"The institution is accomplishing its educational and other purposes."

Overview: This chapter is full of facts. We present them as evidence that KU is accomplishing its educational and other purposes.

We begin by noting that KU is one of the top 30 public research universities in the United States, according to surveys of academic reputation conducted by U.S. News and World Report.

Given its mission as a "major, comprehensive research and teaching university," KU must provide a broad array of academic programs, undergraduate, graduate, professional, and postdoctoral. Indeed, we offer more than 200. Our research programs, which enrich the academic side, are similarly broad. They reflect a commitment to both basic and applied investigation. The value we place on research is signaled by the creation on the Lawrence and Medical Center campuses of more than 130 distinguished professorships, as well as annual recognition of scholarly accomplishment through four Higuchi Endowment Research Achievement Awards.

Despite our significant responsibility in research, we are nonetheless an institution with a strong sense of obligation to undergraduate education and a
concomitant belief in good teaching. Our nine universitywide annual teaching
awards demonstrate the commitment. So do the awards created by the chancellor
to honor faculty in the schools of Nursing, Education, and Social Welfare, as well as
a librarian with faculty status. In addition, there are seven Chancellors Club teaching
professorships.

In describing academic programs, we have presented overviews of
accomplishments in research, teaching, and service. We have organized the
discussion by schools. Data on each Lawrence campus school, reflecting its
experience in the most recent five years, are presented at the outset of each
discussion. Discussion of Lawrence campus academic programs concludes with
descriptions of the Regents Center and the Capitol Center, which offer
graduate-level programming for professionals in the Kansas City and Topeka
areas.

After our discussion of academic programs, we present the assessment
mechanisms that help us monitor our successes and shortcomings. KU draws upon
a range of assessment tools to evaluate its programs. Comprehensive
undergraduate outcomes assessment has been in place since January 1989;
graduate student assessment is evolving. The professional schools rely, in addition,
upon the evidence provided by certification and licensing examinations and by their
own accrediting agencies.

In discussing the research units, we have provided more specific detail on
1992 Program Review outcomes than in the academic section. These discussions elaborate on the strengths and weaknesses of programs and their fit with mission. The recommendations give evidence of our intent to concentrate resources in areas of strength. The chapter concludes with a discussion of the units that play a central role in helping KU meet its public service responsibilities.

.c. Academic Programs: Lawrence Campus

This section of the Self Study Report opens with a discussion of general education and then describes the activities of the College of Liberal Arts and Sciences, of the schools, and of the Regents Center and Capitol Center. Each section will be introduced by a table of data relevant to the unit.

.c2. General Education:. Following the last NCA visit, the faculty engaged in lengthy discussion and debate regarding adoption of a core curriculum. However, general education remains decentralized at the University of Kansas. Each major academic unit is responsible for determining the goals and objectives of general education and the means of achieving those goals for its students. There is considerable agreement among the units on goals, but no single general education philosophy or general education curriculum applies to all students.

Although total hours of general education required for graduation and distribution requirements differ, each school and the College require coursework in the humanities, natural sciences, and social sciences. Courses that meet general
education requirements are designed by faculty members in the College of Liberal Arts and Sciences and, in some cases, the School of Fine Arts. The College’s 1987 curriculum reform enhanced the coherence and depth of general education and the maintenance of course quality.

Agreement on a common set of goals for undergraduate education was achieved through development of KU’s assessment of undergraduate education. While there was considerable agreement among the faculty that a liberal arts core provided the foundation for preparation in the professional schools, it was essential that areas of commonality in goals and curriculum be identified as the basis for assessment. Faculty members in each major academic unit were asked to specify the goals and intended outcomes established for the general education of students in the unit. This effort emphasized reaching agreement on general education outcomes rather than on specific courses to be taken by each KU student. Based on agreement among the schools and the results of the Goal Attainment Study (Exhibit 5), the following general education goals were identified:

- Ability to acquire, develop, and convey ideas and information through reading, writing, speaking, seeing, and listening.
- Understanding of U.S. history and institutions.
- Appreciation of human diversity and an awareness of differing values, needs, and customs.
- Sensitivity to the social, political, and environmental issues that confront the
Knowledge of the history, mores, and languages of other cultures.

Understanding of the role of technology.

Appreciation for the ethical dimension of human behavior.

Capacity for critical thinking.

Appreciation of the arts.

Capacity for innovative thinking.

Understanding of the methods used by scholars to explain phenomena in the social sciences.

Understanding of the methods used by scholars to explain phenomena in the humanities.

Understanding of the methods used by scholars to explain phenomena in the natural, mathematical, and physical sciences.

By fulfilling the general education requirements of the College and the professional schools, undergraduate students are expected to master this core of knowledge and skills. General education assessment results are transmitted to the College and each school to provide data regarding the effectiveness of the general education component of its curriculum. Strategies for interpreting the results and strengthening the achievement of general education outcomes are recommended.
Curricular Reform: Since the last North Central Accreditation visit, the College of Liberal Arts and Sciences has made several changes in accordance with its mission of offering high-quality education in the liberal arts and sciences. A three-year study led to a more coherent and better structured College curriculum beginning in fall 1987. The number of courses that would satisfy the general education, or distribution, requirements was reduced from more than 1,700 to about 150, with the majority of these "Principal Courses" at the freshman-sophomore level. The courses were approved at the College level in accord with criteria of both...
depth and coverage. They were subdivided within the traditional divisions of the College as follows:

<table>
<thead>
<tr>
<th>Humanities</th>
<th>Historical Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature and the Arts</td>
<td>Philosophy and Religion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Natural Sciences</th>
<th>Biological Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>and Mathematics</td>
<td>Earth Sciences</td>
</tr>
<tr>
<td></td>
<td>Mathematics and Computer Science</td>
</tr>
<tr>
<td></td>
<td>Physical Sciences</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Sciences</th>
<th>Culture and Society</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Behavior</td>
<td>Public Affairs</td>
</tr>
</tbody>
</table>

The requirement that all B.A. and B.G.S. students complete three Principal Courses within three different topical groups in each division assured general education across a detailed spectrum of disciplines and equalized departmental responsibilities.

The mathematics requirement was revised to include both college algebra and a course for which college algebra is a prerequisite. Students were now required to begin mathematics studies in their first year and remain continuously enrolled through the completion of college algebra.

Similarly, students had to begin English composition studies in their first semester and remain continuously enrolled until they had completed the second course. And a course emphasizing a non-Western culture became an
undergraduate degree requirement.

During this period, the College developed the Academic Requirements Tracking System (ARTS), a computerized record that shows at any given time which requirements a student has satisfied and which remain to be completed, as well as lists of available classes. With the College's help, the professional schools have adopted the ARTS program. The result is improved advising throughout the institution.

The College is committed to high-quality teaching. In keeping with the university requirement, all College courses are subject to student evaluation. Evaluation mechanisms differ among departments, but the result is regular assessment by students of College faculty classroom performance.

.c. Enrollment Growth, Enrollment Management, and Faculty;

.c2. Recruitment: Coping with a surge of new freshmen in the late 1980s required extraordinary measures. Course demands had to be met in the contexts of the new requirements and of College aspirations to provide enrollment management systems that would ensure student access to programs and to classes of appropriate size. Initially, additional graduate teaching assistants and lecturers staffed freshman-sophomore sections, and tenure-track faculty positions declined. Aggressive reforms were implemented: Admissions standards were raised for out-of-state and transfer students; increased emphasis was placed on the Board of
 Regents-recommended core curriculum for Kansas high school graduates; a more stringent policy on academic probation and dismissal was adopted; and several new, large introductory classes taught by senior faculty were offered. As a result, enrollment has been stabilized and student needs have been met. More recently, as noted in the Faculty section of Chapter V, KU has increased the number of full-time, tenure-track faculty. As an outcome of 1992 Program Review, new positions have been established in the natural sciences, social sciences, humanities, and international areas.

Program Review and Program Discontinuance: In its efforts to provide high quality graduate and undergraduate programs, the College has reviewed all of its programs and discontinued some of them. The personnel administration undergraduate major, an interdisciplinary program drawing on the resources of several departments, principally in the social sciences, was discontinued in 1989. The 1992 Program Review led to other changes: discontinuance of the B.A. degrees in Atmospheric Sciences, Comparative Literature, Computer Science, Geophysics, History and Philosophy of Science, and Italian, and of the master's degree in Atmospheric Sciences; incorporation of the Department of Microbiology into the Division of Biological Sciences; and movement of the Department of Computer Science from the College into the School of Engineering's Department of Electrical and Computer Engineering. These changes reflect both concerns about the ability to staff programs adequately and a desire to
concentrate resources so as to maximize excellence.

### The Division of Humanities

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jrs/Srs/5th</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majors</td>
<td>1,229</td>
<td>1,328</td>
<td>1,340</td>
<td>1,466</td>
<td>1,431</td>
</tr>
<tr>
<td>Avg. ACT*</td>
<td>23.9</td>
<td>25.2</td>
<td>25.2</td>
<td>25.2</td>
<td>25.2</td>
</tr>
<tr>
<td><strong>Graduate Students</strong></td>
<td>765</td>
<td>864</td>
<td>935</td>
<td>917</td>
<td>928</td>
</tr>
<tr>
<td><strong>Tenure/Tenure Track Faculty</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Count</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Terminal Degree</td>
<td>95.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>467</td>
<td>498</td>
<td>522</td>
<td>517</td>
<td>542</td>
</tr>
<tr>
<td>Master's</td>
<td>112</td>
<td>111</td>
<td>119</td>
<td>165</td>
<td>150</td>
</tr>
<tr>
<td>Doctorate</td>
<td>32</td>
<td>24</td>
<td>35</td>
<td>30</td>
<td>25</td>
</tr>
</tbody>
</table>

* ACT changed its scoring in 1990. Scores reported beginning in fall 1990 are enhanced.

The division includes the following departments and degrees: the departments of Classics (B.A., B.G.S., M.A.), East Asian Languages and Cultures (B.A., M.A.), English (B.A., B.G.S., M.A., Ph.D.), French and Italian (B.A., M.A., Ph.D.), Germanic Languages and Literatures (B.A., M.A., Ph.D.),
History (B.A., B.G.S., M.A., Ph.D.), History of Art (B.A., B.G.S., M.A., Ph.D.),
Linguistics (B.A., B.G.S., M.A., Ph.D.), Philosophy (B.A., B.G.S., M.A., Ph.D.),
Religious Studies ((B.A., B.G.S., M.A., Ph.D.), Slavic Languages and
Literatures (B.A., M.A., Ph.D.), Spanish and Portuguese (B.A., M.A., Ph.D.),
and Theatre and Film (B.A., B.G.S., M.A., Ph.D.).

The division also includes six programs: African and African
American Studies (B.A., B.G.S.), American Studies (B.A., B.G.S., M.A., Ph.D.),
Humanities (B.A., B.G.S.), Latin American Studies (B.A., B.G.S., M.A.),
Historical Administration and Museum Studies (M.A.), and Russian and East
European Studies (B.A., B.G.S. [co-majors], M.A.). There are additional
interdisciplinary programs in East Asian Studies, Western Civilization, and
University Theatre.

