

THE UNIVERSITY OF ARIZONA
PROCEEDINGS OF THE FACULTY SENATE
Meeting of Monday December 5, 1966

PRESENT: Allen, Ares, Bartlett, Blitzer, Brewer, Carlson, Chadwick, Cole, Coleman, Coulter, Delaplane, DuVal, Gegenheimer, Gries, Hall, Harshbarger, Hull, Johnson, Joyner, Kruttsch, Little, Lynn, Marcoux, Martin, Massengale, McMillan, Mees, Myers, Patrick, Paulsen, Picard, Quinn, Roy, Sigworth, Silberman, Sorensen, Steelink, Svob, Thompson, Yoshino.

ABSENT: Bretall, Clark, Cockrum, Damon, Dees, Forrester, Gaines, Harris, Harvill, Livermore, McCaughey, McDonald, Rhodes, Robinson, Voris, Windsor.

NEW MEMBER OF SENATE, WELCOME TO: Vice President McMillan welcomed to the Senate Dr. Bernard Silberman, Associate Professor of Oriental Studies, who had been elected at the November meeting of the Senate as a Senator-at-large to fill the vacancy created when Dr. Seeley was unable because of other commitments to accept his election to Senate membership.

CATALOGUE MATERIAL: The following catalogue material was accepted: Special Education 211, Orientation-Mobility for the Blind (3) Fee \$2. and Entomology 220s, Field Entomology (Summer Camp) (2) Fee \$25.

JURIS DOCTOR DEGREE (J.D.), APPROVAL OF: On motion by Dean Ares, seconded by Dr. Patrick, the Senate approved a recommendation from the faculty of the College of Law and the Advisory Council that beginning in January 1967 the degree to be conferred upon students graduating from the College of Law shall be Juris Doctor, rather than Bachelor of Laws, for those persons who hold a bachelor's degree at the time of completing requirements for graduation from the College of Law. Students who do not hold a bachelor's degree will continue to receive the Bachelor of Laws degree.

Since beginning in September 1967 no one will be admitted to the College of Law who does not hold a bachelor's degree, the Juris Doctor degree will be the only degree conferred by the College of Law beginning in 1970.

Dr. Blitzer spoke against the motion, pointing out that he felt it was inappropriate to award any degree carrying the title "doctor" that involves only three years of post-baccalaureate study. It was explained in reply that a number of the country's leading law schools are now awarding the J.D. as the regular earned law degree. This practice is recommended by the American Bar Association.

LONG-RANGE PLANNING (1966-1975) OF THE ARIZONA BOARD OF REGENTS AND THE RECOMMENDATIONS OF THE REGENTS AND THE ARIZONA ACADEMY RESULTING FROM THIS STUDY, REPORT ON: Vice President McMillan introduced Arthur T. Grant, Educational Research Analyst of the University, who presented a report on the Long-range Planning (1966-1975) of the Arizona Board of Regents and the Recommendations of the Regents and the Arizona Academy resulting from this study.

Mr. Grant explained that the material he would present had come primarily from a Long-Range Report on Higher Education in Arizona that was submitted last April to the Long-Range Planning Committee of the Arizona Board of Regents. This study was assembled and written at the University of Arizona from statistics submitted by all institutions of higher education in the state, both public and private, with much more elaborate and detailed statistical analyses coming from the three universities. The report concentrated primarily upon resources for higher education, such as students, faculty, facilities, and finances, in terms of the past, the present, and the future. The future for the purposes of this report extended to 1975.

The report was studied by the Long-Range Committee and was considered in late July at a meeting at Casa Grande of the full Board of Regents with representatives present from all three universities. This meeting resulted in a set of recommendations which were distributed to all faculty members of the three institutions in September; additional distributions were made to prominent political, business and professional leaders throughout the state.

Statistics from the Long-Range Report formed the base for another study, prepared again at this institution. This was the Arizona Academy Report for the Ninth Town Hall Meeting held in early October, also at Casa Grande. At this Town Hall session, four panels of about twenty-five participants each met for three days to discuss problems posed by Academy members after reading the Academy study. The final session involved preparing a set of recommendations representative of all four panels.

