance to health care, and that concern carnies over into their, reaction to activities : related to the future supply of health professionals or the development of new knowledge in the medical field.

Mission 5. Improving Quality

The first four missions were related to functions easily recognized as. accepted roles for universities. The fifth was more of a direction for change. Emerging quite clearly as a distinctive category with seven activity statements was the goal of improving quality. The statements in this mission dealt with recruiting students with academic and artistic talents, limiting enrollment to students with high test scores or strong achievement on standardizes tests and awarding degrees only to students who passed a standardized writing examinetion. Also grouped in this mission category we activities related to attracting and retaining outstanding faculty members including special recruiting efforts, strengthening the library, sponsoring research, and providing tenure. The distinguishing characteristic about each of the statements in this
category was the intent to improve quality. For example, two of activities included the terms "sponsor research" or "support research." The rationale in each instance was related to improving or maintaining quality.

## Mission 6. Student Support Services

The activities grouped here encompassed a much narrower range than is comononly associated with the term we have used to describe the category of student services. Included were 'counseling services to assist students with depression, substance abuse and unwanted pregnancies. Remedial instruction and study. skills" also were grouped here, as were immediate care and continuing education 'for studentscwith health-related problems. Thus, the services in this category . $\therefore$ were limjted to those designed to assist students in overcoming barriers.to academic achieverient: C̀onspiccuous by their absence were the activity statements often viewed as closely related by student affairs professionals and having to to with Peadership training, recreational athletic programs and career and job placement -services. It is interesting to note the fine diss tinctions the respondents made between services that, are often grouped together for administrative purposes butt which do, in fact, serve distinctive functions.

## Mission 7. Broadening Access

This category included seven statements linked primarily by their description of programs and services provided either to a nontraditional clientele (senior ${ }_{\beta}$ citizens, physically handicapped, practicing professionals, general public) or in nontraditional locations (work place, off-campus locations, " * branch campuses). These statements also mentioned alternative delivery systems.
(telecommunication, radio or correspondence). The category encompassed non- . credit courses, workshops and conferences as well as selected credit courses and programs. The emphasis of the mission was on extending access to students other than those pursuing regular degree programs in residence, ${ }^{*}$ either by taking courses and other educational experiences to them, or by providing special services to remove barriers as in the case of the physically handicapped.

Mission 8'. Optimizing Revenues

As in the case of Mission 5, the activities encompassed by this category seem to represent as much a set of strategies as specific goals. Again, like Mission 5, this category seemed to be particularly belevant to the concerns of the 80 's. All three of the activities are related to revenue sources other than tax dollars. Activities include leasing facilities, requiring nonresident students to pay higher tuition and contracting with private corporations to provide such services as bookstores, cppying and food. .

Mission 9. Special Emphasis on Women and Minorities

- This mission involved a series of statements characterized by the inclusion of such phrases as "ethnićc and racial minorities," "qualified women," "qualified minority," or "international." Regardless of whether the remainder of the statement stressed faculty of students, research, teaching or student support services; the activity was grouped in this category. Here we see a third type of mission, one that focuses on clientele and which implies some special consideration in the affirmative action sense. As we shall see in the remain-

ing sections of this monograph, a mission that implies special consideration for some groups is ranked well down the scale of priorities for most respondents, especially external graups.

Mission 10. Intercollegiate Athletics

This mission included two activities having to do with sponsoring competitive intercollegiate athletic programs for men and women and recruiting . students with athletic talents. Not surprisingly, having competitive programs was a lot more appealing to respondents than recruiting talented athletes. Overall, however, this mission was ranked last in importance although, as described in the next section, there were differences of opinion on this ranking.

## Assigning Priorities

The first part of this chapter reported missions of Arizona universities in order of the overall priority assigned by all respondents to the survey. Not all groups had the same priorities, however. Table 2.1 examines priorities for the ten missionsion a disaggregated basis. Because the student survey included some items that are different, its results could not be included in the analysis of mission categories. We do report. student data on those activities that were comparable. Those who are interested in greater detail about differences in the responses of the various groups will find disaggregated data in the Appendix.

Among all responding groups, the teaching mission was assigned top priority. There was almost as much consensus about the second priority, educational and cultural services for the community. Administrators however, ranked this

TRBLE 2.1

focused service mission as less important than Miss ion 3, research and legislators ranked this mission below Mission 3 and Mission 8, Optimizing Revenues. One explanation for the priority assigned to service relates to the nature of the three institutions which comprise the Arizona system. only one of the three is an established research university, while a second belongs in the comprehensive university and college category. The third, while aspiring to research university status, is better described at this point in its history as a doctorate granting university (Carnegie Council on Policy, Studies in. Higher Education, 1976).

There was also a strong degree of consensus about the importance of the mission dealing with health care ${ }^{10}$ fere to the general public in support of teaching and research programs health care professionals.

Interesting differences emery ad or Mission 5, improving quality. In general, internal groups attached higher importance to this cluster of activities than did externals. Significantly, Regents. ranked this mission next to last *among their priorities. Improvements in quality invariably have a price tag. Further, many of the pressures to which Regents must respond in - Arizona relate to competition between the two largest universities in the system, either to justify existing differences in quality measures or to ;achieve parity..

Faculty members and the Regents were most concerned about support services for students, Mission 6. The activities associated with this mission were less important to voters and Academy members.

The mission having' to do with broadening access was most popular with voters and least popular with legislators who tend to equate new services with. new costs. Voters and administrators ranked this mission more important than o. did any other group.

The most important differences for any of the missions occurred for optimizing revenues. The internal group and Regents ranked this mission last while the legislators ranked it in their top half. Within this mission category were a number of activities, around which swirled considerable controversy at the time of the survey. Charging higher tuition for nonresident students, contracting with private industry, and leasing a football stadium were all much more popular with legislators than with any other group.

Mission 9 , which dealt with a series of affirmative action statements, was accorded last priority by all external groups. Internal groups were somewhat more positive about it, but only the Regents ranked this mission among their top, five priorities. On both this survey and a previous one dealing with community college missions, external groups responded in a uniformly negative pattern to activities suggesting special consideration for some groups.

It will probably come as no surprise to the reader to learn that intercollegiate athletics was at, or near the bottom, of the importance rankings for all groups.

The survey results reflect many more similarities than differences in terms of the importance attached to each of the missions. The traditional missions of teaching, research and service are at cor near the top of everyone's list. All missions received at least some support from all groups, except for intercollegiate athletics from the faculty and optimizing revenues from the Board of Regents, the faculty and administrators. पese were the only two missions receiving mean scores on importance of less than 3.0 from any group.

Table 2.2 lists survey statements grouped by mission category.

Table 2.2
Activity Statements Included in Each Mission

## MISSION 1: TEACHING PROGRAMS AND SERVICES

5. Offer selected degree programs in fields such as medicine and law.
6. Offer selected undergraduate degre ${ }^{\text {P }}$ programs in business, engineering, education, architecture, social work, nursing, public administration, agriculture and forestry.
7. Require all undergraduate degree programs to include liberal education courses such as humanities, fine arts, social and behavioral sciences; physical sciences and mathematics.
8. Sponsor student government, student publications and other activities related to student development, outside of class.
9. Offer selected undergraduate degree programs in the humanities, fine arts, social and behavioral sciences, physical sciences and mathematics.
10. Offer selected master's and doctoral degree prðgrams in business, engineering, education, architecture, social work, pubTic administration, agriculture and forestry.
11. Offer selected master's and doctoral degree programs in the humanities, fine arts, social and behavioral sciences, physical sciences and mathematics.
12. Provide academic advisement to assist students in achieving educat'ional goals.

Mission 2: Educational and Cultural Services

1. Sponsor films, speakers), exhibitions and musical and dramatic productions for students and the community.
2. Operate non-profit public television and radio stations as a community and educational service.
3. Provide information to keep the public informed of educational, social and other services offered by the universities or other agencies.
4. Encourage advancement in the creative arts by sponsoring arts events, exhibitions and performances.

## Mission 3: Research and Technical Assistance

4. Conduct research under contracts funded by business, industry, foundations and government agencies to assist the training of graduate students and to keep faciulty up-to-date.
5. Conduct projects to apply the findings of research to everyday life.
6. Publish for sale scholarly books, pamphlets and reports to share the results of faculty and student research.
7. Conduct research to contribute to the future growth and welfare of the state and nation.
8. Provide technica assistance to the general public in areas such as agriculture, forestry, resource and energy conservation and community development to assist citizens in applying researcfifindings to everyday life.
9. Sponsor research in health science to improve standards of medical care and to train health professionals.
10. Do research in areas such as energy, agriculture, electronics, government; economics, health and education to expand existing knowledge and to help solve immediate problems.
11. Conduct research and provide technical assistance in areas such as juvenile delinquency, health care, child welfare and unemployment.
12. Support the educational program with research laboratories like those used in business and industry.
13. Do research in the humanities, social and behavioral sciences, physsical sciences and mathematics to expand existing knowledge and to help solve immediate problems.

## Mission 4: Health Care for Teaching and Research

2. Provide health care to the general public on a fee-for-service basis to $\qquad$ train medical and other health science students.
3. Operate a teaching hospital to advance knowledge and to help train medical and other health science students.

## Mission 5: Improving Quality

25. Actively recruit and offer financial aid to students with academic and artistic talents.
26. Award degrees only to students who pass a standard university test in writing skills.
27. Sponsor research to attract and keep well qualified faculty and students.

45: Provide tenure (reasonable assurance of continuing employment) to faculty who maintain professional standards approved by the Board of Regents.
46. Support research with libraries like those at other universities having
, . similar programs.
56. Make special efforts to recrult and retain recognized scholars and researchers for university faculties.
57. Limit enroliment to students who graduated in the upper half of their high school class or who have above average scores on standardized aptitude tests.