This division makes a special contribution to a KU student’s
education. The faculty educate College students, as well as freshmen and
sophomores from other schools. At KU, a nine-hour English requirement is
virtually universal, and a four-course sequence of foreign language study is
recommended or required by several professional schools and programs.
In general there is a renewed emphasis across schools on the study of
history, literature, and world culture. Some courses, such as Eastern
Civilization and required English courses, are writing-intense.
Undergraduates choose humanities majors for their intrinsic interest and for pre-professional study. Humanities graduate programs train future scholars and teachers.

All humanities courses are evaluated twice annually by the students enrolled. In the case of pre-tenure faculty, peer evaluations are conducted as well.

Since FY 1989, the number of humanities baccalaureate degrees awarded has increased by 16 percent, while the number of master's and doctoral degrees awarded has increased by nearly 22 percent. In that period, majors in the division increased 66 percent. The average ACT of majors in fall 1993 was higher than the College and universitywide averages of 24.7.

Strengths in the division include well-qualified faculty members productive in research and committed to high-quality teaching. From 1984 through 1993, division faculty received 21 teaching awards from among the nine categories of universitywide awards given each year. Of the seven Chancellors Club teaching professors, two are from humanities departments. There are also 11 named/distinguished professors in the division.

Recently, funding activity in the humanities division increased
dramatically. In conjunction with the Hall Center for the Humanities, the College will establish (by August 1, 1994) an office for humanities grant writing. In the reorganization of the KU General Research Fund (see the Research Infrastructure section of this chapter), preference is shown humanities faculty who already have secured external funding. In spring 1994, all four area studies programs, African and African American Studies, East Asian Languages and Cultures, Latin American Studies, and Russian and East European Studies, were funded as national research centers by the U.S. Department of Education Title VI program.
### The Division of Natural Sciences & Mathematics

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jrs/Srs/5th Majors</td>
<td>1,005</td>
<td>1,178</td>
<td>1,360</td>
<td>1,483</td>
<td>1,563</td>
</tr>
<tr>
<td>Avg. ACT*</td>
<td>25.2</td>
<td>26.3</td>
<td>26.2</td>
<td>26.0</td>
<td>25.9</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>532</td>
<td>556</td>
<td>589</td>
<td>626</td>
<td>642</td>
</tr>
<tr>
<td>Tenure/Tenure Track</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Head Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>192</td>
</tr>
<tr>
<td>% Terminal Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>98.4%</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>344</td>
<td>344</td>
<td>357</td>
<td>445</td>
<td>476</td>
</tr>
<tr>
<td>Master's</td>
<td>64</td>
<td>46</td>
<td>61</td>
<td>77</td>
<td>54</td>
</tr>
<tr>
<td>Doctorate</td>
<td>36</td>
<td>36</td>
<td>39</td>
<td>48</td>
<td>30</td>
</tr>
</tbody>
</table>

* ACT changed its scoring in 1990. Scores reported beginning in fall 1990 are enhanced. Data includes Engineering Physics, a joint program with Engineering.

Courses and degree programs in the natural sciences and mathematics are offered in the freestanding departments of Chemistry (B.A., B.S., M.S., Ph.D.), Geography (B.A., B.G.S., B.S., M.A., Ph.D.), Geology (B.A., B.S., M.A., M.S., Ph.D.), Mathematics (B.A., B.S., M.A., Ph.D.), and Physics and Astronomy (B.A., B.S., M.S., and Ph.D. in Physics; B.S. in astronomy; B.S. in atmospheric sciences); and in the departments of Biochemistry (B.A.,
B.G.S., M.A., Ph.D.), Botany, Entomology, Microbiology (B.A., B.G.S., M.A.,
Ph.D.), Physiology and Cell Biology, and Systematics and Ecology, all
within the Division of Biological Sciences (offering B.A. degrees in biology;
B.S. degrees in organismal biology, cellular biology, and systematics and
ecology; and M.A. M.S., and Ph.D. degrees in all of the various specialties
within the various departments). In addition, three interdisciplinary
programs offer degrees: Genetics and Molecular Genetics (B.S.), Human
Biology (B.A., B.G.S.), and Environmental Studies (B.A., B.G.S., B.S.).

Division faculty members are productive scholars, with well over
1,000 peer-reviewed papers, books, and reviews published between 1987
and 1992. In that period, they received about $40 million in external grants
for research and teaching, and more than 20 received national or
international honors. From 1984 through 1994, 15 faculty in this division
received universitywide teaching awards. A professor of mathematics
holds one of the seven Chancellors Club teaching professorships. There
are nine distinguished professors in the division; seven of them in two
departments, Chemistry and Geology.

Since 1987, more than 60 division faculty have held offices in
professional societies, 65 have served on editorial boards, and more than
50 on review panels or accreditation teams.
Tenure-track faculty teach all division graduate courses; with few exceptions, they also teach the undergraduate courses, large and small. Course evaluations and surveys of seniors by the Office of Institutional Research and Planning indicate satisfaction levels between 3.5 and 4.0 on a 5.0-point scale across all departments and courses.

In addition to handling the science and mathematics requirements of the new College curriculum, division faculty teach courses required by the schools of Business, Education, Engineering, Journalism, Medicine, and Pharmacy. The great majority of students in biology, chemistry, geology, geography, and mathematics courses are non-majors, so the division plays a vital role in the education of nearly all KU students.

The number of majors in the division has grown rapidly. Since fall 1989, the number of bachelor's degrees awarded has grown 38 percent. In the past five years, the number of undergraduate majors has risen 56 percent, and the number of graduate students 21 percent. Demand for undergraduate majors in the biological sciences division and environmental studies program has been especially high. And there is greater diversity now than 10 years ago: A Howard Hughes grant of $1 million to the biological sciences has provided scholarships and internships for promising minority students. Graduate enrollments also are up, especially
in chemistry. Though demands for geology graduates are down, employment opportunities for natural sciences graduates, at all levels, remain good to excellent. The average ACT score of division majors is 25.9, with particularly high averages among those in biochemistry, chemistry, astronomy, and physics.

Division strengths are an excellent faculty, as measured by teaching quality, research publication, and performance in external grant competitions; a high degree of collaboration, cooperation, and collegiality across the disciplines; a record of public service; and a high-quality student body.

The Division of Social Sciences

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jrs/Srs/5th Majors</td>
<td>2,028</td>
<td>2,113</td>
<td>2,054</td>
<td>1,941</td>
<td>1,856</td>
</tr>
<tr>
<td>Avg. ACT*</td>
<td>21.5</td>
<td>23.1</td>
<td>23.4</td>
<td>23.5</td>
<td>23.2</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>714</td>
<td>739</td>
<td>778</td>
<td>772</td>
<td>782</td>
</tr>
<tr>
<td>Tenure/Tenure Track</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>151</td>
</tr>
<tr>
<td>% Terminal Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>97.4%</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>943</td>
<td>930</td>
<td>974</td>
<td>1,003</td>
<td>985</td>
</tr>
<tr>
<td>Master's</td>
<td>124</td>
<td>138</td>
<td>130</td>
<td>172</td>
<td>141</td>
</tr>
<tr>
<td>Doctorate</td>
<td>45</td>
<td>27</td>
<td>37</td>
<td>57</td>
<td>42</td>
</tr>
</tbody>
</table>

* ACT changed its scoring in 1990. Scores reported beginning in fall 1990
Social science education and research in the College are the focus of eight departments and several interdisciplinary programs. The division includes the departments of Anthropology (B.A., B.G.S., M.A., Ph.D.), Communication Studies (B.A., B.G.S., M.A., Ph.D.), Economics (B.A., B.G.S., B.S., M.A., Ph.D.), Human Development and Family Life (B.A., B.G.S., M.A., M.H.D., Ph.D.), Political Science (B.A., B.G.S., M.A., Ph.D.), Psychology (B.A., B.G.S., B.S., M.A., Ph.D.), Sociology (B.A., B.G.S., M.A., Ph.D.), and Speech-Language-Hearing: Sciences and Disorders (B.A., B.G.S. in speech, language, and hearing, M.A. in audiology or speech language pathology, Ph.D. in audiology or speech language pathology). The political science department and the Public Administration Program together constitute the Division of Government. Interdisciplinary programs (offering the M.P.A.) in clinical child psychology, child language, and women's studies have been developed to serve student interests.

Publication by social science faculty has increased significantly since the last review. During that period, faculty published 86 books, 283 chapters, 519 articles in journals; they also gave more than 1,200 presentations at international, national, state, and local conferences. In addition, they held 60 journal editorships. From 1987 to 1991, faculty attracted external grants totaling $20.4 million.

The College's social scientists have a broad educational mission, from teaching introductory courses to training researchers capable of generating new
knowledge. The social science departments, with 28 percent of the College faculty, have 38 percent of the undergraduate College majors. Teaching, a fundamental commitment of the social sciences faculty, influences annual merit evaluations, promotion, and tenure. Universitywide teaching awards earned by division faculty since 1984 total 23. The division also has three Chancellors Club teaching professors and five named/distinguished professors.

All departments administer student evaluations in every course. The College also surveys graduates for their impressions. In both kinds of evaluations, ratings generally have been above 3.5 on a 5.0-point scale.

Social science enrollments increased steadily over the past decade. The largest increase was in undergraduate major enrollment. In FY 1992, the division awarded more than half of the College's undergraduate degrees. To cope with large numbers of majors, some departments, such as communications studies and political science, have strengthened prerequisites for admission to the undergraduate program and have improved advising for prospective majors. The number of degrees granted in FY 1993 fell slightly.

### School of Architecture and Urban Design

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jr/srs/5th Majors</td>
<td>381</td>
<td>402</td>
<td>399</td>
<td>435</td>
<td>433</td>
</tr>
<tr>
<td>Avg. ACT</td>
<td>24.3</td>
<td>25.7</td>
<td>25.8</td>
<td>25.7</td>
<td>25.5</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>109</td>
<td>113</td>
<td>93</td>
<td>103</td>
<td>110</td>
</tr>
<tr>
<td>Tenure/Tenure Track Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Head Count</td>
<td></td>
<td></td>
<td></td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>% Terminal Degree</td>
<td></td>
<td></td>
<td></td>
<td>90.9%</td>
<td></td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>94</td>
<td>113</td>
<td>107</td>
<td>112</td>
<td>96</td>
</tr>
<tr>
<td>Master’s</td>
<td>33</td>
<td>28</td>
<td>36</td>
<td>40</td>
<td>27</td>
</tr>
</tbody>
</table>

* ACT changed its scoring in 1990. Scores reported beginning in fall 1990 are enhanced. Data includes Architectural Engineering, a joint program with Engineering.