Mr. Grant said he would like to review the basic material of the Long-Range Report, including also some of the materials from the Arizona Academy study. He would then give the high points of the Regents' recommendations and those of the Arizona Academy. He said he would begin with a summary of the Long-Range Report and then present the two sets of recommendations.

Mr. Grant said that we anticipate the future primarily in terms of the past. It is therefore to the last twenty years we should turn to establish some trends in population growth for the future.

Between the 1940 and 1950 censuses Arizona's population increased by 50 percent. Between 1950 and 1960 it increased 74 percent. This rapid growth was exceeded in 1960 by only three states: Florida, Nevada, and Alaska. Over the same period of time the average rate of growth for the nation was 18.5 percent. Recent estimates by the Bureau of Census place Arizona second only to Nevada in rate of growth by 1965.

Two major factors have driven population growth upward in Arizona: a high rate of natural increase (an excess of births over deaths) and heavy in-migration. Comparing natural rates of increase for the United States and Arizona over the last twenty-five years Arizona has been consistently above the national rate of increase for each 1000 of population. Some tapering off from the high reached in 1950 is evident in 1960 and 1963. Both national and local rates of natural increase will probably drop even more as modern birth control measures become generally available. This, however, will not affect the growth of enrollments in higher education until the 1980's. The undergraduate students of 1975 are

already born. They are presently from 9 to 12 years of age and are typically in the fourth through the seventh grades.

The second and more important factor affecting Arizona's population increase is heavy in-migration. In 1960, 31 percent of Arizona's population 5 years or older had lived in another state in 1955. This compares with a national average for all states of 11 percent, 18 percent for the West, and 21 percent for the Mountain States.

These two things, a high rate of natural increase and an even higher rate of in-migration, will produce a population in Arizona estimated at two and three-quarter millions by 1975.

Contrary to popular belief the population of Arizona is and has been a relatively young one. According to the 1960 census, 70 percent of Arizona residents were under 40 and in-migrants tended to be slightly younger than the resident group, suggesting that by 1975 Arizona's population may have a greater proportion under 40 than it does now.

Because of this relatively young population and because Arizonans have unusually strong aspirations for a college education, enrollments in the state's colleges and universities have been high. There are several ways to see this unusual interest in higher education that Arizonans have. The percentage of the population nationally in 1960 with one or more years of college was 16.5. In Arizona it was 20.5, slightly less than the percentage for the West and the Mountain States. As for the percentage of the population with four or more years of college, Arizona leads the United States average, the West and the Mountain States with 9.5 percent. The West and the Mountain States had 9 percent, and the nation as a whole 7.5 percent.

There is yet another way to see the strong demand for higher education in Arizona and that is to view college enrollments as a percentage of the 18-21 year old population for both Arizona and the United States. In each of the years under consideration Arizona has been substantially above the national average. Between 1960 and 1965 when four new junior colleges opened in the state, the percentage for Arizona increased noticeably.

As another evidence of the growing enrollments in the state's institutions, Mr. Grant pointed out that the percentage of the college-age group has grown from 18 percent in 1940 to 69 percent in 1965, an increase of slightly more than two percentage points a year over the 25-year period. During the same period the size of the college-age group almost tripled. Thus enrollments have grown from about 7000 in 1940 to 65,000 in 1965, increasing therefore almost 10-fold since 1940.

This is the pattern of the enrollment growth in all institutions of higher education in Arizona for the last ten years. By September of 1965, 69 percent of Arizona's students in higher education were enrolled in the three universities, 30 percent in the six junior colleges, and one percent in the two private colleges.

A very strong growth trend is apparent for the future with enrollments tripling over a ten-year period. This prediction is based on an average increase of slightly less than two percentage points per year in the proportion of the 18-21 year olds attending college over the next decade. Actually, over the last twenty-five years there has been more than two percentage points yearly gain in the percentage enrollments of the 18-21 year old group. The increase in the last five years has been even greater. It has averaged about five percentage points gain each year between 1960 and 1965. These increases of the last five years are, however, primarily due to the opening of four new junior colleges in the state and do not represent a long-range trend.