## Mission 6: Student Support Services:

11. Provide counseling and related services to assist students in coping with problems such as depression, stress and alcobol and drug abuse.
12. Offer 'remedial instruction in reading, writing and mathematics to university students who need help with these skills.
13. Provide sfudents immediate medical care and continuing education on health-related problems.
14. Provide counseling and related services to help students avoid or cope with unwanted pregnancies.
15. Offer courses and workshops in areas such as study skills and academic survival skills.

## Mission 7: Broadening Acces.s

17. Provide selected programs and services at reduced tuition rates for senior citizens.
18. Provide conferences, short courses and workshops for doctors, lawyers, public administrators and simitar groups to keep their skills up-to-date.
19. Offer selected courses by telecommunication, radio or correspondence.
20. Offer non-credit courses and workshops for the general public in areas such as health, recreation and hobbies.
21. Provide special assistance such as Braille texts, tutoring services, or sign language to physically handicapped students.
22. Offer selected courses and degree programs at off-campus locations or branch campuses.
23. Offer selected courses to groups of employees at their work place.
24. Earn a profit by leasing university facilities such as football stadiums, activity centers, meeting rooms and exhibition space to private corporations.
25. Contract with private corporations to provide on-campus services currently run by universities such as bookstores, copying and food services.
26. Require students who are not residents of Arizona to pay the full costs of their education.

## Mission 9: Emphasizing Minorities and Women

13. Accept international students who meet university admission standards.
14. Conduct research and provide technical assistance to meet the special needs of Arizona's ethnic and racial minorities.
15. Actively recruit and offer financial aid to ethnic and racial minorities.
16. Make special efforts to recruit and retain qualified women faculty.
17. Make special efforts to recruit and retain qualified minority faculty.
18. Include information about the achievements and needs of Arizona's ethnic and racial minorities as part of all undergraduate degree programs.
19. Provide special tutoring and advisement to ethnic and racial minority students to help them get through their educational programs.

Mission 10: Intercollegiate Athletics
21. Sponsor competitive intercollegiate'athletic programs for men and women.
64. Actively recruit and offer financial aid to students with athletic talents.

## CHAPTER 3

## COMPARING PRIORYIIES FOR INDIVIDUAL ACTIVITIES

In Chapter 2 we described ten missions derived through analyzing the factorial structure underlying respondents' answers to the survey. The purpose of this chapter is to compare priorittes assfgned to activities withtin misston categories. To simplify the analysis, aggregated results are presented here. Complete results, including the disaggregated priorities for individual respondent groups, can be found in the Appendix.

As noted in Chapter 1, students at the three universities comprising the Arizona system completed a revised form of the survey. Eight of the statements from the original survey were modified, while an additional 15 were replaced with new statements suggested by the student leaders who helped to validate the revised survey. A complete list of the actlvity statements in both the original and revised surveys and defailed information abof student responses appears in the Appendix.

We have reported student responses to statements common to the original survey', as well as statements that were modified, in the tables that follow. While changes to the survey format and statements may have affected student responses, it was our judgment that the desirabilityrof comparing student priorities directly with those of other ressondent groups outweighed any risks associated with misinterpreting the differences between the two instruments.

We have reported in this chapter only the activities from the original survey' that were among the top ten or bottom ten prioriteres for any one of the four groups. Table 3.1 displays the 23 activities that appeared among the top

TMBE 3.1
Nost Inportant Activities Rakked by Respondent Group Twenty-three nctivities which were anong the 10 Most Inportant Activities for at least one Respondent Grap ${ }^{\prime}$ '

| IIIM | MISSION | DESCITPITION OR MIEM | EXITPNL | - RANK By | grave | stupare |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 1. | Degree prograns in medicine and law | $\cdots 3$ | 3 | ${ }^{4}$ | N/A |
| 7* | 1 | Undergraduate' degree prograns in professional fields | 1 | 1 , | 1 | 5 |
| 19 | 1 | Undergraduate liberal arts requirenent | 28 | 8. | 9 | 42 |
| 47 | 1. | Undergraduate degree prograns in arts and sciences. | 115 | 15 | 2 | N/A |
| 60 | 1. | Craduate degree prograns in professional fields' | 2 | 8 | - 31 | B |
| 63 | 1 | Graduate degree prograns in arts and sciences | 17 | 15 | 6 | 16 |
| 65 |  | Acadenic advisenent | 6 | 15 | 14 | 7 |
| 4. |  | Contract research | 5 | 8 | 5 | 14 |
| 12* | 3 | Basic research in all fields | 9 | 8 | 7 | 12 |
| 14 | 3 | Technical assistance to comunity in applying research | 7 | 30 | 20 | N/A |
| 22 | 3 | Research in health'sciences | 1 | 15 | 18 | N/A |
| N 29 | - | . Aasic research in proféssional fields | - 8 | 30 | 8 | N/A |
| 36 | 4 | opdrate tefching hospitul | 16 | 8 | 23 | N/A |
| 38 |  | Research to attrract and retain students and faculty. | 13 | 30 | 10 | 15 |
| 46* | 5 | Library to fiuport research | 31 | 35 | 12 | 6 |
| 56 | 5 | Recruit and retain recognized scholars | 20 | 8 | 15 | 29 |
| 11 |  | Counseling for, drug and alcohol abuse | 21 | 23 | 25 | 10 |
| 51 |  | Special assistance to the handicapped | 12 | 27 | 32 | 9 |
| 53 | 7. | Courses and prograns at branch canpuses | 32 | 3 | 51 | 45 |
| 31 | 9 | Recruit and retain wnen faculty | 52 | 3 | 42 | 51 |
| 49 |  | Recruit and retain minority faculty | 60 | 8 | 48 | 58 |
| 3 | IOVE. | Develop qutadent leadership | 10 | 50 | 31 | 35 |
| 32 | Nate | Career ard j job placenent sernices | 24 | 23 | 24 |  |

*Modified in student survey
N/A Itens unique to student sfrvey
NOTE: Tied itens are given the median rank for the thed itens. When there are only two itens or an even number, the higher rank is used,
ten priorities for at least one group of respondents. N/A in the student column indicates that the statement did not appear on the student survey."

For the teaching mission, students and external groups assigned a much lower priority to requiring liberal eduçation courses ás a part of all undergraduate degrees thẩn did regents or internal groups. This difference in priority attached to the liberal arts and sciences is also apparent in the statements dealing with both undergraduate and graduate degrees, a fhough to a \& somewhat lesser extent. In contrast, all groups attach very high priority to programs in the professional flelds. Students and externar groups, on the other hand, attached higher priority to fcademic advising than did regents or faculty and administrators. Still, all groups agreed adv.ising was a relatively important aftivity.

While the service mission was ranked second overall, none of the individual activities which made up this mission was given top ten priority by any group. For the research mission, there was close agreement on the priority of activities related to basic research and research in support of teaching. External groups gave high priority to all forms of research and technical assistance. Students, reported similar attitudes for the statements common to the two surveys. However, internal groups were relatively less supportive of providing technical assistance and research in the health sciences, perhaps reflecting the fact that only one of the three universities has specifie responsibility for medical research and agricultural extension. Regents $\because$ assigned lower priority than any of the other groups to providing technical assistance and research in professional fields.

Internal groups assigned lower priority to operating a teaching hospital than did other groups, again reflecting the fact that such an operation is common only to one university. The university with the teaching hospital is.
often perceived as occupying a privileged position in the competition for scarce resources.

The mission category related to improving quality protuced a number of interesting contrasts. Overall, internal groups assigned the highest priority to activities in this category, as might be expected. They were joined by students and external groups on the research-related item, reflecting the relatively high priority assigned by these two groups to most statements including the term, "research." Students also attached very high priority to a modified item on the library. Regents assigned high priority only to the statement involving the recruitment of recognized scholars. An activity statement in this category on providing tenure, while not making any merged group's list of the top ten, is nonetheless interesting because of the differences it reveals. Faculty ranked this item eighth while administrators ranked it fifty-first. No other group ranked it higher than thirty-eighth.

Students were substantially more interested in counsel ing for drug and alcohol abuse than were any of the other three groups. Both they and external groups were quite supportive of special assistance for the handicapped in rather marked contrast to regents and internal groups. Only regents attached high priority to offering courses and programs at branch campuses, reflecting one of the most important differences in priorities found in the survey. Interestingly, regents shareof this priority most closely with legislators who ranked it ぁeventeenth, in contrast with the overall rating by external groups of 32 .

The mission having to do with special emphasis on minorities and women 3. produced the most significant differences of opinion overall. Only the regents assigned high priority to the recruitment of minority faculty. In fact, this
activity was ranked among the lowest ten priorities, for both students and external groups. A simflar item on women faculty fared little better.

Career and job placement services were second in priority for students, but had substantially lower priority for'all other groups. In a separate factor analysis performed on student responses, this activity was grouped with Item'11 as part of a well defined student services category, which also included a number of other high ranked activities that were not a part of the original survey. Ranked first in importance by students at the three universities was adequate study space. Information about university services was ranked third, while financtal assistance services was ranked fourth. While we can only estimate the priorities that might have been assigned to these related activities by examining the item on career and job placement, it seems reasonable to infer that services designed for students as well as information about the availability of such services are more important to students than to anyone else.

More useful, however, are the estimates that can be derived of the success. with which such activities are perceived as being performed. We will turn our attention to that question in the following chapter, after first completing our analysis of importance by looking at the lowest priorities for each group.

Table 3.2 provides information about the 20 items that were ranked by at least one group as being among their ten lowest in priority. The table suggests more agreement about low priority activities than their higher priority counterparts.