Since 1968, when the KU architectural studies program became the School of Architecture and Urban Design, the school has developed comprehensive academic programs for aspiring architects, architectural engineers, and urban planners.

It awards the bachelor of architecture, the bachelor of arts in architectural studies, the master of architecture, the master of urban planning; it cooperates with the School of Engineering in the bachelor of science and master of science in architectural engineering. The professional degrees are reviewed for accreditation every five years by the National Architectural Accrediting Board, the Accrediting Board of Engineering and Technology, and the Planning Accreditation Board. All have been continuously accredited since accreditation began; all have five-year accreditation; and all are undergoing a normal review in 1994-95.

The proportion of faculty who hold a doctorate C 50 percent C is very high, relative to the proportion present at most North American architecture schools in which the terminal degree is a master’s. Faculty have won outstanding teaching
awards and Fulbright and NEA fellowships. Their work has been honored by professional organizations and by local and state preservation societies and has been supported by external funding of about $650,000 in 1992. Two faculty members are KU distinguished professors. Four have received an endowed teaching award established by an alumnus.

School admission requirements are rigorous, and the demand for the school's programs is very strong, with over five applicants for every available position.

To strengthen its commitment to undergraduate liberal education, the architecture faculty initiated the bachelor of arts in architectural studies degree. It provides a comprehensive liberal arts education for students who intend to seek professional training at the graduate level. There are now 67 B.A. students. The school plans to downsize its undergraduate professional program to half its current size in the next 10 years. It expects the number of B.A. students to increase and more graduate students in design, planning, and engineering to be admitted.

About 10 percent of the school's students participate in international programs each year. Two-thirds of the faculty have worked or studied in foreign countries. Since 1973 the Ewart Endowment Fund has sponsored more than 200 student and faculty exchanges in Europe, Japan, and Latin America. A summer design studio course in Siena, Italy, helps to make international design education a distinguishing characteristic of the newly accredited Master of Architecture degree.
A new exchange is now being finalized with the School of Architecture at the University of Stuttgart.

During the past 10 years the school has made special efforts to attract women and minority faculty and students. At this point approximately 25 percent of the faculty and unclassified staff and about 35 percent of the students are from these groups. In 1983 the school faculty included one tenure-track woman and one tenured minority faculty member. As of 1993 there were four women and four minority faculty members. Two of the women and two of the minorities have received tenure. A chapter of National Organization of Minority Architecture Students recently was established. In 1992 a tutoring program for minority students was instituted.

The school has made significant progress in computerizing its curriculum and providing computers for faculty, but more needs to be done in this area. It has hired two full-time and two part-time faculty to teach computing. Since 1983, the school has joined with the School of Fine Arts to form three computer laboratories; within a year, two more will be established. The school also has begun placing computers in design studios and plans to have a network in five years.

During the last 10 years the school has established outreach programs in Kansas City, including a fifth-year urban design studio, a graduate management program in architecture, a graduate construction management program in architectural engineering, and a cooperative center for design education and
research with Kansas State University and the University of Missouri/Kansas City.

To underscore the school's commitment to Kansas City, an assistant deanship was created in 1991 to oversee the graduate management program.

As a result of 1992 Program Review, the school formulated several aspirations for itself. It hopes by the year 2000 to develop additional international opportunities and funding support for faculty and students, to increase endowment support for the lecture fund and Slide Library, to design and implement a doctoral program for the Graduate School, to stabilize undergraduate enrollment, and to increase graduate enrollments.
School of Business

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jrs/Srs/5th Majors</td>
<td>825</td>
<td>826</td>
<td>908</td>
<td>856</td>
<td>717</td>
</tr>
<tr>
<td>Avg. ACT*</td>
<td>24.7</td>
<td>25.6</td>
<td>25.5</td>
<td>25.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>447</td>
<td>447</td>
<td>452</td>
<td>456</td>
<td>463</td>
</tr>
<tr>
<td>Tenure/Tenure Track</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Terminal Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>98.0%</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>427</td>
<td>361</td>
<td>418</td>
<td>396</td>
<td>422</td>
</tr>
<tr>
<td>Master's</td>
<td>131</td>
<td>122</td>
<td>140</td>
<td>116</td>
<td>151</td>
</tr>
<tr>
<td>Doctorate</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

* ACT changed its scoring in 1990. Scores reported beginning in fall 1990 are enhanced. Data above include a joint program with the School of Engineering, petroleum management.

The School of Business offers programs leading to the bachelor of science, with majors in business administration and accounting and concentrations in 42 major fields offered by other academic units; the master of science, with concentrations in accounting, human resources, marketing, and organizational behavior; the master of business administration, with concentrations in business environment and public policy, finance, human resources, international business, management, management science, marketing, and strategic management; and the doctor of philosophy, with concentrations in accounting, finance, human resources, marketing, management science, organizational behavior, and strategic management.
In order to manage effectively with the resources available, the school implemented enrollment controls with a planned undergraduate enrollment of about 720.

Student quality is high. Average Graduate Management Admission Test scores for M.B.A./M.S. and Ph.D. students entering in fall 1993 were 573 (75th percentile) and 702 (98th percentile), respectively.

The school has a total of 10 distinguished professors and distinguished teaching professors. Five of its members have won all-university teaching awards in the past five years. Since 1988 faculty members have published 200 articles in refereed journals, 43 book chapters, and 25 books. An article in Review of Business and Economic Research (Spring 1988) ranked the KU School of Business 13th among public universities in research productivity per faculty member. Nationally, the finance and the business law faculty have been ranked in the top five in research productivity.

In 1992 the M.B.A. program was recognized by Business Week as one of 20 programs nationwide "that offer consumers the most bang for the buck." (More than 750 U.S. institutions offer the M.B.A.) Successes notwithstanding, faculty members are committed to continuous improvement. Aspirations to regional or national standing have been explicitly established, and faculty teams directed to achieve these goals.

The school has been increasing its international dimension. In 1989, eight
business faculty funded by a Fulbright-Hays Group Project Abroad grant spent six weeks meeting with executives and touring plants in Japan and South Korea. These grants are usually given to specialists in foreign languages and area studies; in this case, an exception was made based on the potential contribution of the faculty.

Through collaborative efforts with the College of Liberal Arts and Sciences and the Institute for Public Policy and Business Research, four research centers that link faculty strengths with business needs have been established since the last review: the International Center for Ethics in Business, the Center for International Business, the Center for Technology, and the Center for Workforce Management. The knowledge generated in these centers will be disseminated in the classroom.

The school has offered executive education programs for more than 35 years. The Small Business Development Center provides free counseling and workshops for northeastern Kansas businesses. Through the Small Business Institute, seniors provide management counseling to regional small businesses.

The school is a member of the American Assembly of Collegiate Schools of Business and has been continuously accredited. The last accreditation was conferred in 1986.

Results of 1992 Program Review included support for the quality of all of the degree programs and a transfer of resources to the School of Business to enable it to deliver more courses in the part-time master's of business administration program serving greater Kansas City. A major expansion of offerings has been
proposed in the FY 1996 legislative request.
The School of Education provides a comprehensive program in professional education and some related helping professions. The school continues to be fully accredited by the National Council for Accreditation of Teacher Education. The most recent visit was in 1990. The school comprises six academic departments and 79 tenure-track faculty. Thirty-three are women and 10 are minorities.

The school comprises the departments of Counseling Psychology; Curriculum & Instruction; Educational Policy & Leadership; Educational Psychology & Research; Health, Physical Education and Recreation; and Special Education. Degrees offered include the bachelor and the master of science in education and the doctor of education; the master of arts; the specialist in education; and the
doctor of philosophy. As a result of 1992 Program Review recommendations the Department of Art, Music Education and Music Therapy was moved to the School of Fine Arts. The bachelor's degree in recreation and the doctoral degree in art education were eliminated.

Faculty have received national and international recognition for their scholarship and other professional activities. One faculty member holds a distinguished professorship. Another has received the international J.E. Wallin Award in special education. During the 1992-93 academic year, 44 faculty published one or more articles in refereed national journals; 14 authored one or more books; 33 wrote book chapters; and 22 produced films, audio products, and other creative works. In addition, faculty wrote numerous technical and research reports. Thirty submitted successful proposals for external funding totaling $4.78 million, making the school a university leader in that area. Last year 74 faculty served as officers, committee members, editors, or members of journal review boards in professional organizations.

Members of the school's faculty have been widely recognized for their excellent teaching. An impressive number have won international, national, and universitywide awards for teaching. One faculty member holds a Chancellors Club teaching professorship. In two of its first five years, the Honor for Outstanding Progressive Educators Award, a KU teaching-excellence award, went to education professors. Since then, the faculty has been honored with seven chancellor's
awards, three H. Bernard Fink awards, three Burlington Northern awards, two Silver Anniversary awards, two Louise Byrd Graduate Educator awards, one Amoco Foundation Award, and one Ned N. Fleming Trust Award for Teaching Excellence.

The school was one of the first in the nation to establish a five-year teacher education program. To enter the program, students must attain a 2.75 GPA in a 35 hour block of course work in liberal arts, meet minimum score requirement on the PreProfessional Skills Test (PPST), and submit recommendations from professionals attesting to their ability to work successfully with children and adolescents. Students in the elementary education track must complete a multidisciplinary minor in liberal arts and one other liberal arts minor. Those who want both elementary and middle level certification must complete two academic minors. Prospective high school teachers must take 90 hours of liberal arts courses, including 40 to 50 in at least one subject matter concentration. As a result of the five-year program's success, the school has begun to limit enrollments in some teacher-education programs. The decision reflects the desire of the faculty to maintain quality and to honor its commitment to students.

At the end of the fourth year a non-certificate B.S. is awarded. To earn certification, students must be admitted to the Graduate School for their fifth year. The year includes a six-week student-teaching apprenticeship, 15 hours of professional education courses, and a 14-week, full-time internship. The strengths of this five-year program are clear: strong liberal arts preparation, early induction of
students into the schools, extensive apprenticeships in the fifth year, and the graduate-level course work and research experience built into the program.

The school evaluates the program annually through faculty review and consideration of program requirements and standards. This review is supported by a longitudinal Annual Alumni Survey that has provided information used in curriculum modification. Results of the past year's survey reflect a persistent pattern: a strong indication by employers that the graduates are academically and professionally solid and strong support among graduates for their early and frequent field experiences and for overall program quality.

Nearly 70 percent of the students majoring in education are enrolled in graduate programs, several of which have been recognized for their quality and innovativeness. The Department of Special Education doctoral program has been consistently rated, through an independent survey of faculty in all U.S. special education programs, as the nation's best. The doctoral programs in both counseling psychology and school psychology are fully accredited by the American Psychological Association, and the school psychology program is ranked high nationally. Recent major revisions in the graduate programs in educational administration were funded in part by a Danforth Foundation grant. The school has also established an innovative interdisciplinary doctoral program in instructional leadership.