The twelve existing institutions of higher education in Arizona (including Prescott College which opened September 1966) indicate they can accommodate about 126,000 students by 1975 with rapid growth of the facilities on the campuses. This suggests that the state should prepare in some way to accommodate an additional 27,000 students by 1975. This can be done in several different ways. Present campuses at both junior colleges and universities can be expanded to handle greater enrollments than those anticipated over the next nine years; new junior colleges can be created to provide additional space, and branch campuses can be opened in strategic population centers.

The growth of existing junior colleges and the creation of new ones will bring some changes to the universities and to enrollment characteristics generally within the state. New community junior colleges are generally within easy commuting distance. Their admission policies are broad. Therefore, more students in a given community are likely to continue their education beyond high school if a junior college is available. In addition, the special attraction of vocational and technical programs offered at junior colleges encourages other high school graduates to prepare themselves further. The net effect of junior colleges will be to increase total educational opportunities for the youth of the state. This in turn will produce larger enrollments in higher education.

Two other effects of the junior colleges will be to decrease the proportion of lower division students at the universities somewhat and increase the proportion of upper division and graduate students. This has been the experience as Arizona Western, Cochise, Glendale, and Mesa colleges have opened. We should expect then that as the junior college system develops further there will be a tendency toward a concentration of larger percentages of lower division students at the junior colleges with smaller percentages at the universities.

One other effect is just becoming apparent. As junior college enrollments increase, more and more transfers will move to the university to complete baccalaureate degree requirements. Enrollments at the universities in 1966 show an even greater increase in the rate of growth of third year students.

We can assume therefore that lower division enrollments at the universities in the future will become a smaller percentage of total enrollments and upper division a larger percentage. This in turn will affect the amounts of space needed for instruction and the number, composition, and qualifications of the faculties in the universities. In September of 1965, lower division students represented 46 percent of the combined student bodies. The universities estimate they will represent about 37 percent by 1975. Graduate enrollments

will increase noticeably at all three institutions in the next decade. In September of 1965 they represented 19 percent of the combined student enrollments of the three universities; by 1975 it is anticipated they will rise to 27 percent.

The institutions indicate that they believe out-of-state enrollments will diminish as a percentage of the total enrollment. This would not be because of diminishing demand but probably through limitations imposed by the institutions themselves. In connection with this it should be pointed out that fees now charged out-of-state students are substantially above the cost of educating them. Mr. Grant explained that the out-of-state student is presently paying about \$150 above costs at both the University of Arizona and Arizona State University and is therefore helping to pay educational costs for Arizona students over and above defraying his own costs. It should be remembered that only 68 percent of the costs for educating students is borne by the state; the remainder comes from sources other than appropriations such as federal support and student fees. Considered in this way the out-of-state student pays about \$430 a year above the direct amount it costs the state to educate him.

In order to handle the enrollments anticipated at the universities by 1975, it will be necessary to increase present capacities of the physical plants considerably. Existing space at the three universities is so limited that future increases in enrollments depend completely upon rapid continued expansion of physical facilities. When one compares square feet per full-time student at certain selected institutions with present amounts at the three Arizona universities, he finds that the three Arizona institutions now have from one-half to one-third of the space recommended for student bodies of the sizes they are presently supporting. The amount of floor space for each full-time student at the universities is now as little as one-third of the amount available at a number of public universities in the West and Midwest.

There are other indicators that the facilities of the universities are presently less than those required to support their enrollments. The average amount of floor space in classrooms at 68 public universities is 17.2 square feet for each full-time student. The Arizona universities have from one-half to one-third of this amount. Similarly in laboratories they have from one-half to one-third of the 21 square feet for each full-time student at 65 public institutions.

Over the span of the coming decade it will be necessary to increase the floor space available at the universities to bring it closer to the amount needed for good teaching conditions and to provide for the coming increases in enrollments.