Uniformly, gröups, X ssigned low priority to 1 imiting enrollment as a means of improving quality faculty were the most positive about this practice but still ranked i.t only thirty-fourth.

| IIM | MISsiow | UISCChiptian or inm | Exizenas. | numan | Incewh | subays |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 | 5 | Linit enrolllinant to high achieving students | 58 | 65 | 45 | 59 |
| 17 | 7 | Selected prograns for senior citizens | 38 | 56 | 41 | 47 |
| 18 | 7 | Non-cecedite coursose far tio public | 54 | 41 | 59 | 41 |
| / 95 | 7 | Courees at tho work place | 36 | 39 | 57 | $N / \mathrm{A}$ |
| 10 | 8 | Lease facilities for profit | 30 | 60 | 60 | 50 |
| 30 | 8 | Contract for services with private enterprise | 59 | 64 | 66 | 61 |
|  | 8 | Increase tuition for out-of-state students | 14 | 63. | 61 | 63 |
| 18 | 9 | Ressarch for special needs of minorities | 57 | 39 | 43 | 54 |
| 23 | 9 | Recruit and offer financial aid to minorities | 62 | 23 | 52 | 57 |
| 49 | 9 | recruit and retain minority faculty $\quad . \backslash$ | 60 | 8 | 48 | 58 |
| 54 | 9 | Minority infomation in curriculum | 63 | 53 | 63 | 66. |
| 66 | 9 | Special tutoring and advising for minorities | 61 | 39 | 49 | 56 |
| 64 | 10 | Recruit and offer financial add to athletes | 64 | 53 | 64 | 62 |
| 16 | NaNE | Let non-profit agencies use facilitites | 40 | 58 | 55 | 47 |
| . 24 | nove | Free library services to the public | 53 | 59 | 62 | 60 |
| 28 | NOVE | University support for faculty consulting | 65 | 62 | 65 | 64 |
| 33 | NOVE | Reduced tuition for university enployees | 66 | 60 | 39 | N/A |
| 44 | Hove | cooperate to attract new business and industry | 49 | 48 | 58 | N/A |
| 61 | nove | Namit high school stidents. | 47 | 56 | 4 | 53 |
| 62 | Nove | Develop prograns in veterinary medicine and dentistry | 25 | 66 | 1 | 20 |

N/A Itens unique to student survey
NIIE: Tied itens are given the median rank for the tied itens, When there are only two itens or an even number, the higher rank is used,

Nono of the groups avidenced much enthusiasm for broadening accoss by offering noncredit courses, or courses at the place of work. As noted in the section on high priorittes, rogents weru much more supportive of courses at branch campuses than of othor activities in this mission; in fact, the regents gave this activity their third highest priority. The issue of estabilshing a branch campus on the west side of Phoenix has been a volatile political issue for several yoars. The range of priforities given to this activtty by the various groups suggests that it will continue to be an issue.

In mission category 8, optimizing revenues, there is similar disaorement. Regents reserved three of their lowest/priorities for activities in this category. In fact, analysis of their mean scores formese activities reveals not only low priority, but resistance to leasing facilities for profit, contracting for services, and increasing tuition for out-of-state students. . External groups, in marked contrast, assigned relatively high priority to increasing tuition charges. There was also a large rank difference in the importance assigned to leasing facilities for profit, with legislators being the most enthusiastic about this practice. At the time the survey was administered, one of the universities was under public pressure to lease its football stadium to a professional football franchise. (The lease was subsequently executed.)

We have already commented on the significant differences in priorities that existed between the regents and all other groups on the question of special emphasis on minorities and women. The difference was most pronounced on the recruiting questions where the regents have been under pressure from organized groups to improve the representation of minorities among both faculty and students.

All groups were in relative agreement that the low priority assigned to recruiting athletes is appropriate.

Among the activities that did not relate to one of the ten mission categories there were few important differences: Predictably, university employees felt that continuing the fringe benefit of reduced tuition was more important than anyone else. Voters were much more positive about new programs in veterinary science and dentistry (not currently available in Arizona) than were any of the other groups. Regents and legislators were in close agreement on this one, ranking it sixty-sixth and sixty-first in order of importance, respectively.

## DISCREPANCIES BETWEEN PERFORMANCE AND PRIORITIES

The previous two chapters have discussed the priorities of the groups who participated in the survey. As well, we have suggested a way of grouping most of the activities conducted by universities into ten major mission categories. In this chapter, we turn to the second question asked by the survey, "how well is the activity being performed."

The intent of this chapter is to examine the question of how well an activity is being performed in relation to its importance. Given constrained resources, we should not expect agreement that all activities are being performed equally well. Instead, we would hope to find that important activities are being done well and less important activities are being done. less well. Wherever an activity is being performed less well than its importance would suggest as desirable, administrative intervention in the form of additional resources may be necessary. Similarly, actiyities that are being achieved better than their importance warrants may represent areas from which slack resources can be obtained.
' Our method of analysis involved identifying for each group the twenty activities for which the group reported the greatest discrepancy between the ir perceptions of the activity's importance and their perceptions of how well the activity was being performed. Groups differed in'their perceptions of how well 'activities were being performed, just as they differed on the importance they assigned to each of the activities. As a consequence, the pool of items that
included the twenty most discrepant activities for each group contained a total of 48 items. This figure probably overstates the level of differences since it includes 8 items that appeared only on the student survey.

We report these activities in four different categories. Four activities were identified by all groups as being among the twenty exhibiting the greatest discrepancies between importance and performance. An additional four activities were similarly identified by three of the responding groups. A larger pool of twelve activities was identified among the most discrepant by two groups. Finally, each group reported items unique to itself, reflecting its special concerns.

## Activities Identified by Two or More Groups

Table 4.1 identifies the four activities identified by all groups as being most discrepant between importance and performance. In this Table and the following three, we have reported the median ranks for importance assigned by, the four groups. Similarly, we have reported the median percentage of the four groups who believed the activity was being done less well than its importance warranted (< Import); being done as well as its importance warranted (=Import), and being done betfter than its importance warranted (> Import).

These four activities on which all groups agreed appear to be good candidates for administrative attention. Three of the activities, counseling for drug and alcohol abuse, providing information on computers and special assistance to the handicapped, are among the top third of activities in importance as well as being in the twenty most discrepant between importance and performance Overall, more respondents perceived a discrepancy between

# MEDIN OF <br> IMPORIANCE RANK <br>  

| ITEM MISSION | DESCRPPITON OF ITITM |  | IMPORTANCE | $=\operatorname{IMPDORALE}$ | IMPORTANCE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11.6 | Counseling for drug and alcohol abuse | 22 | $70 \%$ | 25\% | 78 |
| 39.6 | Remedial instruction | 51 | 61 | 22 | 20 |
| 51. 7 | Special assistance to the handicapped | 20 | 72 | 25 | 4 |
| 15 NONE | Infomation on computers in undergraduate program | - 23 | 75 | 20 | 5 |

NOER: Median percentages do not necessarily add to $100 \%$.

## TABLE 4.2

$\}$
Activities Identified by Three Groups as Most Discrepant Between Inportance and Performance

> MADIA OF : MEDIN \& OF GROUPS' RESPOSEES IO BEENG
> IMPORTMACE RANK DONE WELL QUESIION THAT ARE:

| ITEM MISSION | DESCRIPIION OF ITEM |  | IMPORTANCE | $=$ IMPORTAMCE ${ }^{\prime}$ | IMPORTIMCE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $65 \therefore 1$ | Acadenic advisement | 11 | 718 | 278 | 18 |
| $4 \quad 3$ | Contract research | 7 | 68 | 28 | 4 |
| 3 NONE | Develop student leadership | 33 | 67. | 27 | 5 |
| 62 NONE | Develop programs in veterinary medicine and dentistry | 38 | 71 | 22 | 9 |

NOTE: Median percentages do not necessarily add to. $100 \%$
priority and accomplishment for providing information on computers than for any other activity. The high importance rank given this jtem indicates strgng support for improvement.

Table 4.2 lists four activities identified by three groups as being among the most discrepant. Academic advisement ranksialeyenth in inportance oyer two-thirds of those responding believed this activity wats hot being performed as well as its importance justified. Research for training students and updating faculty was ranked even higher in terms of median imporfance, but there was somewhat less agreement on the need for mporovemen' The relatively low ranking legislators and regents assigned to the fovelopment of new professional programs not currently offered in Arizona, as well as the tess-thanmajority sentiment that improvement was needed, reflects a conscious decision by legislators and regents to subsidize tuition of state residents at out-of-state schools as opposed to starting costly new programs th the state. In contrast, voters perceived this activity as one of the 20 most important.

Table 4.3 identifies activities perceived by two groups most discrepant: Two missions, improving quality and conducting research, account for 8 of the 12 activities. Increased emphasis upon impraving resfarch is a donnant theme for at least one of the three universities, as well is for state potwcymakers interested in attracting high-tech industry- There is al so an aetive piterest among a wide range of constituencies in improving the quality of edycat oronn The activities related to improvong quality that receive high rankings as well as strong support for improvement, include rectating regognized schotars and. students of exceptional promise as well as providing these nd ividuals with attractive research opportunities. Well down the fot of prior it ies and receiving substantially less support for change are practices that would limit enrollment at the state's puniversities or impose a writjhg. test as a condition

Activities Identified by Tho Groups as
Most Discrepant Between Inportance and Perfomance

| ITIEM MISSITON |  |  |  | MEDIN 8 OR GROPS' RESPCaSSS 10 BEDC DOEC WUNL, XUSTITON THRP ARE: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | DESCRIPITION OR ITMM |  | IMORRMCE $=$ TMOORMICE |  | ITPORMAC |
|  | $8-3$ | -Apply - research to everyday-life | 28 | 678 | 288 | 58 |
|  | 123 | Basic research' in all fields | 9 | 68 | 28 | 3 |
|  | 293 | Basic research in professional fields | 8 | 68 | 29 | 2 |
|  | 25 | Recruit and offer financial aid to gifted students | 21 | 64 | 29 | 4 |
|  | 27. | Require writing test for degree | 49 | 60 | 26 | 13 |
|  | 38 | Research to'attract and retain students and faculty | 14 | 69 | 27 | 4 |
|  | $56 \quad 5$ | Recruit and retain recognized scholars | 18 | 67 | 29 | 5 |
|  | 57 | Linit enrollment to high achieving students | 59 | 42 | 28 | 29 |
|  | $40 \times 7$ | Continuing edication for professionals | 27 | 67 | 27 | 9 |
|  | 177 | Selected prograns for senior citizens | 41 | 60 | 26 | 10 |
|  | $10 \quad 8$ | Iease facilities for profit | 55 | 49 | 28 | 18 |
|  | 18.9 | Research for special needs of minorities | '49 | 54 | ${ }^{\circ} 32$ | 16 |

for graduation: Among the remaining items, only continuing education opportunities for professionals ranks in the top half of respondents' priorities.


0
Activities Unique to a Single Group

The discussion of differences in priorities in chapters 2 and 3 sets the stage for the final section of this chapter in which we examine those $\int 7$ activities primarily of interest to a single group in terms of an expressed need for change. In the Tables that follow, we have reported importance rank and the percentages of the group falling in the categories of discrepancy identified earlier for each group separately. This is a departure from our practices in the preceding Tables of reporting median data for all groups combined regardless of the number that identified the activity as a concern.

- Table 4.4 displays the four activities of special concern to external groups. The fact that there are only four activities listed indicates that sixteen of the twenty activities they identified as most discrepant between importance and performance were shared with at least one other group. None of - their unique items are of very high importance to external groups with the exception of the item involving increasing tuition charges for out-of-state students. Quite clearly there is considerable sentiment for a change in this area.

As indicated in Table 4.5, there were only two discrepant activities for internal groups not shared with some other constituency. One of these, requiring undergraduate liberal arts courses, received a particularly high priority.

Activities Identified by Extemal Groups only as Nost Discrepant Between Inportance and Performance

# NEDIN 8 OF GROUSI' RESPOSSES TO BEDC <br> DOER WELH QTESTICN THEM ARE: 

| ITEN MISSTION | DESCRPTITON OF ITINS |  | IMOPRMACE $=\mathbb{M}$ MOPRMACE |  | InRORRMCE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1{ }^{4}$ | - Provide health care to train students | 33 | 628 | 298 | 98 |
| 378 | Increase tuition for out-of-state students | $14^{\circ}$ | 64 | 26 | 9 |
| 16 NaE | Iet non-profit agencies use facilities | 40 | 59 | 30 | 11 |
| 33. 100E | Reduced tuition for university emplogees | 66 | 15 | 27 | 58 |

NOIE: Median percentages do not necesssarily add to 100\%\%.

## TREIE 4,5

Activities Identified by Intemal Groups only as Nost Discrepant Between Inportance and Perfomarcee

## MEDTN OR MEDIN 8 OR GRXUS' RESPOTSES TD BEDG 

|  | Mission |  | DEECRIPTITON |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | 1 |  | liberal arts requirenent | 9 | 698 | 268 | . 58 |
| 9 | 8 |  | ch findings | 30 | 69 | 26 | 5 |

NOTE: Median percentages do not necessarily add to $100 \%$.

Unlike the previous two groups where a substanttal majority of the activities ddentified as most discrepant were common to the lists generated by other groups, over half of the activities ddentiffed by the regents were unique as indicated in Table 4.6. From our previous knowledge of their priorities, we would expect Mission 9, Special Emphasis on Women and Minorities, to receive significant attention' and, indeed, four of the twelve activities they identify, as most discrepant fall in this area. Increasing the number of minorities and women on the faculties are very high priority. They are also activities which the regents, with virtual unanimity, view as being done far less well than their importance merits.

Second only to their concern with women and minorities is their emphasis on broadening access. Only one of these activities made the top half of their priority list, however. Interesting, also, is their perception that making courses available in the work setting is being done far less well than its importance would merit.

One activity, sponsoring arts events and performances, stands out as being twenty-third in priority and twenty-first from the bottom in discrepancy between.impgrtance and performance. The regents' strong interest in the health field is reflected in items from two different mission categories, both of which were assigned relatively high priorities as well as being marked as in need of improvement.

The ten activities unique to the student list of most discrepant items, which appear in Table 4.7; are interesting for several reasons. Student leaders who assisted in validating the student version of the original survey identified fifteen new activities they wished to have included, on their survey. Eight of these made the list of the 20 most discrepant, and seven of these eight were ranked in the top half of student priorities. Some of these

Activities Identified by Regents only as Most Discrepant Between Importance and Perfomance


NOTE: Median percentages do not necessarily add to $100 \%$.


Activities Identified by Students Only as Most Discrepant Between Importance and Performance

MEDIA OF
IMPORTANCE RANK
MEDIAN 8 OF GROUP'S RESPONSES ID BEING DONE WELL QUESTION THAT ARE:
IMPORTANCE $=$ IMPORTANCE IMPORTANCE

activities might well have made the lists of other groups had they been given the chance to respond. Even without the responses of other groups on these - items, the student responses provide valuable information about student priorities and their perceptions of how well the activities most important to them are being performed in Arizona universities.

Among their top ten priorities, more than 70 percent of the students
 career information and job placement and general information about university services. In the next ten most important, the emphasis was clearly on teaching with again more than 70 percent suggesting improvement in research labs, class size and teaching. Improving student involvement in decision making was a high priority for change, but the one activity that students felt was most in need of change was the removal of unsatisfactory teachers.

## CHAPTER 5

## DISCUSSION

The purpose of this study was to determine public attitudes toward/ the activities conducted by Arizona's public universities as background for a Town Hall on Postsecondary Education conducted by the Arizona Academy in Apri1, 1983 (Richardson, Wolf, and Kimbal1, 1983). The study replicated, with some modifications, an earlier project involving Artzona's communty colleges. (Richardson, Doucette, and Armenta, 1982).

## Mission Definition

The study yielded ten missions, three of which were easily identifiable in terms of the traditional triumvirate of teaching, Fesearch and service long associated with university mission. The research mission included both applied and basic research, as welf as technical assistance. Whatever distinctions academics may make, the general public associates with the research mission a practical pay off as well as the necessary assistance to achieve that pay off.

The service mission was perceived by survey respondents in a way substantially narrower than its common definition as a general catchall category. Service, in terms of the mission defined in this study, involves providing educational and cultural experiences for the general community through med ia as well as live performances. Information about services as well as the actual events are subsumed within the mission category.

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The remaining seven missions form useful categories for addressing a range. of. contemporary concerns. Access, affirmative action, health care, improving quality, student services and increasing revenues all emerge as areas of concern represented by more than a single activity. Intercollegiate athletics also emerges as a distinctive mission category, a phenoken that many may regret but none can easily refute.

In addition to these ten distinctive mission categories, the survey included eleven activities that did not form any coherent grouping. Included Within this miscellaneous category were several "issue items" suggested especially for the Town Hall meeting as well as some activities in which Arizona universities do not currently engage.

Taken as a whole, the categories provide useful ways of summarizing the services universities provide to a state. Further, the relative emphas is upon some of these categories among the units of a system might serve as a useful, starting point for mission differentiation. Finally, some categories such as affirmative action and optimizing revenues sharply del lineate value conflicts. among different constituencies of the state university system.

## Priorities: Mission Categories

Among the mission, categories there was general agreement ad ot theron priorities for the system with a majority of respondents and groupsirantong service above research. Lily legislators and ed in istrators rankedresearch higher for the system as a whole. Teaching h as/could be expected, was every group's top priority.


Areas of greatest disafredment included improving quality, with regents attachong a much jowe pronkty to this area than internal groups. In contrast regentsive the onily group to attach high priority to activities related to affrmatityefetion. The reaction of external groups who ranked thts ampsion category fast in priority suggest one of two possibilitiles. Either they believe the agtivities in this category are already receiving more attentifon thacthey deserve, or they are resistant to spectal consideration for any group: The generally high support for special services to the handicapped sugdest, that the reststance is focused on groups perceived to be capable of helping ot themselves as distinct from groups who must receive assistance because - 4 at chinstances over which they have no influence.

- Significant differences also emerged in the priority for optimizing regrenues where legislators gave the most support with regents, administrators and faciulty giving this their lowest ranking. Legislators, in turn, were less interested in broadening access, a adevelopment that is frequently associated with new costs.

While the importance of differences in perspective should not be minimized, the refults of these surveys suggest more agreement than disagreement about the activities in which Arizona universities engage. As well; there was support for all 1 of the mission categories (as distinct from the activities that compr îsed them) with one interesting exception. The regents and internal groups did not support the activities in the category of optimizing revenues, probably seeing in these activities both intrusions on their own scope of authonity and limitations on access through increases in user charges. As we shall see in later discussion, regents believe there is a significant need to broaden access to some currently underserved areas.

## Priorities: Activities

- An analysis of the top ten and bottom ten priorities for each group revealed some expected diffeyences as well as a few surprises. Among the expected differences were much stronger support for the liberal arts from faculty and administrators than from any other groups; a high priority on tenure only among faculty, a greater interest among students in counseling for drug and alcohol abuse as well as career services and a very strong difference of opinion between legislators and regents about the importance of charging higher tuition to out-of-state students and the tmportance of leasing (facilities for profit: $\}$.

Among the surprises were the very strong differences between regents and all other groups in the priorities assigned to the recruitment of women and minorities.

A study of the survey results failed to yield any suggestion of coalitions or combinations of our sample groups who consistently reported common priorities. The regents, who disagreed sharply with legislators on tultion and leasing, were in relative agreement with them on the importance of a branch campus. Among. all groups there was more greement about unimportant activities than about important ones.

The results suggest the healthy differences of opinion that should be expected within any political system coping with conflicting values. The absence of coalitions, supports an inference that each of the constituents are receiving reasonable consideration from such policy level groups as
legislators, regents and administrators. There is no evidence, for example, that the regents consistently report attitudes that are closely aligned with those of any other groups.


In a system with limited resources not everything can be done as well as possible; therefore, it makes sense to examine the discrepancy between how well an activity is being performed and its importance, and to use this discrepancy as a rough guide for resource allocation. Activities performed at a higher level than their importance warrants may indicate a mplsallocation of resources, in the same way as activities performed less well than their importance would seem to merit. Using this line of reasoning, we were able to identify activities where there were varying degrees of consensus about the need for more or less emphasis. of course, as might be expected, activities requiring reduced resources were few and far between. As a result, the most interesting aspect of the issue were those activities identified by a high percentage of most groups as requiring greater attention.

Three activities emerged as the most important areas in need of improvement from virtually everyone's perspective. These areas included improved counseling for drug and alcohol abuse, special assistance for the handicapped and improved academic advisement. Also given high prior ity for increased emphasis was information on computers in the undergraduate curriculum and improved research opportunities for training students and updating faculty. Several of these activities, including advising and counseling, could be improxed simply by chang ing the priorities of university personnel through
staff development activities and manipulation of the reward system. Others, such as emphasizing computers and research opportunities, require significant: additional resources and must be approached incrementally through the reallocation of avallable dollars. Interestingly, greater progress seems to be taking place with the latter rather than the former activities, suggesting administrators find it easter to reallocate funds than to change employee attitudes.
$\$$
Several additional activities were ranked as high priority in terms of need for additional. emphasis by, two or more of the groups responding to the survey, but this group of activities was more controversial as at least one group accorded them a relatively lower priority. This second category of priorities for increased emphasis included recruiting recognized scholars and outstanding students, improving research opportunities generally and increasing continuing education offerings for the professions. All of these activitfes require additional dollars and, thus, compete with other priorities such as recruiting minority and women faculty, a major concern of regents.

In addition to activities where there was some reasonable consensus about the need for change, three of the four groups had at last some unique priorities not shared with other constituencies. Anong these unique concerns for the external groups, raising tuition for out-of-state students emérged as their most salient concern. The regents were most insistent about the neẹd for improving affirmative action and broadening access. Students responding to a modified survey emphasized the need to improve student services including career counseling and job placement, financial assistance and information. They also were concerned about improving teaching but gave this lower priority than needed improvements in student services.

As we noted in.chapter 1, the analysis presented in this monograph is only one of many ways 1 n which the data might be used. Arizona's system of public universities includes institutions'with differing missions, ranging from the teaching emphasis of a comprehensive university, Northern Arizona; through an emerging refearch university, Arizona State, to an established research university, the University of Arizona. Data from the survey can be broken down by university to reflect differences in priority that are a function of institutional mission. Equally, patterns of effectiveness and efficiency can be analyzed for each institution by constituency to produce information of greater use to administrators. Indeed, dissertations gurrently in progress will exploit a number of these possibilities.

Finally, the survey has potential for furnishing information about con process through which the surveys were developed and validated ensured that activities important to all constituencies were represented in the instrument administered during the 1982-83 academic year. If, in five years, the sarveys are reviewed and modiffed to reflect the relatively iimited number of issues that will have disappeared or emerged in the interim, a readministration of the survey at that time would yield answers to the following questions:

1. To what extent do perceptions of a untversity's missions change over five years? Can activities be subsumed within the same ten categories?
2. Within whit ranges do perceptions of importance of missions and the activities which comprise them change during the same period? To what extent do the priorities of any group at one point in time tend to endure?
3. Do changes in university priorities over a five year period alter constituencies' perceptions of effectiveness? Do constituent groups offer improved ratings for the perforthance of those activities on which a university has concentrated resources for a period of time?

The decade of the eightles has been described as a period of emphasis on improving quality. In order to know whether quality has been improved, there must be some measure of its presence or absence at a point in time followed by a subsequent assessment using stmilar criteria and methods. Clearly, attitudes of constituency groups are only one measure of how well a university is performing. However, such attitudes and the values on which they are based tend to assume primary importance in the political process through which universities receive their resources. It would seem that educational policy makers ignore them at the peril of the institutions they guide.

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APPENDIX


In this appendix a more detailed discussion of the research process as well as tables presenting detailed survey results are presented. The appendix describes the research in the following order:

1. Development of the two Priorities for Arizona Universities surveys: the first version and the student version
2. Selection of respondents for the two surveys
3. Administration of surveys to seven major constituent groups
4. Response rates to the two surveys
5. Analysis of survey results.

## A. DEVELOPMENT OF THE SURVEYS

A major goal in the design of the original Priorities for Arizona Untverstties survey was to sample adequately the activities in which universities engage.

## Development of the First Survey

A series of 66 activity statements were generated for the first Priorities for Arizona Universities survey. As a basis for the generation of activity statements, the research team reviewed the literature on previous mission research and on activities: conducted in higher education institutions across the nation. The Arizona Board of Regents' university mission statement, college catalogs' and literature on organizational effectiveness and organizational theory were also consulted.

Only two major approaches to the study of goals in institutions of higher aducation have proviously been undertaken on a large, scale. The Gross and Grambsch studes in 1964 and 1971 were the first national studies done on institutional goals in higher education. They wore followod by the Institutional Goals Inventory (IGI) of Peterson and UhI tn 1973 and 1975.

The activity-driven concept of mission developed by Richardson, Doucette. and Armenta (1982) in the Community College Activitios Survey provided the conceptual framework for the Priorities for Arizona Untversities survey.

The ifterature on college and university activities gave the research team a broad overview of the activities in higher education. However, to be sure that no major activities conducted by universities were omitted from the list, the activity statements were grouped into the three traditional university missions of teaching, research and service. This list of activities was then further analyzed to be certain that all aspects of university activities were appropriately sampled. In addition, a few items of policy interest identified by administrators and the Arizona Academy were added to the list of activities to provide further information.

Throughout the development of the questionnaire, every attempt was made by the research t'eam to be objective. To this eind, a final draft of the activity statements was given to administrators, regents and researchers at the three state universities. They were asked to validate the list by reviewing the activity statements to determine that the items accurately described the activities in which universities engage and to ensure that these statements , were comprehensive and adequately sampled the full range of major unfversity activities.

Each reviewer was directed to review the activity statements according to the instructions reproduced in Table A.1. The research team reviewed and

Tabile A. 1<br>Copy of Validation Instructions

## VALIDATION INSTRUCTIONS

- Purpose: The purpose of reviewing the following activity statements is to validate their comprehensiveness and appropriateness for use in an instrument designed to asses constituent support for university activities and missions and their evaluation of the effectiveness of current university activities. Specifically, the purpose of reviewing these statements is:

1. To determine that the statements accurately describe activities in which universities are engaged, and
2. To ensure that these statements are comprehensive and represent all major university activities:

Description of Activity Statements: The following activity statements are intended to be a comprehensive list of the major activities conducted by universities, arranged in the three traditional mission categories of teaching, research, and os service. Each statement states a service provided by a university (a learning or research activity or asupport service, not an administrative function): In many instances the clientele to whom the service is provided ohas been listed next; a rationale has been added for an activity only when necessary to set the context.

The language in this instrument is simple and direct because the survey will Q. also be administered to constituencies outside the universities, including registered voters, the legislature, and members of the Arizona Academy.

Respondents will be asked two questions about each activity:
Is this activity important to do?
Is this activity being done well?
The format for their responses will be a five-point Likert Scale: 1) strongly disdy agree, 2) disagree, 3) not sure, 4) agree, and 5) strongly agree.

## DIRECTIONS FOR REVIEW OF ACTIVITY STATEMENTS

7. Review each activity statement to determine if the statement accurately des ceibes an activity of universities:

$\approx$ on the statement.

- Suggest deletion by writing "delete" in theydy
- Write comments as needed in the margins.

2. Review each mission category to ensure that each category is comprehensive and contains statements of all major activities in which universities might engage related to the mission:

- Suggest needed additions to each mission category on the last page. Your suggestions and comments will be helpful in assessing the accuracy and completeness of this instrument for research on university missions and effectiveness in Arizona. Please return to Troy Crowder by August 24 .
analyzed the comments and suggestions made and refined the instrument. As a result of the comments, the language of some activity statements was changed to improve clarity and consistency; in addition, a few items were added in areas which were under represented. Finally, a small, pilot test was conducted with a convenience sample. Using practitioners and significant constituencies reprosented an effort to ensure that the activity statements were grounded in practice.

The format of the Priorities for Arizona Universities survey was designed to elicit the respondents' perceptions of the importance and level of accomplishment for each activity. Respondents were asked to rate the importance of an activity on a scale ranging from $1=$ strongly disagree to $5=$ strongly agree. To determine the perceptions of the levels of accomplishment of each activity, respondents were also asked to rate, on the same scale, how well they believed an activity was being done.

Table A. 2 contains the list of 66 activity statements which were included in the final version of the first survey. A survey instrument is bound in at the end of this report to display the format and the instructions to respondents:

Development of the Second Survey
second
d. version of the survey was commissioned by the Arizona students for administration to students at the three Arizona universities. Several modifications were made to the original survey. First, the instructions, were clarified, and a choice of font know, or no opinion" was added to the possible responses for the "being done well" questions. While all

- Table A. 2


## List of Activity Statements in First Survey

1. Sponsor films, speakers, exhibitions and musical and dramatic productions for students and the community.
*2. Provide $h e a l$ th care to the general public on a fee-for-service basis to train medical and other health science students.
2. Provide incentives and training to assist students in developing and practicing leadership skills.
3. Conduct research under contracts funded by business, industry, foundations and government agencies to assist the training of graduate students and to keep faculty up-to-date.
*5. Offer selected degree programs in fields such as medicine and law.
4. Operate non-profit public television and radio stations as a community and educational service.
*7. Offer selected undergraduate degree programs in bus.iness, engineering, education, architecture, social work, nursing, public administration, agriculture and forestry.
*8. Conduct projects to apply the findings of research to everyday life.
5. Publish for sale scholarly books, pamphlets and reports to share the results of faculty and student research.
6. Earn. a profit by leasing university facilities such as football stadiums, activity centers, meeting rooms and exhibition space to private corporations.
7. Provide counseling and related services to assist students in coping with problems such as depression, stress and. alcohol and drug abuse.
*12. Conduct research to contribute to the future growth and welfare of the state and nation.
8. Accept international students who meet university admission standards.
*14. Provide technical assistance to the generak public in areas such as agriculture, forestry, resource and energy conservation and community development to assist citizens in applying research findings to everyday 1 ife .
*15. Include information about the use of computers in all undergraduate degree programs.
9. Let nonprofit organizations use university facilities such as football stadiums, activity centers and exhibition space if they pay all costs.
*17. Provide selected programs and services at reduced tuition rates for senior citizens.
10. Conduct research and provide technical assistance to meet the special need's of Arizoná's ethnic and racial minorities.
11. Requires fit undergraduate degree programs to include liberal education coursestuch as humanities, fine -arts, social and behavioral sciences, physical sciences and mathematics.
*20. Provide information to keep the public informed of educational, social and other services offered by the universities or other agencies.
12. Sponsor competitive intercollegiate athletic programs for men and women. -
*22. Sponsor research in health science to improve standards of medical care and to train health professionals.
13. Actively recruit and offer financial aid to ethnic and racial minorities.
14. Provide university library services free to the general public.
15. Actively recruit and offer financial aid to students with academic and artistic talents.
-26. Encourage advancement in the creative arts by sponsoring arts events, exhibitions and performances.
*27. Award degrees only to "students who pass a standard university test in writing skills.
16. Provide limited use of university resources such as secretarial help, computer time and copy services to faculty who serve as paid consultants to business and industry, government and community agencies.
*29. Do research in areas such as energy, agriculture, electronics, government, economics, health and education to expand existing knowledge and to help solve immediate problems.
17. Contract with private corporations to provide on-campus services currently run by universities such as bookstores, copying and food services.
18. Make special efforts to recruit and retain qualified women faculty.
19. Provide career and job placement services to current and former university students.
*33. Permit state employees and their dependents to attend Arizona universities at reduced tuition rates.
$\therefore$ 为
*34. Conduct research and provide technical assistance in areas such as juvenile delinquency, health care, child wel fare and unemploymentha
20. Sponsor recreational athletic programs for all students.
*36. Operate a teaching hospital to adyance knowledgeand to help ditan medical and other health science students. 7 ,
21. Require students who are not residents of Ar izona to pay the fulf costs of their education.
22. Sponsor research to attract and keep well qualified faculty and students.
23. Offer remedial instruction in reading, writing and mathematics to university students who need help with these skills.
*40. Provide conferences, short courses and workshops for doctors, lawyers, public administrators and șimilar groups to keep their skills up-to-date.
*41. Sponsor student government, student publications and other activities related to student development outside of class.
*42. Support the educational program with research laboratories like those used
等 in business and industry.
24. Offer selected courses by telecommunifation, radio or correspondence.
*44. Cooperate with state and local government, chambers of commerce and other non-profit groups in attracting business, industrial and residential development.
25. Provide tenure (reasonable assurance of continuing employment) to faculty who maintain professional standards approved by the Board of Regents.
*46: Support research with libraries like those at other universities having similar programs.
*47. Offer selected undergraduate degree programs in the humanitied, fine arts, social and behavioral sciences, physical sciences and mathematics.
26. Offer non-cred it courses and workshops for the general public in, areas such as health, recreation and hobbies.
27. Make special efforts to recruit and retain qualifjed minority faculty.
*50. Do, research in the humanities, social and behavioral sciences, physical sciences and mathematics to expand existing knowledge and to help solve immediate probjems.
28. Provide specturnassistance such as Braille texts, tutoring services, or sign language to physically handicapped students.
29. Provide students immediate medical care and continuing education on health-related problems..
30. Offer selected courses and degree programs at off-campus locations or branch campuses.
31. Include information about the achievements and needs of Arizona's ethnic and racial minorities as part of all undergraduate degree programs.
*55. Offer selected courses to groups of employees at their work place.
32. Make special efforts to recrūit and retain recognized scholars and researchers for university faculties.
33. Limit enroliment to students who graduated in the upper half of the ir high school class or who have above average scores on standardized aptitude tests.
34. Provide counseling and related services to help students avoid or cope with unwanted pregnancies.
35. Offer courses and workshops in areas such as study skills and academic survival skills.
36. Offer selected master's and doctoral degree programs in business, engineering, education, architecture, social work, public administration, agriculture and forestry.
37. Admit to regular university courses high school students who are recommended by their principals.
38. Develop programs in veterinary medicine, dentistry, optometry, and other professional areas not currently available at any Arizona university.
39. Offer selected master's and doctoral degree programs in the humanities, fine arts, social and behavioral sciences; physical sciences and mathematics.
40. Actively recruit and offer financial aid to students with athletic talents.
41. Provide academic advisement to assist students in achieving educational goals.
42. Provide special tutoring and advisement to ethnic and racial minority student's to help them get through their educational programs.

* = ftems modified or replaced on the student survey. See Table A. 3 for - the new wording.
respondents were presumed to have opinions about the importance of each activity, changes in format were made for cases where an activity was not performed at one or more of the universities or the respondent simply had no personal acquaintance with that activity.

The second change was to make the instrument institution-specific. That is, rather than asking what a-respondent thought about the total Arizona university system, the second instrument elicited a student's perceptions about the university he or she was currently attending.

Finally, a number of activity statements were deleted from the first questionnaire and replaced with items of specific concern to students. Suggestions for changes were submitted by the Arizond Students Association, but the research team made final changes in choice, format and wording of items. Student leaders validated this version of the survey instrument. Final ghanges were made as a result of this validation, and the survey, was administered to a convenience sample of students for a pilot test.

An effort was made to maintain comparability between the two Priorities for Arizona Universities surveys; 40 items remained common for the two instruments and 26 items were modified or replaced. While the changed items have been clearly indicated in the tables which follow, care should be taken not to compare responses for students with other groups on items for which the students answered a different question. The activity statements which were modified or replaced in the student version of the survey are listed in Table A.3. Two sample pages from the student survey dre reproduced in Table.A. 4 tơ indicate the changes in format and instructions.


Table A. 3
List of Activity Statements Modified or Replaced in Student Survey
2. Remove from teaching assignments faculty who consistently receive unsatisfactory student course ratings.
5. Employ trained students to assist in academic advising.
7. Offer selected un crgraduate degree programs in business, humanities, the arts, behavioral and social sciences, physical sciences, mathematics and professional fields.
8. Offer short courses and provide technical assistance to help students and the general public use the findings of university research in areas such as energy conservation and crop production.
12. Conduct research in areas such, as energy, agriculture, electronics, government economics, and education to contribute to the future growth and wealth of the state and nation.
14. Provide academic transcripts which include information about honors, awards, and activities when requested by students.
15. Include information about the use of computers in all undergraduate degree programs to develop computer literacy.
17. Provide opportunities for students to be involved in important university decisions including those related to the budget.
20. Provide current information to students about services offered by the university.
22. Provide advising and administrative services to help qualified students receive financial assistance.
27. Award degrees only to students who pass a standard test in writing skills to ensure that graduates can write clearly and effectively.
29. Change the academic transcripts issued by the Registrar's Office to include "+" or "-" letter grades.
33. Provide adequate space for students to study on campus.
34. Reward faculty for good teaching,
36. Offer small classes (25 or less).
40. Provide instructor evaluations to help students select wammes.
41. Sponsor an effective student government to serve al students.
42. Provide high quality modern laboratories to support students and faculty research.
44. Reward faculty for good research.
46. Provide library resources and services to support the educational program.
47. Provide programs to acquaint students with the campus and to assist them in making good adjustment.

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50. Sponsor student publications such as the campus newspaper and literary magazines to inform the campus community and to provide examples of student literary work.
55. Have regular members of the faculty closely supervise all classes taught by teaching assistants.


## B. SELECTION OF SAMPLES

## Respondents to the First Survey

All members of the Arizona Legislature and the Arizona Board of Regents were surveyed. All university administrators at the dean level and above at Arizona State University and Northern Arizona University were also surveyed. Because of a communication problem, deans at the University of Arizona did not receive the survey; all other administrators there were surveyed as for the other two universities.

Random samples of the Arizona Academy membership, of the three state universities' faculties and of Arizona registered voters were selected to represent the views of the groups of which they were a part. Twenty-five percent of the membership of the Arizona Academy; a total sample of 303 , were selected. From the full-time faculty of the three universities, 988 university faculty members were kandomly selected within colleges; the number of faculty sampled was proportional to the size of the college, with $25 \%$ of the faculty sampled in colleges of 100 or more, $50 \%$ of the faculty sampled in medium-sized colleges ( $50^{\prime}-99$ ) and all of the faculty included in small colleges (under 50). Statistical analysis of the raw and weighted data revealed on y small differences; unweighted data is reported here.

Registered voters were chosen to represent public attitudes because voters are the citizens who, having taken the trouble to register, are more likely to be active in the political process and, thus, to be an influential constituency of the university.

A commercial firm selected 2532 registered voters from the most current list available from county registrars in August. 982 . The list represented all those who had voted in the general election of November, 1980, or who had registered or re-registered after that election.

In a previous study using similar lists, a large number of surveys were returned as undeliverable by the Post Office. . To address this problem, researchers took several steps:

A: A week before the mailing of the actual survey instrument, a letter . describing the study was sent to each of the 2532 registered voters who had been selected. The letter was from the president of the Arizona Academy and urged the individual's participation in the survey.. Address correction and return of undeliverable letters was requested from the Post Office.
B. Those people for whom address corrections were received were kept in the sample, provided that the new address was still in Arizona.
C. Letters returned as undeliverable were considered non-sample. There were 474 in this category, or $18.7 \%$ of the original sample. Since the Post Office forwards mail for some time, these returns represented people who moved a considerable time earlier and who had not updated their voter registration.
D. A week after the introductory letter was sent, the survey instrument was sent to the 2058 voters for whom good mailing addresses had been obtained.

## Respondents to the Student Survey

Because of the difficulty of getting students to respond to a il survey, and because the addresses that the universities had for students were known to contain many inaccuracies, students were surveyed in their colasses. Approximately 50 classes were randomly sampled on each campus: Slightly different methods were used to draw the sample in each case, because of the unique characteristics of the institutions' data base systems.

At the University of Arizona, a systematic random sample was drawn by hand at a sampling interval of 124 from the courses listed in the Spring, 1983 Schedule of Classes. Before sampling, 1,198 courses des igned for independent sțudy were deleted from the 7,422 course sections. There were 1820 students enrolled in the 50 elass sections selected.

At Arizona State University, a stratified random sample of 52 course sect ions was drawn from the master course list. Courses were stratified by
school or college and by course level, i.e., lower division, upper division, graduate. The course sections were then randomly selected for each of the 26 cells produced by the stratification." In \& \& \& course pions, 1874 were enrolled.


At Northern Arizona University, a stratified random sampler of 50 classes, with 1476 students enrolled, was drawn from cells stratified along the same lines as the ASU sample.

The student data were appropriately weighted for analysis.
C. ADMINISTRATION OF SURVEYS

Administration of the First Survey


In the last week of August and the first week of September, 1982, the survey questionnaire, Priorities for Arizona Universities, was sent to 3808 subjects.

A letter and a postage-paid business reply envelope were included with each survey. The letter, which explained the project and encouraged the recipient to respond promptly, was from a recognized leader who had been identified for each"respondent group:
a. Members of the Arizona Academy received a letter from the President of
the Academy.
b. Voters received a letter from the President of the Arizona Academy referring to the earlier letter and urging them to respond.
c. The faculty and adminstrators at the three universities received a letter from the president of their particular university.
d. Members of the Board of Regents received a letter from the Executive Director of the Board of Regents.
e. Legislators received a letter from President of the Board of Regents.

Follow-up procedures designed to increase the response rate included the following:
a. A postcard was sent to each persongonthe six samples who had not Fereturned the initial survey instrument within two weds.
b: Second copies of the survey fere sent to allon-respondents a week after the card was sent.
c. A thirds copy of the survey was sent to legislators who had not returned the completed survey.

## Administration of the Student Survey

- The second survey was administered during the ${ }^{2} \operatorname{pring}^{2} 1983$, semester to students in their classes at the thee Arizona, ungersofles A letter from the Academic Vice President at each un varsity $k$ as seftetofthe tacaltymembers who taught the classes selected for the sample, making for, pedefosion to administer the surveys, After permission was given, student deadersor, ayresearcher went to the class and read a prepared statefinnt of instructions before administer ing the survey Permission was notgranted for 5 classes at the University of Arizona, th is accounts in partafor the lower respposerate at that university. Response Rate for First Survey

An overall response ratepof $83 \%$ was achieved by the first survey when all groups but the voters are considered, and the response rate was $64 \%$ when voters were included. A detailed breakdown of the response rate for each constituent group is provided in Table A.5.
R

The high response rate for most groups surveyed as well as the sampling procedures ensured that responses of most groups were representative of the total group from which they were selected.

Just under $50 \%$ of the registered voters in the sample returned the survey. Voters received three mailings in addition to the fnitial fintroductory letter; budget constraints prevented a fourth follow-up mailing. Nevertheless, the response rate of 48\% for registered voters is the lowest achieved in this survey. The registered voters who responded to the survey were older and better - educated than the general Arizona population; minority groups were also underrepresented. Comparison of characteristics of the survey's voter respondents with the demographic description of all Arizonans is provided in Table A.6.

## Response Rate for the Student Survey

At ASU, 1428 students out of sthe 18 students enrol fed in 52 classes completed súveys for a response rate of $76 \%$, The majority of those not responding were students who were officially on the enroliment rolls but were absent from the classroom at the time the survey was administered. $A$ small number of studentsfyfused to participate in the suryey here as, well as at the other two institutions

At the University of Arizona, 45 classses were surveyed. of the 1820 students enroiled in the classes, 1001 responded, for a response rate of $55 \%$.

Table A. 5


R Response Rates of Respondent Groups for Priforities for Arizona Universities Surveys
A. First Survey

The high response rate for moser wopts surveyed as well as the sampling We procedures ensured that responses of most groups were representative of the detotal group from which they were "selected".

Just under $50 \%$ of the registered voters in the sample returned the survey. Voters received three mailings in addition to the initial introductory letter; budge"t constraints prevented a fourth follow-up matling. Nevertheless, the response rate of $48 \%$ for registered voters is the lowest achieved in this survey'. The registered voters who responded to the survey were older and better educated than the general Arizona population; minority groups were also underrepresented. Comparison of characteristics tof the survey soter respondents with the demographic description of all Artzonans is provided in Table A. 6.

## Response Rate for the Student Survey

At ASU, 428 students out of the 1874 students enrolad in 52 classes completed surveys fora response rate 9 f $76 \%$. The majority of those not responding were students whowe officialiy on the enroliment rolls but were. absent from the classroom at the time the suryew was administered. A smalay and number of students refused to participate in the survey, here as wellys at the other two institutions.

At the University of Arizona, 45 classes were surveyed. of the 1820 students enrolled in the classes, 1001 responded, for a response rate of $55 \%$.

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Át Northern.Arizona University, a sample of 50 classés was drawn; however, due to personnel problems, only' 41 of the classes were actually sampled. Those not sampled appeared to be randomly distributed. There were 1,46 students enrolled in the 50 classes, and responses were obtained from 880, a response rate of $60 \%$.

The response rate for the student survey is included in Part 2 of Table A. 6.

## E. ANALYSIS PROCEDURES

This section provides further details of the different analyses that have been reported in the body of this refort, including:

1. Identification of university missions' by factor analysis of important to do questions
2. Identification of prioritiestad dstat hes, group
3. Identification of discrepan deve well, by group.

Factor:Analystis ig
One of the goan of the regánch was to formulate missions for Arizona's universities, and to this ên it was necessary to veduç the large number of activity statements included en the questionnaire to some smaller number. Common factor analysis was ofocin to accomplish this as this technique produces-factoss, or sets, of 符tivity statements, for which the respondents answers follow a simaar pattern. The activities which gnouped in each factor were then examined for their common dimenstion and the factor, or mission, was given a descript pue name.

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# Comparison of Demógranic Profile of Voter Respondents with Profile of Arizona Residents 

Characteristics

Arizona Voters Responding to Survey**

Arizona
Residents:*

Sex

Male
Female
Age
15-24
25-34
35-44
45-54
55-64 $65 \&^{\prime \prime}$ over

$\therefore$| White |
| :--- |
| Black |
| Indian |
| Oriental |
| Other |
| Spanish Heritage |

Education

$\therefore \quad$|  |  |
| ---: | :--- |
| $\therefore \quad$ | $\quad$ Respondents Residents |

41.828
55.76
55.76 .
7.588
19.39
17.98
16.36
17.37
17.68

Pima county
$49.28^{\circ}$
50.8
$i$
24.6\%
21.4
14.2
$-12.0$
12.4
14.9


0
$86.46 \%$
82.48
5.6
2.8
0.8
8.4
16.2


1.82
1.11
. 51
2.63 $\infty^{5}$ , ${ }^{2}$


Residents Male Female

Less than high school 6 High school graduate Some college College degree Graduate studies
$6 \%$ 17
17
38 14 20

Maximum likelinood factor analysis wals used for the initial factor extraction, followed by orthogonal rotation (ixon, 1981). Eorftits analys is only, all groups were considered together and had equar ingiting. The input to the factor analys is program was a covariance matrix of the responses to the 66. important to do questions, which was constructed uspridpairwise deletions where there was missing data.

The program was constrained to produce 7- thru 14-factor solutions, Which were then examined using as criteria the degree of internal consistency within a factor and the absence of any single-item factors. The 10-factor folution was chosen as the solution which best fit the data and provided the most useful description of uniersity activities.

Items were included in a factor if they loaded at the 0.30 level or higher. Items which loaded on more than one factor were included on the factor for which they had the highestloading. The 0.30 level was chosen because it included the most items that seemed to fit the definition of the factor, without introducing undue distortion (Comrey, 1973). This procescallowéd 55 If the 66 items to load on one of the 10 factors:

Table A. 7 contains a list of the ten factors and the items which loaded on Sachsoshowing the factor loading by item and the Chronbach's coefficient alpha for the factor. Coefficient alpha is a measure of whether or not items are measuring "the same thing," (Hull and Nie, 1981). "That is, a high coefficient alpha indicates strong internal consistency among the items on a mission (Peterson Whl, 1975).
$\therefore$ Table A. 7 shows that one mission consists of 10 items, four of 7 or 8 items, thrée of 3 to 5 items and two of 2 items. While it is generally


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- Factor Loadirgg and Reliability Coefficients for Inportance Responses of all Respondents to the first Priorities for Arizona Universities Survey.

recognized that three is the smallest number of tems that should be used to desicribe a factor analysis of the scales with only two items，Athletics and Medtcal Care，shows that the items loading in each are the only items among the 66 In the survey that reference these areas．Future adintolstrations $\phi$ thetsotat type of survey might include more tems covering the sefareas so that the factor meaning could be better determined．

The coeffictent alphas range from 0.87 to 0.43 ，with two misstons hay ing coefficients of less than $0: 66$ ．These figures indicate a high to moderate degree of reliability among the items on each scale，suggesting reasonable confidence that the means reported for missions do represente a true easponse to the concepts embodied in the items represented in that mission．

Means，Deviations and Ranks
In order to compute the priorities for items and missions，the mean scores管政 for the important to do questions for both activities and missions were． calculated．The importance means，＂as well as those forsthe being done well question，for all 66 items in the survey are presented in Table A．8．The means $\cdots$ For the missions are reported in Table $A$ included in these tables are the standard deviations and the ranks for the mportant to do question．In both cases the data are given for each of the seven groups surveyed，and also． for the averages of the internal and external groups．These group averages are unweighted．

The ranks given for the important to do means are computed so that the higtiest nean has rank 1．In the smaller groups，particularly the Regents， there are severaキi tied means．In these cases，the median rank for the tied ＂items is used，unless there are only two or anfeven momereof tied items，and

Table 1.8
Importance, Level of Performance and Rankings for 66 Activities by Respondent Group

*


then the higher rank is used. While some means may appear to be tied in the table, the ranks reported were computed on the means to 4 significant digits, whereas the means reported in the table have been rounded off.

## Discrepancy Percentages

The discrepancy between important to to and being done well serves as a measure of how satisfied the groups are with the priority and level of accomplishment for each activity. The text discusses items for which there is great discrepancy between the perceptions of importance and accomplishment, and this section explains how the discrepancies were computed.

For each individual respondent, on each item, there were three possible combinations of responses to the two questions, important to do and being done well:

- . 1o. The important to do rating was higher than the being done well

2.     - The important to do rating was the same as the being done well rating
3. The important to do rating was lower than the being done well rating.

Table A. 10 presents the percentage of respondents in each group whose responses placed them into the categories above. The three columns under each - group heading are in the same order as the listing above... It is readily seen that the three categories above can be divided into two outcomes for our purposes. In numbers 1 and 3 , above, the individual perceives a discrepancy between the priorjty and the accomplishment of an activity; where in number 2 , the respondent's perceptions of the two measures are the same. The selection of the 20 most yiscrepant items for discussion in chapter 4 was made simply by taking the 20 items with the lowest percentage of no discrepancy. For this purpose, it was not important how the discrepancies were distributed, only that

## Table A. 10 <br> Discrepancies Between, Importance and Performance by Respondent Group



相 $m=$ Item modified in the student survey.
$I=D=$ Percent perceiving Important equal to Done Well.
$I>D=$ Rercent perceiving Important greater then Done Well.
Y $<D$ Pe Percent perceiving Important less than Done Well.
$I=D$ RANK = Rank of percents in $I=D$ column. Rapik 1 is largest percent:
these were the 20 ttems for which the respondents felt' the mos't need for change efther in priority or accomplishment.

The ranks beside each item are for the no discrepancy column. Rank 1 is assigned to the them with the ehighest proportion of respondents in this. category and rank 66 to that item with the lowest proportion of respondents perceiving no discrepancy. This latter ttem is the most discrepant for this group.


## A Statewide Opinion Survey



DEPARTMENT OF FIGHER.AND ADULTTEDUCATION. ARIZONA STATE UNIVERSITY


## Introduction

This study ls being done to find out how' Arizonans fool about tho priorities of our three state universities. The statements in this booklet represent a wide range bf possible activities universities can do; not all of these activities are currently being done at Arizona's unlversitlos, Please answer allot the questions as well as you can. If you. wish to , comment on any questions or to explain an answer, please feel free to use the space at the back of this booklet.

## DIRECTIONS

Please answer each of the statements in this booklet as shown in the following examples.

Each statement asks you to answer two questions:

1. Is this Important to do? Here you show how much you agree that the activity is Important for our

## Example 1



This first example shows that the person answering strongly agrees that, for our universities, publishing


| Cross through one'number after importani to do and one after being done well. <br> Univgrsitios should... |  |
| :---: | :---: |
| 1. Sponsor films, speakers, oxhlbitions and " musical ànd dramatic productions for studenta and the community. |  |
| 2. Provide health care to the general public on a fee-for-service basis to train medical and other. health science students. |  |
| 3. Provide incentives and tralning to ássis! students in developing and practicing leadership skills. |  |
| 4. Cơnduct research under contracts funded by business, industry, foundations and government agencies to assist the training of graduate students and to keep faculty up-to-date. |  |
| 5. Offer selected degree programs in fields surch as medicine and law. |  |
| 6. Operate non-profit public kelevision and radio stations as a community and educational service. |  |



| Cross through one number aftor important to do and one atter bging done well. <br> Univorsitios should... | Agres <br> Houtral <br> Dlagaree <br> 8frongly Dleapgae |
| :---: | :---: |
| 13. Accopt intornational studonta who moot university admission standards. |  |
| 14. Provide technical assistance to the genoral public in areas such as eqgiculture, forestry, resource and energy conservation and community deveiopment to assist citizons in applying research findings to everyday life. |  |
| 15. Include information about the use of computers in all undergraduate degree programs. |  |
| 16. Let non-profit organizations use unlversity facilities such as football stadiums, activity centers and exhibition space if they. pay all costs. |  |
| 17. Provide selected programs and services at reduced tuition rates-for senior citizens. |  |
| 18. Conduct research and provide technical assistance to meet the special needs of Arizona's ethnic and racial minorities. |  |



Cross through one number atter Important to do and ono attar being döne well.

Univeraitloa ahould...



| Cross through one number after important to do and one after being done well. Universities should |  |
| :---: | :---: |
| 37. Require students who are not residents of Arizona to pay the fulf costs of their education. | Important To Do |
|  | Being Done Well. |
| 38. Sponsor research to attráct and keep well qualified faculty and students. |  |
|  |  |
| 39. Offer remedial instruction in reading, writing and mathematics to university students who need help with these skills. |  |
|  |  |
| 40. Provide conferences, short courses and workshops for doctors, lawyers, public administrators and similar groups to keep their skills up-to-date. | Important To Do <br> (2) <br> (6) |
|  | Being Done Well <br> (1) (2) <br> (3) (4) <br> 5 |
| 41. Sponsor student government, student publications and dther activities related to student development outside of class. |  |
|  |  |
| foort the educational program with reseaten laboratories like those used in business and industry. | Important To Do |
|  | Being Done Well |


|  |  |  |
| :---: | :---: | :---: |
| 43. Offer selected courses by telecommunication, radio or correspondence. |  | Important To Do |
|  |  | Being Done Well (1) (2) 3 (4) W6) \% |
| 44. Cooperate with state and local government, chambers of commerce and other non-profit groups in attracting business, industrial and residential development. |  |  |
|  |  | Being Done Well |
| 45. Provide tenure (reasonable assurance of continuing employment) to faculty who maintain professional standards approved by the Board of Regents. |  |  |
|  |  | Being Done Well |
| 46. Support research with libraries like those at other universities having similar programs. |  | rtant To Do |
|  |  | Being Done Well <br> (3) <br> (4) <br> (5) <br> y |
| 47. Offer selected undergraduate degree programs.in the humanities, fine arts, social and behavioral sciences, physical sciences and mathematics. |  | Important To Do <br> (2) <br> (3) <br> (4) <br> 6 |
|  |  | Being Done Well |
| 48. Offer non-credit courses and workshops for the general public in areas such as health, recreation and hobbies. |  | Important To Do |
|  |  | Being Done Well <br> (5) |
| $110$ |  |  |





Now, we have some questions to get information about your background. We know that people of different backgrounds differ in their opinions." Young people are different than old, men and women answer differently and people with different amounts of education also have different opinions. You can help us understand these differences by answering the fol owing questions about yourself. Thank You.

Please cross through the number which is beside your answer to each question.
67. What is your sex?
(1) Female
(2) Mate
68. What is your age?
$\qquad$
69. What is your marital status?
(1) Single, never married
(2) Married
(3) Separated
(4) Divorced
(5) Widowed

Us
70. What is the highest level of formal schooling you have completed?

- (Cross waugh one only.)
(1) Grade school (1st thru oft grades)
(2) Some high school
(3) High school graduate
(4) Some college
(5.) Community college degree (associate)
(6) 4-year college or university-degree (bachelor's)
(7) Post-graduate course work
(8) Graduate degree (master's, doctor's)
(9). Other (What?) $\qquad$

14. 114

11．If you checked that you have a university legree，which university is it from？
－（1）No，do not have a üniversity degree．
Yes，my degree is from：
＊（2）Arizona State University
（3）Northern Arizona University
（4）University of Arizona．
（5）Other（Which？） $\qquad$
12．Has one of yourciose relatives（e．g．，pfother， ster，parents，children，spouse）other than ourself＇everiottended＇an Arizona university？
（1 ）Yes

## （2）No

13．Do you have any children？
（1）Yes．Mow many？
（2）No
4．If you do have children，how od are they now？ ＇Cross through each number that applies．） （1）Do not have any children
（2）Newborn to less than 14 years
（3） 14 the ty 18 years
（4）Overate thru 22 years
（5）Over 22 冏筑s
75．Politically，how do you think of yourself？
（10）Conservative：
（2）Somewhat conservative
（3）Middle－of－the－road
（4）Somewhat liberal
（5）Liberal

6．What is your racial or ethnic background？
（1）Black
（2）Hispanic
（3）American Indian
（4）Aslan／Oriental
（5）White，not Hispanic
（6）other（what？）
77．What was the total income from－all sources， before taxes，in 1981 ．for all persons living in your hqưse？
$\qquad$

1）bess than $\$ 10,000$
（2）$\$$ toiooo to to ss than $\$ 20,000$
（3）$\$ 20,000$ to less than $\$ 30,000^{2}$
（4）$\$ 30,000$ to less than $\$ 40,000$
（5）$\$ 40000$ to less than $\$ 50,000$
（6）$\$ 50,000$ to less than $\$ 60,000$
（7．）Over $\$ 60,000$


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