Long-range plans for the school include, in partnership with public school
systems, the continuation and solidification of four professional development schools now in operation; an up-to-date physical facility; more emphasis on the integration of new technology into instructional and research programs; an increase in the ethnic diversity of students and faculty; expanded scholarship funds; more systematic student advising and support; increased external funding; and faculty development.
The School of Engineering offers the B.S. degree in the fields of aerospace, architectural, chemical, civil, computer, electrical, mechanical and petroleum engineering, as well as in engineering physics. Only engineering physics and computer engineering do not offer graduate degrees. All others offer the M.S., with an engineering management program and a water resources engineering and science program offering only the M.S. Ph.D.s may be earned in aerospace, chemical and petroleum, civil, electrical and mechanical engineering, as well as in environmental engineering and environmental science. All engineering programs are accredited by the Accreditation Board for Engineering and Technology.

Between fall 1989 and fall 1993, undergraduate majors decreased 5
percent, a decline reflective of national trends and due in part to the school's enrollment management policy. Graduate enrollment, meanwhile, increased 20 percent. The number of doctoral students has increased from 30 to 80, a 167 percent increase. The school confers the largest number of M.S. and Ph.D. degrees of any Kansas engineering school.

A 1991 survey of employers rated KU graduates as better than graduates from other "top engineering schools." On the April 1994 Fundamentals of Engineering Examination, a national test administered by the state, KU students had a pass rate of 90 percent, compared with a national rate of 70 percent.

ACT composite scores indicate that engineering students are among the best prepared on campus and among the Kansas engineering schools. Every year since 1981, aerospace engineering students have won and placed in the top three in an aircraft/propulsion design national competition sponsored by the American Institute of Aeronautics and Astronautics.

External FY 1994 research funding for the school is approximately $7.1 million. Five faculty, including four emeriti, are members of the National Academy of Engineering C the only NAE members at any Kansas university. The school has nine distinguished professors and one faculty member holds a distinguished teaching professorship. Since 1987, ten different engineering faculty members have won universitywide teaching awards.

Three of the school's research programs deserve special mention. The
Energy Research Center has attracted U.S. Department of Energy funding of $500,000 for technology transfer and nearly $1 million to stimulate oil production by Kansas independent oil operators. A multi-unit project focused on high-speed data networking, titled "Research on Gigabit Gateways: Access to Future Public-switched Networks," has a $560,000 contract with the federal government's Advanced Research Projects Agency. It is one of six such projects in the nation. The Center of Excellence in Computer Aided Systems Engineering, one of two centers of excellence on the Lawrence campus, is supported by the Kansas Technology Enterprise Cooperation Center of Excellence Program.

Five of the nine engineering undergraduate programs were rated "exceptional" during 1992 Program Review; the other four were rated "very good." As a result of the review, the Department of Computer Science, formerly housed in the College of Liberal Arts and Sciences, became part of the Department of Electrical and Computer Engineering.

\[ .c3. School of Fine Arts \]

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jrs/Srs/5th Majors</td>
<td>585</td>
<td>631</td>
<td>649</td>
<td>655</td>
<td>637</td>
</tr>
<tr>
<td>Avg. ACT*</td>
<td>20.8</td>
<td>23.0</td>
<td>23.2</td>
<td>23.5</td>
<td>23.5</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>207</td>
<td>226</td>
<td>227</td>
<td>226</td>
<td>219</td>
</tr>
<tr>
<td>Tenure/Tenure Track Faculty Head Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>% Terminal Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>92.2%</td>
</tr>
<tr>
<td>Degrees Awarded</td>
<td>FY</td>
<td>FY</td>
<td>FY</td>
<td>FY</td>
<td>FY 1993</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>190</td>
<td>163</td>
<td>188</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>Master's</td>
<td>30</td>
<td>26</td>
<td>24</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Doctorate</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

* ACT changed its scoring in 1990. Scores reported beginning in fall 1990 are enhanced. Data above include figures from the Department of Art and Music Education and Music Therapy.

The School of Fine Arts includes the departments of Art, Design, and Music and Dance. Instruction is offered in most art media, crafts, the design professions, a variety of music and dance performance specialties, and music scholarship.

There is a full range of professional degree programs in the visual arts and music, including the B.A. in art, design, music, and dance; the M.A. and Ph.D. in music; the B.F.A. and M.F.A. in art and in design; and the B.M., M.M. and D.M.A. in music.

Academic programs are duly accredited by the National Association of Schools of Art and Design and the National Association of Schools of Music. The dance program has not been in existence long enough to apply for accreditation to its national association.

In August 1993, as an outcome of 1992 Program Review, the Department of Art and Music Education and Music Therapy was transferred to the school from the School of Education. The goal of the realignment was to enhance student educational opportunities and to improve administrative efficiency. The change accords with national norms for organization of academic programs in music. Included in this transfer are the following degrees: bachelor of art education, bachelor of music education, bachelor of music education-music therapy, master of
music education, master of music education-music therapy, master of arts in visual arts education, and doctor or philosophy in music education.

The school faculty is diverse, representing a spectrum of experiences and achievements in the arts. Many have attained recognition at the highest levels of their profession. Art and design faculty have had exhibits at the U.S. Embassy in Warsaw, the Museum of Modern Art and Bernice Steinbaum gallery in New York, and the Cain Colles Museum in Spokane. Four faculty have received National Endowment for the Arts individual artist fellowships and one an honorary doctorate from the Rhode Island School of Design. Music and dance faculty have appeared on the Public Broadcasting System and National Public Radio, at the White House, and with such organizations as the Cleveland Orchestra, the Joffrey Ballet, the Metropolitan Opera National Touring Company, the Carnegie Recital Hall, the Chicago Lyric Opera, and the San Francisco Opera. A faculty member has been editor of the *Journal of Research in Music Education*. Two have been recognized with distinguished professorships.

The school attracts a significant number of international students. Ten years ago the largest influx was from China; more recently the number of students from eastern Europe has increased. The music and dance department has a flourishing exchange agreement with the Chopin Academy in Warsaw, Poland.

Two of the school's strongest academic programs are in textile design and piano. There is wide professional consensus that KU's textile design program is
among the nation's top five. The Division of Piano has an outstanding faculty, including a distinguished professor and a well-known visiting artists program. A faculty of two in organ and church music has recruited a strong nucleus of graduate students. A superb new organ facility adjoining the recently opened Lied Center is planned for completion in 1996.

The Lied Center, which serves the community and the region, enhances the school's programs by providing high quality performance space for the University Symphony Orchestra, Band, and Choirs. In addition, the Concert, Chamber Music, and New Directions Series present a range of performances by world class artists and enhance academic programs in music and dance by providing for master classes by outstanding professionals.

A long-term aspiration of the faculty has been realized with the transfer of the Department of Art and Music Education and Music Therapy to the school. This realignment increased school faculty numbers by about 10 percent and students by nearly 30 percent. Distribution among majors also shifted; total enrollment in music programs and in graduate programs has nearly doubled. These increases do, however, heighten the need for an expansion of the teaching facilities in Murphy Hall, home of the offices and instructional space for the programs in music performance, music history, theory and composition; for the major ensembles; for the music library collections; and for the office of the dean and of the school.

A long-range commitment of school administration is to develop a B.F.A. in
The William Allen White School of Journalism and Mass Communications awards one undergraduate degree, the bachelor of science in journalism. Students complete 90 hours of general education, 65 of those in the liberal arts and sciences. Twenty-eight to 34 hours are required in the major field, which include the following: news, magazine, advertising, and radio-television. Emphases in newspaper journalism, business communications, photojournalism, broadcast news, and broadcast management are offered as well.

The school consistently is rated among the top 10 in national rankings by professional journalists. In November 1991, the Accrediting Council on Education in Journalism and Mass Communications judged the school in compliance with its 12
standards and summarized school strengths:

For years, [it] has enjoyed a quality national reputation. It deserves that reputation, for its undergraduate program is one of the best professional programs in the country. The accrediting team also noted the faculty's excellence and its commitment to teaching, as well as its outstanding academic advising. In addition, the KU Program Review Committee rated the undergraduate journalism program as exceptional. As a follow-up to that review, the school launched a study of its curriculum, focusing on the implications of fast and dramatic changes in communications technology. The school also began to build an advanced, multimedia laboratory and is developing laboratories in television and public information.

Enrollment dips recorded in recent years are the result of a reduction strategy. In the late 1980s, with enrollment exceeding 1,000, the school implemented controls to manage enrollment more effectively. The school now is adopting measures to stabilize and diversify enrollment and keep it in balance with resources.

The school's commitment to teaching is signified by numerous awards to faculty. They have been honored both by the Chancellor's Distinguished Teaching Award Committee and by Mortar Board; several have won, or been finalists for, KU's Honor for Outstanding Progressive Educators Award. Faculty teaching excellence has resulted in awards by such national organizations as the Freedom
Forum Media Studies Center at Columbia University, the Poynter Institute, and the American Press Institute. The school has two endowed teaching professorships and two other distinguished chairs.

In 1991, the John S. and James L. Knight Foundation recognized the school as "one of the best" in the nation and awarded it a $1 million grant to establish an endowed professorship dedicated to teaching, research, and continuing education related to the leadership role of the press in communities. In 1975, the school received a grant from the Gannett Foundation (now the Freedom Forum) to pay for a yearlong visit by a professional journalist. The grant was renewed each year through 1993 by the foundation.

The school values both traditional scholarship and creative activity. Several faculty members have had outstanding careers in leadership positions on newspapers and other publications. One, who holds the chair endowed by the Knight Foundation, gained national stature through 17 years of innovative leadership at a newspaper in Anderson, South Carolina. Another directs the Mid-America Press Institute, which provides continuing education through a cooperative of newspapers in 20 states. A third directs educational programs for the City and Regional Magazine Association.

External funding, available primarily through private foundations, has come from the Freedom Forum, the Knight Foundation, and the Kellogg Foundation. The United States Information Agency has also supported faculty initiatives.
Students acquire practical experience on the University Daily Kansan, a student newspaper; KJHK, a student radio station; and the Jayhawk Journalist, a publication for the school’s alumni. The Kansan received its second consecutive national Pacemaker and Trendsetter awards last year, sponsored, respectively, by the Associated Collegiate Press and the College Newspaper Advertising and Business Managers. In 1991, KJHK was cited as the top college radio station by the National Association of College Broadcasters. In 1993-94 the school won first place in the national intercollegiate writing competition sponsored by the Hearst Foundation. A competition regarded as the Pulitzer Prize program for college journalism. Of nine students who competed for an individual student championship, four were from the school.

The school assesses its graduates in a variety of ways. Employers evaluate work done on internships. The school's graduates are in demand, joining such companies as Leo Burnett, Hallmark, Proctor and Gamble, and McGraw-Hill. The Wall Street Journal has more graduates from the KU school on its staff than graduates of any other university.

Journalism faculty members serve their profession and KU. The school is headquarters for the Accrediting Council on Education in Journalism and Mass Communications, the only accrediting agency for these fields. The Kansas Scholastic Press Association also has headquarters in the school.
School of Law

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Students</td>
<td>500</td>
<td>518</td>
<td>565</td>
<td>545</td>
<td>529</td>
</tr>
<tr>
<td>Tenure/Tenure Track Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Count</td>
<td></td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees Awarded</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prof./Specialist</td>
<td>155</td>
<td>163</td>
<td>174</td>
<td>174</td>
<td>176</td>
</tr>
</tbody>
</table>

The School of Law offers one course of study, which leads to the juris doctor, or J.D., degree. The school also cooperates with other academic units to offer seven joint degree programs, pursuant to which a student can earn a master’s degree or a J.D. The school’s collaborators in these programs are the business administration, economics, health services administration, philosophy, public administration, social work, and urban planning units.

The student body is well-qualified, with undergraduate median and average GPAs in the 3.35 to 3.45 range and median and average Law School Admission Test scores in the 80th percentile nationally. The ratio of applicants to accepted students is about six to one. More than 50 percent of admitted applicants enroll. Forty-four percent of the students are female, and 13 percent are members of racial minorities. The graduation rate for minority students is only slightly below the average for the school.

Until recently, placement results were excellent. Ninety percent of each class was placed within six months of graduation, the great majority in law-related
activities. The recession reduced demand for law graduates nationally, yet 82 percent of the 1993 graduating class was placed under these difficult conditions. With rare exceptions, the performance of the school's graduates on the Kansas and Missouri bar examinations has exceeded the performance of applicants from other schools.

The curriculum complies with all relevant American Bar Association and Association of American Law Schools standards and provides instruction in all major areas of the law. Intensive trial advocacy instruction is provided for students seeking it, and five live-client clinics are provided. Completion of faculty-supervised writing projects is required of both beginning and advanced students.

Sixteen law schools, including many of the nation's finest institutions—Harvard, Michigan, Yale, Virginia, Chicago, and Stanford—were represented among faculty alma maters. Five faculty members are female, and four are members of racial minorities.

In terms of research productivity, the school consistently ranks in the upper quarter of law schools. During the 1989-91 period, when faculty productivity was last surveyed, the 26 full-time faculty produced 22 books, 24 book chapters, 59 law review articles, and 60 book reviews, essays, and other published works. They also produced 58 continuing legal education papers and 122 other scholarly presentations.

Three faculty members have received universitywide teaching awards. On
anonymous student evaluations of teaching, more than 90 percent of the ratings are "excellent" or "good." Six faculty members hold distinguished professorships.

Law faculty are on KU committees and participate in governance activities, as well as in national professional organizations. During the past six years, three faculty have chaired national academic organizations. Six faculty currently serve on editorial boards of academic or professional journals. Four faculty have served on accreditation teams, and one faculty member has chaired the American Bar Association's Accreditation Committee. Faculty members are involved in virtually every aspect of the legal profession in Kansas, including activities of the Kansas Bar Association and of entities supervised by the Kansas Supreme Court.

The school is fully accredited by both the American Bar Association and the Association of American Law Schools. Both groups last reviewed the school in 1992, praising its programs and progress but expressing concern in two areas. First, faculty and administrative salaries had declined to noncompetitive levels. KU responded to this concern by increasing the school's salary allocation and by instituting a special fee that supports the Law Library and faculty salaries.

Second, students had charged a faculty member with sexual harassment. The school responded to this in various ways. Two actions were especially significant. Formal charges were brought against the faculty member involved, ultimately resulting in dismissal; that determination is now on appeal to the Board of Regents. In addition, the school adopted a policy declaring inappropriate and
unacceptable all sexual or romantic relationships between faculty members and students; the university also has adopted a consenting relationships policy (see Chapter VIII, The Grievance Structure and Due Process subsection).

.c3. School of Pharmacy

<table>
<thead>
<tr>
<th></th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jrs/Srs/5th Majors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg. ACT*</td>
<td>24.0</td>
<td>25.3</td>
<td>25.1</td>
<td>25.1</td>
<td>25.3</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>188</td>
<td>193</td>
<td>197</td>
<td>200</td>
<td>214</td>
</tr>
<tr>
<td>Tenure/Tenure Track Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>% Terminal Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>93</td>
<td>82</td>
<td>81</td>
<td>85</td>
<td>96</td>
</tr>
<tr>
<td>Master’s</td>
<td>30</td>
<td>34</td>
<td>45</td>
<td>27</td>
<td>34</td>
</tr>
<tr>
<td>Doctorate</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>

* ACT changed its scoring in 1990. Scores reported beginning in fall 1990 are enhanced.

The School of Pharmacy consists of the departments of Health Services Administration, Medicinal Chemistry, Pharmaceutical Chemistry, Pharmacology and Toxicology, and Pharmacy Practice. Two undergraduate programs leading to the B.S. or the Pharm.D. degrees are offered. Three departments—medicinal chemistry, pharmaceutical chemistry, and pharmacology and toxicology—offer graduate training leading to the M.S. and Ph.D. degrees, and two—health services administration and pharmacy practice—offer M.S. degrees.
The school offers a program of undergraduate education for qualified 
students who will serve society as pharmacist practitioners. The school is continuing 
expansion and development of the Pharm.D. undergraduate program with the 
objective of making this program the sole undergraduate degree offered by the year 
2000. The transition will require $500,000 to $1 million in additional funding. KU is 
developing a fee for pharmacy students that will help the school meet its new 
financial needs (see Chapter II, Supplemental Fees and Tuition).

Both the B.S. (164 credit hours) and Pharm.D. (198 credit hours, an 
undergraduate professional degree) degrees are fully accredited by the American 
Council on Pharmaceutical Education. The curriculum for both degrees is similar, 
but the Pharm.D. degree requires a sixth year. The professional portion of the 
program consists of significant 
course work in the three pharmaceutical science departments: pharmacology and 
pharmacology and toxicology, pharmaceutical chemistry, and medicinal chemistry. Traditional lecture 
and lab courses, clerkships, and externships are offered by the Department of 
Pharmacy Practice. In addition to its degree programs, the school provides 
postgraduate professional continuing education programs for pharmacy 
practitioners and others within the pharmaceutical industry.

The school’s faculty and graduate programs are, documentably, among the 
nation’s best. Between 1987 to 1992, faculty members wrote more than 650 books, 
book chapters, and scientific articles. They received $26.24 million in grant awards.
Included among these were three National Institutes of Health training grant awards for predoctoral training in medicinal chemistry and pharmacology, biotechnology, and cancer pharmaceutical analysis.

Four school faculty are university distinguished professors. Between 1987 and 1992, four were elected fellows of the American Association of Pharmaceutical Scientists and two, fellows of the American Association for the Advancement of Sciences. Four received prestigious international awards; four, major awards from national societies in their disciplines; four, special research awards from the NIH, NSF, the Sloan Foundation, and the Eli Lilly Corporation; three, universitywide awards for research excellence.

Faculty participate actively in their fields. They belong to more than 60 professional organizations and learned societies. Over a five year period, they served on more than 120 review panels for the NIH, ten for the National Science Foundation, ten for the VA Merit Review, and three for the National Research Council. They chaired review panels for NIH and NSF. They served on professional accreditation teams that visited more than 30 universities.

All faculty teach at the undergraduate level, and each member's performance in each course is evaluated by the students. The average student evaluation score for a professor over the past five years is, on a scale of one to five, 4.3. In the past five years, two faculty were finalists for the Honor for Outstanding Progressive Educators Award.
The undergraduate programs receive approximately 400 applications for admission annually. Each year about 95 students are admitted to the B.S. in pharmacy program and a growing number to the Pharm.D. program (currently, 25 per year).

The graduate programs receive approximately 360 applications annually for admission to the M.S. and Ph.D. programs. About 40 graduate students are admitted.

The undergraduate professional students have excellent ACT composite scores; the graduate students admitted have undergraduate GPAs averaging around 3.4 and GRE scores (combined) of approximately 1,300. Many undergraduates receive scholarships from the school. Of the graduate students, 15 predoctoral students received nationally competitive fellowships in the 1987 to 1992 period.

Strong ties exist between the pharmacy school and other schools, departments, and external constituencies. Several graduate courses are offered across departments and schools, e.g., Chemistry of the Nervous System, Pharmaceutical Biotechnology, Clinical Drug Analysis of Anti-cancer Agents. Service courses in public administration, business, law, nursing, and sociology are also offered.

Many faculty serve on the boards of local hospitals, treatment facilities, or biotechnology and pharmaceutical companies. Two faculty members have served
on state committees for economic development, and several do consulting for national and international pharmaceutical companies.
The School of Social Welfare offers three degree programs. Two degrees, the B.S.W. and the M.S.W., are professional degrees accredited every seven years by the Council on Social Work Education. The school just completed a reaccreditation site visit and anticipates receiving full accreditation in June 1994. The Ph.D. program prepares students for research and academic careers.

The B.S.W. and M.S.W. programs emphasize a strong liberal arts background. Seventy-five of the 124 credit hours required in the B.S.W. program are spread over a broad range of general education courses. A strong liberal arts background is required of master’s students. In the two programs, students take core courses in research, social policy, human and organizational behavior, and social work practice.
Running throughout the curriculum of all three programs is content on cultural diversity that prepares students to respect human differences. Also integrated into the school's curriculum is an ongoing critical examination of the value base that undergirds the profession. Efforts are made to keep classes small enough to enable dialogue between faculty and students. In each of the professional degree programs, students work individually with a practicum instructor.

The programs prepare students for professional practice, administration, or research. The school's four primary roles, congruent with the KU mission, are to provide high quality graduate and undergraduate social work education, serve as a national leader in producing social welfare scholarship, help improve Kansas social services, and further the development of a research-education-service model that links the school with the creation and study of innovative social service delivery models.

The faculty is exceptionally productive. Externally funded research has increased more than 500 percent since 1989, reaching $1.95 million in FY 1993 with a projection of $2.8 million in FY 1994. Two recent studies in major social work journals have ranked the school fourth and fifth nationally among schools of social work (Journal of Social Work Education 1990 and Social Work, 1994). Faculty serve on the editorial boards of major journals and on national professional boards and committees, and they present at national meetings.

The school makes continuous efforts to recruit, retain, and promote minority
faculty. Currently, 21 percent of our faculty (one assistant professor, three associate professors, and one full professor) are people of color.

The school's commitment to teaching is tangibly recognized in its double-weighing of teaching in the merit review formula. For the past five years, superior teaching has been recognized through the annual Chancellor's Award for Excellence in Teaching in the School of Social Welfare. A senior faculty member was the 1993 recipient of the Honor for Outstanding Progressive Educators Award.

The pass rate of our students on the state social work licensing exam is an outcome of that commitment; in 1992, 92 percent of B.S.W. and 95 percent of M.S.W. graduates passed the exam.

There is strong demand for both the undergraduate and graduate programs. Demand for professional social workers continues to exceed the number of graduates, with Department of Labor projections indicating continued high demand through the year 2000. Most of our Ph.D. graduates assume academic positions before or shortly after graduation.

The school carries out its commitment to vulnerable populations through an agenda that emphasizes community-based research, service, and training. Over the past 10 years, the school has developed a strengths-based case management approach that has achieved international recognition for keeping people with mental illness out of institutions. A parallel development has been the school's collaboration with the state's legislative and executive branches in developing and
implementing public policy that supports community, rather than institutional, services.

Much of the school's external funding supports this agenda. The school, in cooperation with the state departments of Corrections and of Social and Rehabilitation Services, along with community mental health centers, has its B.S.W. and M.S.W. students providing services, doctoral students providing on-site supervision and research assistance, and faculty providing direction and oversight. Afterwards, research products are made available to the profession.

The school's commitment to establishing a multicultural learning environment was demonstrated in 1989 with creation of a privately funded position of minority recruiter. Minority enrollment in the M.S.W. program has increased by 12 percent and in the B.S.W. program by 17 percent. The school has also developed a working relationship and articulation agreements with Haskell Indian Nations University to assure a smooth transition of Native American students into its B.S.W. program. Financial support for minority students has been bolstered through alumni fund-raising designated for minority students, and financial assistance for Native American students has been secured through the Indian Child Welfare Act and the KU Student Senate Equal Opportunity Fund.

As a result of the 1992 Program Review, an additional tenure-track position will be created in 1995. The school also affirmed its commitment to prepare students for social work practice in a multicultural society, and a Native American
social work scholar will be joining the full-time faculty in fall 1994. The school has identified four goals it aspires to achieve by the year 2000. The first is to acquire external funding equal to the amount of state base funding (and it is moving quickly toward that goal). The efforts of our faculty should enable us to achieve our second goal, that of ranking among the top 10 percent of all social work schools in national publication. It appears that the combined efforts of our minority recruiter, private and public contributions, and faculty are helping us achieve our third goal, that of increasing minority enrollment beyond the current figure of 10 percent. The only goal that may be difficult to attain is our desire to add two faculty positions in order to meet the statewide demand for M.S.W. practitioners.

.3. The Graduate School

The Graduate School is responsible for graduate education on the Lawrence campus and the masters and Ph.D. programs at the Medical Center. The graduate faculty, the graduate student body, and the administrative organization, composed of the office of the Graduate School and the graduate divisions of the College and professional schools, constitute the organizational structure of the school.

Administration of graduate education at KU is decentralized. Management of graduate programs resides in the graduate divisions. Responsibilities include admitting and retaining students, maintaining student files, administering degree examinations, and granting exceptions to Graduate School regulations. Program
oversight for the Medical Center programs is delegated to the Office of Graduate Studies in Kansas City.

Policy development, general oversight, and quality control responsibilities are vested in the Office of the Vice Chancellor for Research, Graduate Studies, and Public Service and the Graduate School governance structure. Within their purview is approval of new programs, approval and periodic review of graduate faculty appointments, authorization to chair dissertation committees, and program review.

The Graduate Council, composed of representatives from each graduate degree granting department or program, sets and maintains major policies regarding graduate education. The office of the Graduate School recently initiated a program of graduate student assessment (described later in this chapter). It also is developing a new review system for graduate programs, based on data available centrally and structured to build on the results of the 1992 Program Review. In fall 1993, a committee was appointed to review the academic experience of graduate students. It is anticipated that their report will feed into the revised review system. The Executive Committee of the Graduate Council has been active in both the assessment and review initiatives.
International Studies

KU made a major commitment to international education in the 1950s, but its efforts were largely decentralized until the Center for International Programs was established in 1983 as a unit within the Office of Research, Graduate Studies, and Public Service. The center sought external funding in support of international projects, generating more than $2 million in its first five years. In February 1989, an Office of International Studies and Programs was created under the direction of the Office of Academic Affairs. For the past five years, the international programs center and international studies office have shared staff and other resources to carry out an enlarged mission of internationalizing KU.

After 1992 Program Review, KU strengthened its commitment to international education. The university is envisioned as a center for international study and research, aspiring to prepare students for leadership roles in the global community and serving as a resource to the state in economic development. The international center and office work with faculty, students, administrators, and external constituent groups in accomplishing their several goals.

From the 1992 Program Review emerged several other recommendations: that the center and office report solely to the vice chancellor for academic affairs; that several new faculty positions be added to KU area studies programs, including a Regents professorship in international political economy; that submission to the Regents of proposals for B.A. and M.A. degrees in international studies occur upon
approval of the degrees by the appropriate academic assemblies; and that Medical Center and Lawrence campus international activities be coordinated.

The center and office are responsible for the Office of Study Abroad, the Applied English Center, and the research and programmatic aspects of area studies centers and programs for Africa, East Asia, Latin America, and Russian and East Europe. The Office of Study Abroad sends more than 700 students abroad each year. The Applied English Center provides English-language instruction to more than 400 students a semester and operates a special program with Kanagawa University in Japan.

All four area studies programs were designated National Resource Centers in April 1994. The programs in African and African-American Studies, East Asian Studies, Latin American Studies, and Russian/East European Studies have received funding from the U.S. Department of Education Title VI program. Only a handful of universities are funded nationally in as many as four areas. A fifth area studies program, Western European Studies, has been proposed by a universitywide committee.

The KU Language Across the Curriculum program (KULAC) has been supported by both the National Endowment for the Humanities and the U.S. Department of Education. Students study disciplinary courses in a target foreign language. Selected courses in history, business, anthropology, and architecture are taught in French, German, Russian, or Spanish.
Several departments have introduced new international courses. Examples include environments and cultures (Architecture 655), Varieties of Human Experience (Anthropology 160), Introduction to Intercultural Communication (Communication Studies 246), International Finance (Business 829), and Comparative and International Management (Business 869).

Activities of the center and office include the following: an annual faculty seminar on an international topic; development of new international courses or modules; sponsorship of international visitors and lecturers; coordination of several speaker and topical series, including Worldview, TGIF (Think about Global Issues on Fridays), Fulbright Forum and related programs; Country Week activities related to particular nations; development of and coordination with KU alumni chapters overseas; relationships with overseas universities for the purpose of faculty and student exchanges and collaborative research; coordination of Fulbright notices and awards; supervision of 12 direct exchange graduate scholarship programs with European universities; maintenance of a faculty database showing discipline, country, and language expertise; coordination of Phi Beta Delta activities, the international honorary society; sponsorship of an annual International Careers Conference; outreach to regional schools and businesses; and a Global Achievement program for regional high school students.

Through the years, budgetary support for the center and office has increased dramatically. External funding now reaches about $1 million per year. A primary
The objective is to seek external funding for faculty development and for programmatic and student support from federal agencies, foundations, corporations, and individuals. The center and office Board of Advisers links with the private sector to stimulate international economic development.

.c. Academic Programming for Professionals: Regents Center and Capitol Center

The KU Regents Center on the Edwards Campus in Overland Park and the Capitol Center in Topeka represent the university's efforts to meet the needs for professional education in neighboring urban areas. KU's commitment to strengthening these offerings is indicated in the statements of aspirations for the Lawrence campus; specific information about planning is included in the section on Opportunities for the Next Decade of Chapter VII.

.c2. The Regents Center: The Regents Center, a graduate education center for greater Kansas City, offers 11 master's degree programs. Degree programs include the following: master of architecture (management/practice option), master of science in architectural engineering (construction management), master of science in engineering management, master of business administration, master of arts and master of science in education, master of science in civil engineering, master of health services administration, master of science in journalism (management emphasis), master of public administration, and master of
social work. The engineering management program at KU is based at the Regents Center. In summer 1994, the Department of Educational Policy and Leadership moved its Ed.D. program to the center to train individuals for administrative leadership positions. Plans for developing additional professional programming are described in Chapter VII.

About 1,500 students take at least one course during each of the fall and spring semesters, and from 500 and 800 complete at least one during the summer. Center courses are staffed by full-time Lawrence campus faculty. The center has 26 classrooms, three computer labs, and a library. Its new building opened in spring 1993, replacing one KU had purchased in 1975. All facilities have contemporary telecommunications, audio-visual, and computer equipment. The labs and library are linked via computer network to the main campus. Several classes a semester originating on the Lawrence campus are received at the center through microwave.

Like the Regents Center, the Capitol Center in Topeka serves students who are employed full-time or have family obligations. Classes are held weekly in the late afternoon or early evening. The center was founded in 1974 to offer a full-service graduate program leading to the master of public administration degree. Since its inception, over 250 students have earned this degree: Many of them now hold senior positions in state government.

Today the center also offers graduate courses from the School of Social
Welfare, the Department of Civil Engineering, and other units. The Department of Civil Engineering, jointly with the Kansas State University Department of Civil Engineering, began offering a master's degree program through the center in fall 1987.

In addition to formal course offerings, the Capitol Center provides a variety of other services including publication of monographs on issues related to state government, scheduling of workshops and conferences for specific audiences, provision of consulting services, and delivery of seminars for state government administrators. The center is a formal partner with the Kansas Division of Personnel Services in the planning and implementation of a certified public manager training program for state employees. The first class of 20 students began the program in January 1993.

**Academic Programs: Medical Center Campus**

**School of Allied Health**

The School of Allied Health prepares students for positions in allied health careers. Five of the programs lead to bachelor of science degrees: those in cytotechnology, health information management, medical technology, occupational therapy, and respiratory therapy. Four others in dietetics and nutrition, hearing and speech, nurse anesthesia, and physical therapy lead to master's degrees, doctorates, or both.
All of the programs are accredited by their respective agencies. (Appendix 9 is a list of accreditations for the Medical Center.)

The student body is well-qualified, with entering undergraduate GPAs in the 2.8 to 3.5 range, and entering graduate student GPAs in the 3.3 to 3.5 range. The ratio of applicants to acceptances is about three to one. Of the 510 students enrolled in the 1993-94 academic year, 181, or 35.5 percent, were minority or disadvantaged students.

The 12-month cytotechnology program is preceded by three years of pre-clinical work at the Lawrence campus or another accredited college or university.

The 12-month health information management program is preceded by three years of college study at the Lawrence campus or another accredited college or university or by completion of a baccalaureate degree from an accredited college or university. Graduates may apply to take the national registry exam of the American Health Information Management Association.

The 12-month medical technology program is a clinical program preceded by three years of preparatory work at the Lawrence campus or another accredited college or university. Those who already hold a baccalaureate degree and meet program requirements receive a second bachelor’s degree. Graduates are eligible to take a national certification exam.

The occupational therapist program requires five semesters at the Medical
Center campus and nine months of clinical fieldwork. There are 51 prerequisite credit hours required in addition to a GPA of 3.0 or above. Graduates may sit for the certification exam of the American Occupational Therapy Certification Board. The post-professional program is designed for part-time or full-time students who have obtained a bachelor’s degree in occupational therapy.

The respiratory care program requires two years of study at the Medical Center. Applicants must have earned 60 credit hours on the Lawrence campus or at another credited college or university. Graduates can sit for the respiratory care national registration examination.

The dietetics and nutrition program emphasizes clinical nutrition, with advanced study and research. There are two tracks leading to an M.S. in dietetics and nutrition. The first is for registered dietitians or those who are registry-eligible; the second is for students who have not completed an internship or a supervised practice program.

The Department of Hearing and Speech and the Lawrence campus Department of Speech-Language-Hearing Sciences and Disorders together form the Intercampus Program in Communicative Disorders. The program offers the M.A. in speech-language pathology, M.A. in audiology, Ph.D. in speech-language pathology, and Ph.D. in audiology. By itself, the Medical Center hearing and speech department offers the M.S., Ph.D., or Ed.D. in deaf education.

The nurse anesthetist program, which leads to an M.S., is 30 months in
length and requires applicants to have a bachelor’s degree, a GPA of 3.0, and licensure as a registered nurse, plus two years of critical care practice. Graduates may take a certification exam of the American Association of Nurse Anesthetists.

The Department of Physical Therapy Education offers a professional M.S. degree program. The department also offers a post-professional M.S. degree program, open only to licensed physical therapists.

Placement results for school graduates is excellent. About 98 percent of graduates have positions at the time they graduate, and about 95 percent pass their respective board/licensure exams at the first sitting.

School faculty currently have $1.5 million in external grant awards.

School of Nursing

The School of Nursing awards three degrees: a bachelor of science, a master of science, and a doctor of philosophy in nursing. The school is sited at the Medical Center, but some students also enroll for courses on the Lawrence and Regents Center campuses. There are also two outreach sites, Topeka and Pittsburg (though the latter site is being phased out, as will be explained shortly).

The school is fully accredited by its national accrediting body, the National League of Nursing. Our regular eight-year accreditation is due to be renewed in spring 1995.

In 1994, the school was identified by U.S. News and World Report as among
the top 25 public schools of nursing. Several faculty members have won university teaching awards, and students and graduates, polled periodically about their education, are overwhelmingly positive. During the 1992 Program Review, it was determined that between 1989 and 1991, nursing faculty had authored 14 books, 67 chapters, and 164 articles. In addition, they had made 206 scholarly presentations. In FY 1994, the school has $1.9 million in external grant funding.

Each fall, 150 students are admitted as juniors to the bachelor's program, which they can complete in two years of full-time study. The program admits students with an associate degree in nursing from a community college or a diploma from a hospital nursing program. They are enrolled in one of two subcomponents of the bachelor's program: the B.S.N. Completion Program or the first portion of the RN to M.S. Competition for admission to the bachelor's program is keen; there are typically three times as many applications as openings. The mean GPA for students admitted in fall 1993 was 3.46, the average age, 28. Ten percent of those admitted were minorities, 10 percent men.

The bachelor's program requires 125 credits, 62 in arts and sciences completed prior to enrollment in the school, 63 in nursing at the Medical Center. On average, 23 undergraduate classroom courses are offered each semester, eight of which have concurrent clinical lab courses. There are as many as seven clinical sections per clinical lab course offered in one semester. Four clinical courses are offered in the summer. Upon completion of the bachelor's program, students
(excluding those who are already RNs) may sit for the national registered nurse licensing exam.

The master’s program has 235 students enrolled at all program sites. A Pittsburg State University master’s program in nursing was approved by the Board of Regents to be launched in fall 1993, so the KU outreach site will be phased out. Majors available in the program are clinical nurse specialist (adults, pediatrics, women's health, community health, and psychiatric/mental health); primary care family nurse practitioner (FNP); nursing education; and nursing administration.

The clinical nurse specialist and nurse educator majors require 36 credits and can be completed in three semesters of full time study. The nursing administration major is 48 credits, the family nurse practitioner, 46. Most of the master’s students are practicing nurses, so they generally take four to five years to complete the program, though availability of special scholarships for FNP students has shortened their stays. All the majors require some type of practicum, either clinical or functional (teaching or administration). The school has contracts with 105 clinical agencies for the practicums. Agencies are selected by faculty to meet the student’s learning needs.

The FNP program is a cooperative effort of the KU nursing school, Wichita State University’s Department of Nursing and Fort Hays State University’s Department of Nursing. FNP courses are offered by compressed interactive video so expertise can be shared and resources conserved. Students complete core
courses at and receive the degree from their own schools. This program is jointly funded by public and private sources. The purpose is to prepare nurses for primary care service in rural and underserved areas of Kansas.

Thirty-one students are currently enrolled in the doctoral program in nursing, and six to eight are typically admitted each year. Enrollment is directly related to the availability of faculty research activities. The doctoral program in nursing helps prepare graduates to serve on faculties; to conduct independent research and other scholarly endeavors; to generate and expand theoretical, empirical, and philosophical bases for nursing practice; to lead the profession; and to interpret nursing to society.

A student can complete the program in three years of full-time study. Since little funding for pre-doctoral study is available and most students must remain employed, students generally take six years of part-time study to complete the program.

.School of Medicine

The School of Medicine offers programs leading to the doctor of medicine degree, the doctor of philosophy in one of six basic science disciplines, the master of arts or master of science in one of the six, and the master of public health degree. Certificates of completion of postgraduate medical residency programs in graduate medical education are also presented. The school's programs are based at the
Kansas City campus and in Wichita. Medical students and residents also have educational experiences at the Veterans Administration medical centers, community hospitals, outpatient clinics, and private practices. The school is accredited by the American Association of Medical Colleges (AAMC) and has full accreditation until 1997.

Each year, 175 students out of some 2,800 applicants are admitted to the four-year M.D. program. Of the class that entered in August 1993, 43 percent were females and 15 percent were minorities.

All students spend their first two years on the Kansas City campus completing the basic science courses as well as some introductory clinical science work. Students then progress into the clinical portion of the program, involving required and elective clerkship rotations of four-week to twelve-week duration in Kansas City or Wichita clinical departments. Fifty students in each of the third and fourth years complete their clinical work in Wichita. The M.D. program is fully accredited by the Liaison Committee on Medical Education.

An M.D. degree is prerequisite for all graduate medical education programs, which range in length from one to five years. The school sponsors 38 residency programs with 400 residents in Kansas City and eight programs with 240 residents in Wichita. Each program is responsible for recruiting its residents. Most participate in the National Resident Matching Program, which facilitates the matching of applicants with programs. Each program is reviewed by an external
residency review committee for that specialty, with all committees functioning under the auspices of the Accreditation Council for Graduate Medical Education. All institutions that sponsor graduate medical education programs must meet ACGME criteria.

The M.A., M.S., Ph.D., and M.P.H. degrees are offered through the KU Graduate School, although program oversight is delegated to the Office of Graduate Studies in Kansas City. The M.A., M.S., and Ph.D. programs are offered by the departments of Anatomy and Cell Biology; Biochemistry and Molecular Biology; Microbiology, Molecular Genetics, and Immunology; Pathology & Laboratory Medicine; Pharmacology, Toxicology & Therapeutics; and Physiology. Each department offers a program for a combined M.D./Ph.D. degree. In 1994, 18 students were enrolled in the combined-degree program and about 100 in the master's and doctoral programs.

The M.P.H. degree program, a new offering of the Department of Preventive Medicine, is a joint program between Wichita State University and the Medical Center campuses in both Kansas City and Wichita.

c. Assessment of Undergraduate Education: Lawrence Campus

The Comprehensive Plan for the Assessment of Undergraduate Education at the University of Kansas specifies methodologies and schedules for the continuing assessment of undergraduate programs (Appendix 10). This plan was
approved by the Kansas Board of Regents in January 1989. Four components form the core assessment of undergraduate education: assessment of education in basic skills (math and English); assessment of general education; assessment of education in the major; and a goal attainment survey. The chart on the following page depicts the interrelationship of these elements.
Together, these four areas generate information that allows the faculty of each program to determine the extent to which their efforts are reflected in student knowledge and understanding. This comprehensive approach to assessment assists KU in meeting its responsibility for accountability, program improvement, and communication of goals and philosophy. Undergraduate education assessment on the Lawrence campus is administered by an associate vice chancellor for academic affairs.

A synopsis of assessment in basic skills, general education and assessment in the major follows. The document Report on the Assessment of Undergraduate Education (Exhibit 5) provides a detailed analysis of the total assessment program including the initial goal attainment study.

Assessment of Education in Basic Skills. Assessments of basic skills in English and mathematics are conducted each year. Results show that the overwhelming majority of students who complete English 101 continue to demonstrate competency in basic language skills. Substantial changes in our remedial and college algebra courses have produced profound improvement in basic mathematical skills. Now far more of the initial enrollees complete these courses successfully than in the past.

*English.* Assessment of basic skill development in English is based on the College’s long-standing practice of continual assessment of performance in English 101. Prior to the initiation of the new College curriculum in 1987, 88 percent of new
freshmen enrolled in English 101 during their first semester at KU. This has now increased to 100 percent who either enroll in English 101 or transfer an equivalent course to KU. Students continue to demonstrate their mastery of basic English literacy by their high pass rate on the English 101 common final exam. Ninety percent of English 101 students successfully complete the course. Grade distribution data show very little change from year to year.

### English 101 Grade Distributions

<table>
<thead>
<tr>
<th>Grade</th>
<th>Fall 1987</th>
<th>Fall 1988</th>
<th>Fall 1989</th>
<th>Fall 1990</th>
<th>Fall 1991</th>
<th>Fall 1992</th>
<th>Fall 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8%</td>
<td>6%</td>
<td>7%</td>
<td>5%</td>
<td>6%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>B</td>
<td>32%</td>
<td>30%</td>
<td>31%</td>
<td>32%</td>
<td>33%</td>
<td>33%</td>
<td>34%</td>
</tr>
<tr>
<td>C</td>
<td>43%</td>
<td>47%</td>
<td>42%</td>
<td>43%</td>
<td>41%</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>D</td>
<td>7%</td>
<td>8%</td>
<td>10%</td>
<td>9%</td>
<td>7%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>F</td>
<td>10%</td>
<td>9%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>8%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The English Department works to ensure that English 101 remains a high-quality course for developing college-level literacy in English. The early and continuous enrollment policy in English requires students to complete freshman English courses at the outsets of their academic careers. The policy ensures that all students master English composition during their first years at KU, prior to taking upper division and major courses.

**Mathematics.** Given concerns regarding low retention and completion rates in the basic mathematics courses (Math 002 and Math 101), a special assessment committee of faculty outside the Department of Mathematics was charged during
the 1988-89 academic year with reviewing the program of instruction, assessing its effectiveness, and recommending appropriate changes for these courses. Although the approach to instruction was viewed as pedagogically sound, significant revisions were recommended in both courses. Math 002 and Math 101 were revised beginning in fall 1990.

Stricter placement criteria, changes in the instructional format, and improvements in course content have resulted in marked improvements in student performance in both Math 002 and 101. The revisions produced substantial improvement in basic mathematical skills. A far larger proportion of initial enrollees now successfully complete these courses. The proportion of students passing the courses with grades of C or better increased sharply and the proportion of students withdrawing from the courses dropped significantly. These changes are reflected in the reports below.

### Math 002 Grade Report

<table>
<thead>
<tr>
<th>Grade</th>
<th>Fall 1989</th>
<th>Spring 1990</th>
<th>Fall 1990</th>
<th>Spring 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4%</td>
<td>5%</td>
<td>21%</td>
<td>13%</td>
</tr>
<tr>
<td>B</td>
<td>7%</td>
<td>7%</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>C</td>
<td>27%</td>
<td>17%</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>D</td>
<td>16%</td>
<td>12%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>F</td>
<td>34%</td>
<td>30%</td>
<td>16%</td>
<td>28%</td>
</tr>
<tr>
<td>W</td>
<td>12%</td>
<td>29%</td>
<td>12%</td>
<td>14%</td>
</tr>
</tbody>
</table>
For Math 002, the proportion of students earning a grade of C or better was 38 percent in fall 1989 but jumped to 66 percent after the changes were made in Fall 1990. For Math 101, the proportion earning C or better jumped from 50 percent in fall 1989 to 67 percent in fall 1990. Drop rates also declined. Before the revisions, Math 002 had a drop rate over the academic year of 21 percent; afterwards, only 13 percent of those enrolled dropped the course. Math 101’s drop rate fell from 22 percent to 14 percent. Failure rates also declined in both courses. Because testing and grading practices remained unchanged, it is clear that the revisions to the courses significantly improved student learning. Annual assessment data since Spring 1991 supports the pattern documented in the table above.

**Math 101 Grade Report**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Before Course Revision</th>
<th>After Course Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 1989</td>
<td>Spring 1990</td>
</tr>
<tr>
<td>A</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>B</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>C</td>
<td>25%</td>
<td>23%</td>
</tr>
<tr>
<td>D</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>F</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>W</td>
<td>20%</td>
<td>24%</td>
</tr>
</tbody>
</table>

**Assessment of General Education**: General education assessment is conducted on a two-year cycle. Using a semi-structured interview format, faculty teams assess how thoroughly a stratified sample of students had mastered general
education goals in 11 categories. Results for 1991 and 1993 indicated that virtually all student participants demonstrated achievement of all general education goals, with slight improvement noted between the first and second assessments. Faculty ratings in 1993 of student understanding in the 11 category areas were consistent with the ratings of 1991.

The methodology used to assess general education is based on the goal of bringing faculty from across the university together to examine the educational process in "exit interviews" of a sample of graduating seniors. The assessment strategy coupled the exit interview with the student's self-appraisal of his/her mastery of key goals and the student's response to the goal attainment survey. In several cases, this assessment led faculty to effect changes within their own disciplines based upon their experience as participants in the assessment process and feedback transmitted to the College and individual professional schools.

Initiatives that center on issues of undergraduate education, such as the creation of a Freshman/Sophomore Experience Committee, have been prompted by these general education assessment activities as well as by information gained from other evaluations. Such focused inquiries grow out of and supplement KU's ongoing efforts in general education.

<table>
<thead>
<tr>
<th>General Education Mean Faculty Ratings, 1991 and 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

78
<table>
<thead>
<tr>
<th>Goal</th>
<th>1991 Mean</th>
<th>N</th>
<th>1993 Mean</th>
<th>N</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acquire/convey ideas</td>
<td>6.08</td>
<td>96</td>
<td>6.22</td>
<td>98</td>
<td>+.14</td>
</tr>
<tr>
<td>2. Understand US history</td>
<td>5.04</td>
<td>96</td>
<td>5.15</td>
<td>98</td>
<td>+.11</td>
</tr>
<tr>
<td>3. Appreciation of diversity</td>
<td>6.14</td>
<td>96</td>
<td>6.39</td>
<td>98</td>
<td>+.25</td>
</tr>
<tr>
<td>4. Social issues</td>
<td>6.10</td>
<td>96</td>
<td>6.27</td>
<td>96</td>
<td>+.17</td>
</tr>
<tr>
<td>5. Other cultures</td>
<td>4.98</td>
<td>95</td>
<td>5.51</td>
<td>97</td>
<td>+.53</td>
</tr>
<tr>
<td>6. Understand technology</td>
<td>5.47</td>
<td>94</td>
<td>5.69</td>
<td>98</td>
<td>+.22</td>
</tr>
<tr>
<td>7. Ethics/behavior</td>
<td>6.00</td>
<td>96</td>
<td>6.44</td>
<td>97</td>
<td>+.44</td>
</tr>
<tr>
<td>8. Critical thinking</td>
<td>5.61</td>
<td>96</td>
<td>5.83</td>
<td>98</td>
<td>+.22</td>
</tr>
<tr>
<td>9. Appreciation of arts</td>
<td>5.38</td>
<td>95</td>
<td>5.30</td>
<td>98</td>
<td>-.08</td>
</tr>
<tr>
<td>10. Innovative thinking</td>
<td>5.09</td>
<td>96</td>
<td>5.57</td>
<td>98</td>
<td>+.48</td>
</tr>
<tr>
<td>11A. Social Science methods</td>
<td>4.70</td>
<td>80</td>
<td>4.92</td>
<td>92</td>
<td>+.22</td>
</tr>
<tr>
<td>11B. Humanities methods</td>
<td>4.33</td>
<td>82</td>
<td>4.82</td>
<td>92</td>
<td>+.49</td>
</tr>
<tr>
<td>11C. Hard Science methods</td>
<td>4.85</td>
<td>85</td>
<td>5.01</td>
<td>96</td>
<td>+.16</td>
</tr>
</tbody>
</table>

1Rating instructions to the faculty note that "a 3 represents little attainment, 5 represents average attainment, and 0 represents extraordinary attainment" of the goals of general education. Further, raters are asked to "use the same criteria to assign a '5' that you use to assign a grade of 'C' in one of your undergraduate courses."

2N is the number of students; each student was rated by two or three faculty members.

Assessment in the Major Field: Because meaningful change in undergraduate study begins at the departmental level, the universitywide assessment plan stipulates that departments and schools carefully evaluate the results of assessment and initiate appropriate action. In spring 1991, each department and school developed plans for assessment of its majors. Plans included brief descriptions of the types of internal and external methods used, the interval between future assessments, and any changes that had resulted from the initial assessment process. At a minimum, each unit conducts an internal assessment every third year, an external one every sixth year. Units report in detail on the results of assessment and document the impact of assessment results on the
quality of their undergraduate programs during the regular program review cycle.

Methods of assessment vary widely across departments. Among the most popular internal assessment methods is the use of the capstone course. Many departments administer locally developed tests of factual knowledge. Others administer surveys or conduct exit interviews or focus groups with seniors about their program. External assessment methods also vary across departments. Departments that view their mission as preparing students for graduate school often use externally developed tests of achievement such as the Graduate Record Examination (GRE), while those viewing entry into professions as their primary goal rely on surveys of employers of graduates or success rates on licensing exams.

Few departments reported changes resulting from assessment activities conducted during spring 1991. Most departments that report changes had been conducting formal assessment activities prior to implementation of the universitywide assessment plan. As departments repeat and refine their assessment activities, the baseline data accumulated during 1991 will become useful to them.

c. Assessment of Undergraduate Education: KU Medical Center

The KU Medical Center is an upper-division institution. As such, its assessment activities concentrate upon the specialized training available in each of its six upper-division undergraduate programs. Currently, assessment comes from
both external and internal sources. Externally, programs must satisfy the
requirements of state and national accrediting bodies and also provide a solid base
for professional licensing and acceptance into graduate programs. Internally,
programs conduct surveys of their faculty, students, and alumni.

The Medical Center Assessment Plan provides the structure for these
assessment activities (Appendix 11). The plan was formulated by a Medical Center
Assessment Committee comprising students and faculty who followed the principles
of the Lawrence campus assessment committee. Plans for both campuses were
approved by the Regents in January 1989.

The plan consists of three components:

! existing activities to assess achievement in the major field, including
  licensure examinations;

! a program of regular surveys to examine the perceptions of students, alumni,
  graduate advisers, and employers regarding both the content and the
  process of the educational programs; and

! the exploration of other measures that may be used to provide more
  information to aid in the processes of curriculum improvement, goal
  attainment, and program review.

All six undergraduate programs participate in the assessment process.

Decisions about what to assess and how to assess are made by those with relevant
experience; thus, assessment of majors occurs at the department level and
assessment of curricula at the school level. Existing assessment activities were incorporated as parts of the plan in order to ensure that the requirements of state and national accrediting agencies are met and that students are prepared for professional licensure and admission to graduate education programs. Integration of these activities into the comprehensive assessment plan provides a more coordinated means of reporting the results.

As noted above, at this stage, the assessment plan has two focuses: the external gauges, such as the outcome of licensure exams, that monitor achievement in the major field; and surveys that assess the perceptions of faculty, students, and recent graduates regarding both the content and process of educational programs. Both formative and summative types of evaluation are included in the plan. In the future we will explore other measures that could provide information useful to curriculum improvement, goal attainment, and program review. As other measures are explored, the content of existing measures will be reviewed so that the emerging assessment program is consistent and integrated.

.c. Graduate Program Assessment:

Lawrence and Medical Center Campuses

In the fall of 1993, a subcommittee of three faculty members from the Graduate Council Executive Committee designed a graduate program assessment plan (Appendix 12). Drawing on the experience of its members, the subcommittee conducted a pilot study involving five units. Afterwards, it determined a set of
guidelines for all graduate programs to follow. In February 1994, all units were required to construct an assessment program for each of their degrees; the programs were to be reported upon to the Graduate School by April 1. Almost all of the programs now are available for examination.

The Executive Committee has examined and offered feedback on the programs submitted. By spring 1995, all units will be expected to report to the Graduate Council the first assessment results and indicate how they will affect program planning.

The assessment plans submitted share a number of common factors. Nearly all plans rely on admissions data and placement data to assess the quality of students on entry and their success after completing the program, respectively. Most of them also rely on retention, attrition, and progress-toward-degree information to track program success. Most units have constructed exit questionnaires and interviews to determine student perceptions and student satisfaction. A large number have developed questionnaires to be mailed periodically to their alumni.

The assessment of graduate student performance and competence is, at this stage, heavily reliant on current and traditional forms of evaluation: critiques of scholarly writing, examinations in courses, and oral and written examinations for degrees. Several of our stronger units have suggested means of modifying these traditional approaches so as to obtain clearer insights and a better way of tracking outcomes. (Examples include more systematic and cross-course reviews of student
writing, as well as improvements in doctoral examinations.) Still other programs, such as Engineering Management and Educational Psychology and Research, have elaborate plans for assessing performance. Examples include employment data; regular follow-up questionnaires and telephone interviews; employer surveys; and the study of correspondences among admission, performance, and placement data.

.c. