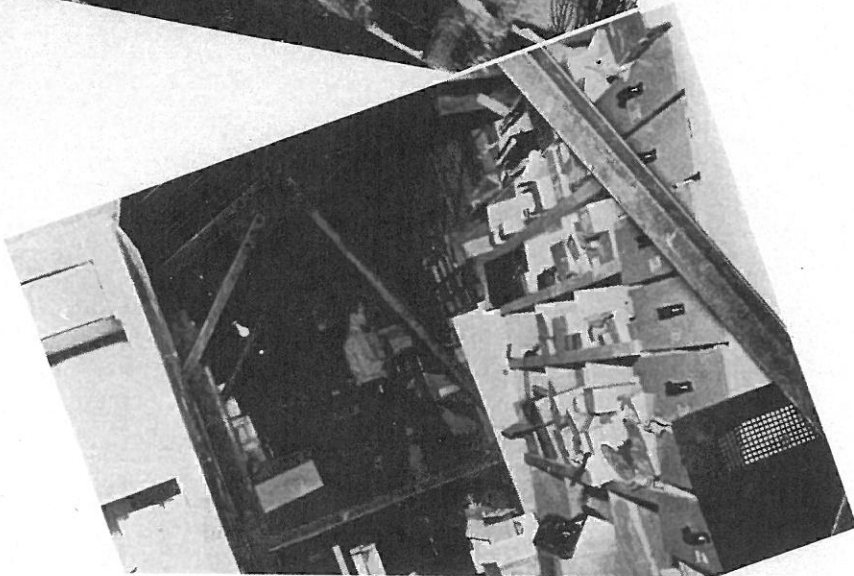
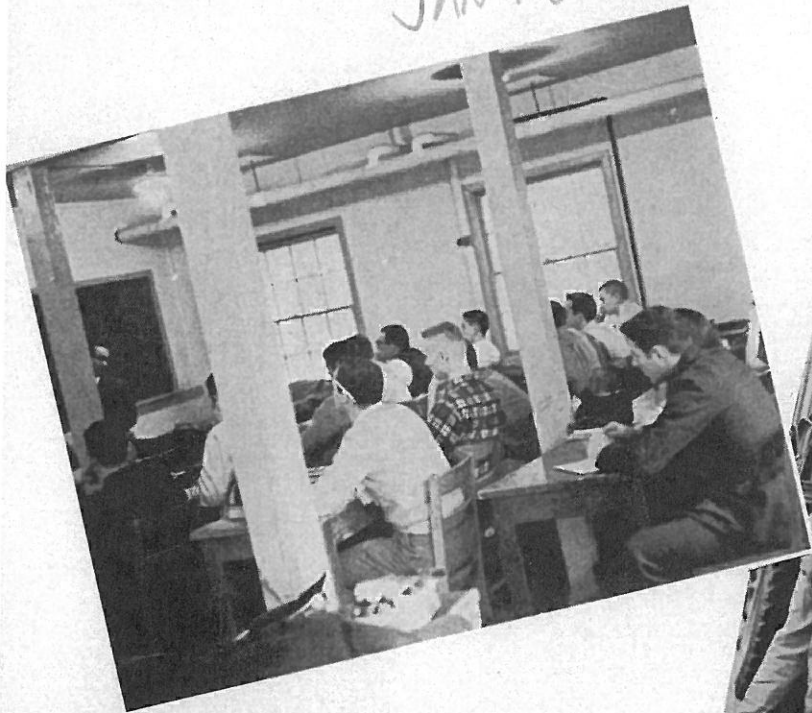


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JAN 1960



EVERYONE KNOWS the nursery rhyme about the old woman who lived in a shoe, "... she had so many children she didn't know what to do."

This is the situation of The University of Kansas today as it anticipates arrival at college age in the sixties of babies who came into the world in the forties.

In "People—Not Numbers," published in the October *Alumni Magazine*, data and reasons were presented to prove that enrollments at the University would increase to nearly 17,000 students by 1970 and more than 20,000 by 1975. This was a conservative estimate, holding true only if all other colleges and universities in the state increase proportionately.

Having authenticated the impending event, those responsible for future planning must ask themselves, "Where can we put them?" And they must find an answer in the face of the admission that many of K.U.'s present facilities are inadequate for students now enrolled.

Housing is Barely Adequate

With new and planned dormitories, student housing is barely adequate now and



for the immediate future. A combination of private gifts, bond issues, and the one-quarter mill state dormitory building fund in the past four years have made possible four new dormitories for more than 1700 students—with about one-fourth of the total cost coming from state tax funds.

But the buildings in which students must be taught how to live and work productively in a complex and changing world are either inadequate or actually not in being and cannot be made ready without extraordinary measures.

The structures which form the campus of The University of Kansas at Lawrence were built for three different periods: Yesterday, Today, and Tomorrow.

The problems involved in assessing the needs of the future cannot be understood without a look at all three. And, like Gaul, the building history of the University is divided into three parts.

From the opening of K.U.'s North College doors in 1866 until the beginning of the Great Depression in 1929, buildings were put up about as needed. As the enrollment increased from 55 to 4,079, 19 major buildings went up and 2 came down

LOWER LEFT: Important equipment must be stored any place that's available—in converted basements or under eaves. LEFT CENTER: Thirteen per cent of K.U.'s academic space is in quonset huts and frame sheds like these behind Strong hall. TOP LEFT: They serve as offices, research areas, seminar rooms and classrooms like this one, either too hot or too cold and expensive to maintain. SECOND FROM LEFT: 25,000 books must be stored under the stadium, as K.U.'s growing library is twice Watson library's 400,000-book capacity. ABOVE LEFT: The stadium also houses an ancient wooden wind tunnel, part of the desperate need for new engineering facilities. ABOVE: Office space is essential in keeping a good faculty and providing graduate study programs. This situation in Snow hall is typical of many Oread offices.

WHERE CAN WE PUT THEM?

by James E. Gunn

Unless proper steps are taken NOW, the young people of Kansas will suffer irreparable harm to the quality and availability of their educations.

(North College and Old Snow). Then came the Depression. Enrollments dipped and money was scarce.

Although other states put PWA money and labor to work on their campuses, this did not happen in Kansas. From 1929 to 1939 the only construction at Lawrence was for housing and hospital facilities financed by private gifts. Actually, no increase in academic facilities was made on the Lawrence campus between the completion of the center section of Strong hall in 1923 and the completion of Lindley hall in 1943.

No New Buildings in 20 Years

For 20 long years, then, the physical facilities of the University remained static. It is understandable that almost everything built before 1950 represents yesterday.

In 1941 something new was added: the Kansas Legislature enacted into law the Educational Building Fund, which had been approved 23 years earlier by the people voting on a constitutional amendment. This now provides three-quarters of a mill property tax for academic buildings at the five state institutions of higher education and one-quarter mill for dormitories.

But World War II put a stop to building and building plans, and the post-war era returned the veterans to the campus faster than buildings could be visualized. Enrollment soared to nearly 10,000 in a physical plant built for 4,000. This was a frantic period when K.U. administrators grabbed for anything with four walls and a roof. War-surplus frame buildings and metal quonset huts appeared everywhere on the campus as "temporary" structures for classrooms, offices, and housing.

All these decrepit classroom and office structures are where they originally were set down, and 13 per cent of K.U.'s total academic space still is in these totally inadequate and potentially dangerous facilities which are almost unendurable several months of the year because of severe heat or cold. Few people see them unless they are taken to them. When they were first put down, the buildings were hidden away—perhaps a little too cleverly for the sake of their replacement. New dormitories looming up on the skyline give a false impression of a new and well-built physical plant.

The major impact of the invaluable Educational Building Fund began to be felt in 1954 with the completion of Malott hall for physics, chemistry, and pharmacy. Here was the first K.U. academic facility built for the future, and it faces the necessity of an addition in the next decade.

It was followed by the Music and Dramatic Arts building in 1957 and Summerfield hall for business and economics in 1959. These, too, were built for the future. Not only are these departments housed for the enrollment increases to come, but they released substantial classroom and office space in other buildings.

The needs of the future have been documented by a comprehensive 6-volume study completed in 1956 by the Kansas Board of Regents. The Regents' conclusion: if temporary facilities are replaced, classroom space in the five state schools will be sufficient for the immediate future; but the five schools are in desperate need NOW of specialized space, such as laboratories, libraries, and so forth.

engineering enrollment was only a little more than 400 students. Today it is more than four times as great.

Needs of Engineering Change

Even more important, the scientific bases for engineering have changed almost completely. One of the first students to enjoy Marvin hall would be lost in today's curriculum. Then he had a choice of only five departments: chemical, civil, electrical, mechanical, and mining engineering. Since then six new engineering sciences have developed almost in their entirety: aeronautical, architectural, geological, metallurgical, and petroleum engineer-

Where Can We

Specific, Changing Needs

Almost any lecture or discussion class can be held in almost any classroom. Fraser theater, for instance, is used for lecture classes of 200-300 in beginning chemistry and psychology. But a laboratory can be used only for the science for which it was designed. Moreover, the needs even of a particular science change.

As one example, take the first priority in the K.U. building program—a \$1.9 million building for the School of Engineering and Architecture to house engineering mechanics and aeronautical, civil, and electrical engineering, permit architecture to move out of a war-surplus shack into Marvin hall, and allow a quonset hut to be torn down.

Present facilities led a committee of distinguished engineers to report that "the school cannot continue such high standards when its students are crammed into outmoded buildings . . ." One of them, N. D. Showalter, vice-president and general manager of the Wichita Division, Boeing Airplane Co., commented that he could not envisage any purpose for which Boeing would use the quonset hut that presently houses K.U.'s aeronautical engineering department.

When Marvin hall, the original engineering building, was completed in 1908,

ing, and architecture and engineering physics.

Moreover, the branches of engineering with which the 1908 student might assume himself familiar would be unrecognizable. The mechanical engineer, for instance, would look in vain for the reciprocating steam engine which powered the sawmill that formed Marvin hall's large wooden beams. The civil engineer would marvel at the modern highways which replaced the unpaved or poorly paved roads along which those beams were hauled by horse and wagon. The electrical engineer would search for the streetcars with which he was primarily concerned. The chemical engineer would wonder how today's chemical miracles could have sprung from the one plastic with which he was familiar, celluloid. The mining engineer would find that he could not even get a degree in his speciality.

When Marvin hall was built, Madame Curie had isolated radium only a few years before, and uranium left over from the extraction of radium from pitchblende was being dumped into a convenient disposal site—and would be until 1939. Orville and Wilbur Wright flew their airplane for a few seconds at Kitty Hawk just five years before. The electron tube

was developed in 1904, and television, radar, and computers were still far in the future.

Even the names the layman tosses about casually would have bewildered 1908's graduate engineer: rayon, nylon, orlon, vinyl . . . radio telescopes, electron microscopes . . . cloverleaf, limited access . . . radiation, isotope . . . curtain wall, Golden Gate . . . jet, rocket . . .

Maintenance Needs a "Must"

Second on K.U.'s list of priorities is two new boilers for the power plant. The heating capacity of the present boilers has been reached. The \$600,000 necessary also would provide safe underground storage for the University's standby oil fuel supply (which permits it a gas rate more than 50 per cent cheaper, saving up to \$8,000 a month), now stored in large, above-ground tanks at 19th and Naismith. Vacant fields surrounded the tanks when they first were put up in 1948; now they border a residential area.

The proposed addition would increase book storage to slightly more than a million volumes and would bring student study spaces up to 2250—which, considering the probable enrollment increases at the time of completion, would represent 20 per cent of the students then on the Lawrence campus, although rising enrollments would quickly submerge that figure.

Trying to Squeeze in Everyone

K.U., in trying to squeeze in everyone, has the same problem as the woman who has put on weight over the years. Not only is the student body twice its 1939 size—it is distributed differently. The Graduate enrollment, with its office and research requirements, including books, has increased 307%, Education is up 382%, and Engineering and Architecture, 158%.

Differences in distribution show up within schools themselves. Enrollment in foreign language courses at K.U., for instance, has gone up 42 per cent since 1956—from 6,093 semester credit hours to

earth sciences: geology, geological survey, geography, petroleum engineering, chemical engineering, and mining and metallurgical engineering. Because of insufficient funds, an entire wing was lopped off the building planned in 1940. Lindley now is jammed by enrollment increases and intensified research needs. Geography students alone have increased from 114 in 1940 to 418 today, and graduate enrollment in geology must be stopped at 75 because of space limitations. Machine shops are in hallways, and research laboratories are carved out of space originally planned for storage in sub-basements.

Finally, if the University can get the funds, the last of the war-surplus buildings in academic use would disappear in the mid-1960's, as a \$1,150,000 social science classroom building provided space for history, human relations, sociology, political science, social work, western civilization, and the governmental research center.

This is a \$7,400,000 program—a minimal program because these buildings are needed now, not three, four, five, six, or seven years from now. How fast they will be provided and where the money will come from is up to the Legislature now in session.

The program is minimal for another reason: although it will eliminate temporary buildings and some of the most serious specialized space problems like engineering laboratories and library study and book storage space, it does not nearly take care of all the University's provable needs.

It does not, for instance, provide for an architecture and applied arts building, for a classroom and laboratory addition to the Museum of Natural History, for an addition to Malott hall, for an addition to the student hospital's outpatient facilities, which are presently inadequate, for remodeling Haworth hall after the freshman medical students move to Kansas City in 1961, for a biological research building, for remodeling Marvin hall, for rebuilding or replacing Fraser hall, or for a building-and-grounds storage warehouse. (The University of Missouri, with an enrollment comparable to K.U.'s, has \$23 million for its building program alone, Princeton is raising a \$53-million building fund for an enrollment little more than one-third of K.U.'s, and many other colleges and universities, public and private, have building programs ranging upward from \$60 million.)

But these demonstrable needs are being deferred in the hope that they can be taken care of in the late Sixties and early Seventies when K.U.'s enrollment is expected to top 20,000.

Put Them?

Third comes a \$1.8 million library addition. Watson library was built in 1924 to hold 120,000 volumes. Room for 300,000 more was added in 1951. Since then the Library's holdings have reached more than 800,000—and additions are accumulating at a rate of 40,000-50,000 a year. Ten-foot wooden stacks with narrow aisles between have been built in basements and filled, and other space salvaged by excavating around building footings. Now books are going under the football stadium.

The situation is just as bad for study space. According to national standards a university should have at least one library study space for every five students. This would mean a minimum of 1700 spaces for K.U. now. Watson library has tables and chairs for 900 students. At peak periods, therefore, students sit on stairs and in hallways to study, and they petition the library director to keep the building open until midnight.

8,632—stimulated by the University's increased emphasis on the need for language competence in a shrinking world, K.U.'s relationship-in-depth with the University of Costa Rica, the new language laboratory, and plans for several language-culture centers.

Fourth in K.U.'s building priorities, then, is the remodeling of Blake hall for the Romance languages and the language laboratory now in a war-surplus shack. Blake hall, home for physics for almost 60 years, has stood empty for five years, since the physics department moved into new Malott hall. For \$600,000 Blake hall, which is structurally sound, could be converted into a modern, fire-resistant building, along the lines of Bailey hall, which was remodeled from a chemistry building into a near-ideal home for the School of Education.

Fifth comes an addition to Lindley hall. Completed in 1943, Lindley houses the

Buildings and other facilities are not adequate for immediate needs. 'What about tomorrow and the next day?' ask Kansas youngsters.