Studies of classroom and laboratory utilization done for the Board of Regents indicate that facilities are presently being exceptionally well used and in some instances are presently being taxed beyond the limits of good practice. Mr. Grant referred to classroom and laboratory utilization at the three Arizona universities and compared it with 90 public degree-granting institutions and 36 large colleges and universities. He noted that in each case Arizona institutions are well above the national average. In another study, when the laboratory utilization rates at our three universities are compared with national norms for 205 public institutions and 33 large colleges and universities, it is apparent that utilization of laboratory space at this university is above the national average.

After reviewing the critical needs for space at the institutions the Board of Regents requested a ten-year building plan from each institution that would accommodate enrollment increases over the next decade by expanding campus facilities. This study revealed that an average of about \$21-million a year will be required from state appropriations to provide facilities needed by the three universities over the next decade to allow them to accommodate the enrollments anticipated.

Another study revealed that by 1975 total operational needs at the three universities will reach \$135-million. Of this, approximately \$92-million is anticipated to be in the form of state appropriated funds, the balance coming from student fees and other sources.

Combined operational and capital outlay needs for all three universities by 1975, it is estimated, will be \$160-million, with \$112-million deriving from state appropriations.

Assuming ten junior colleges by 1975, the estimated total cost for higher education to the state will be approximately \$140-million by 1975. In 1965 the total amount expended by the state for higher education including junior colleges represented about one-third of the state's general revenue fund. If this general revenue fund increases at the same rate it has increased for the last twenty years it should reach \$548-million by 1975. In view of the unusual number of young people of college age and the greater demand for post high school education, expenditures for higher education by 1975 should increase at least in the same proportion as the state's general revenue.

Mr. Grant reported that after reviewing the final report in its complete form, the Regents formulated an overall prospectus of growth for the universities for the next decade, a prospectus that includes not merely physical growth but growth in excellence as well. These recommendations have been published in a bulletin entitled Higher Education in Arizona: The Next Decade. In it the Regents call for the enlargement of present campuses, the establishment of branch campuses, an expansion of the junior college system, and further development of private institutions. The Regents further indicate that admission standards in state institutions should be set so that all able and willing Arizona students can continue their education beyond high school at some institution of higher learning in the state.

The Regents encourage the development of extension programs throughout the state to bring adult education to a greater portion of the state's citizens. Development of expanded graduate programs is encouraged. The Regents feel strongly that higher education should be provided at a minimum cost to the student and they urge that higher education be adequately supported so that the youth of Arizona can reach their fullest potentials. They ask for support from the legislature to improve faculty benefits so that the universities can continue to attract and hold outstanding faculty members.

Particularly gratifying was the strong support the colleges and universities received from the public at the Ninth Arizona Town Hall meeting, Mr. Grant said. There panels made up of ninety community, business, professional and political leaders urged that the fullest support be given to increase the

capacities and the capabilities of the state's institutions to accommodate the 153,000 students who will be seeking a college degree by 1975.

Among conclusions reached by the Town Hall were the following:

There was a feeling closely approaching unanimity that Arizona's institutions of higher education should insist upon a basic foundation in the liberal arts, with particular emphasis upon communicative abilities, even while meeting reasonable demands for specialized and vocational training.

Research as a responsibility of higher education won general approval. Research should be encouraged insofar as it furthers the basic, broad purpose of higher education, and that the Board of Regents and faculties of the various institutions should strive for an academic balance so that the research function may supplement and improve the direct teaching function in addition to increasing the store of human knowledge.

The Town Hall was loath to attempt to recommend restrictions on the role in education of any of the state's institutions--universities, junior colleges or private colleges.

The Town Hall felt that the freedoms and responsibilities of academic citizenship of students, including the responsibility to obey the laws of the land and the rules of the institutions they attend, do not differ from those of other citizens.

The Town Hall felt emphatically that a public responsibility exists to make education beyond high school available on the broadest possible basis to all motivated applicants.

Present admission requirements at institutions of higher learning, co-related with entrance examinations where required, were felt to be adequate under existing conditions. While such requirements should not now be raised, however, it was anticipated that the creation of additional educational facilities, including greater realization of the junior college potential, may make it advisable to give further consideration to raising university admission standards in the future.

Curricula should be determined by the needs of society as demonstrated by the many influences exerted on the educational institutions. These derive from such sources as the accrediting agencies, the professions, the world situation and other social and economic requirements. The determination of curricula based upon them should be recommended by faculty and administration to the appropriate governing board.

Out-of-state students comprise an asset to higher education in Arizona, and to the state's economy as well. Great importance was placed on the advantages to Arizona students of establishing contact with other students from all over the nation and the world, as well as on the fact that many of the state's future leaders may be young people who came to Arizona as students and who will remain to make their homes in the state after completing their college studies.

The creation of branch campuses and the establishment of off-campus centers for graduate and specialized studies, but without weakening related disciplines in the parent institutions, were recommended. Also recommended for the universities was special attention to the cluster concept of college grouping, as recommended by Arizona's Board of Regents and envisioned by Northern Arizona University personnel.

The Town Hall went on record as being unalterably opposed to any effort to create a single board or authority to supervise all public institutions of higher education in the state.

The Town Hall discussions revealed deep concern for the competitive position of Arizona institutions of higher learning in attracting and holding the services of highly qualified professional personnel. To assist the institutions in obtaining and retaining top-flight faculty members, Town Hall recognized that the state must:

1. Increase, within the state's ability to pay, faculty salaries and vigorously pursue initiation of an attractive retirement system and other fringe benefits.
2. Take whatever legislative action may be necessary to bring about favorable conditions in this regard.
3. Continue the development of an inviting academic atmosphere in which faculty members may live and enhance their capabilities and talents.

Strong sentiment opposed further increases in student fees to finance operating costs of the universities. While all delegates agreed that an increase in tax revenues will be necessary to meet growing operating costs of higher education, there was considerable divergence of opinion among panelists as to the specific source of such increases. At least half of the delegates favored no increases in the ad valorem taxes. Opinion was sharply divided as to whether necessary additional revenue should come from increases in income taxes, sales taxes or luxury taxes, with some delegates feeling that increases in all three might be necessary.

The Town Hall recommended that, to the fullest extent possible, the state should finance capital fund requirements for construction of physical facilities from general appropriations. Should such funds prove inadequate, Town Hall believed that general obligation bonds of the state, keyed to specific programs, and not revenue bonds, should be issued.

GROWTH OF CAMPUS AND BUILDINGS, REPORT ON: Mr. Robert L. Houston, Director of the Physical Plant, was introduced and he reported briefly on how the long-range plans for the University of Arizona might be brought into reality so far as physical facilities on the campus are concerned.

Director Houston explained that the present 160 acres of land will have to be expanded by an additional 100 acres. This additional 100 acres will take care of more than twice as much square footage of building space, however, because

building is now done more efficiently than at some times in the past with high-rise buildings, etc.

Expansion, he said, will be in every direction, that is, all four directions laterally and up. The campus will have to cross Speedway on the north, he said. Some additional building will probably be necessary beyond Park Avenue, and there will be considerable expansion south across Sixth Street.

Mr. Houston explained that to acquire the 100 additional acres of land needed for campus expansion will require an expenditure of about \$10 million.

Dr. Blitzer said he hoped that efforts are being directed not only to increasing the facilities and size of the campus but to improving the architectural appearance. He referred to the remark attributed to a former President of the University explaining that good architecture costs no more than bad. Mr. Houston said that attention indeed was being given to the architecture of the campus. He reminded the Senate that what is good or bad architecture, attractive or unattractive, is often a matter of opinion. Even two skilled and talented architects may disagree on what is or is not an attractive building.

Dr. Delaplane, who had taken over as Chairman of the meeting because Mr. McMillan had to leave, thanked Mr. Grant and Mr. Houston for their presentations to the Senate group.

The meeting adjourned at 5:00 P.M.

David Butler, Secretary pro tem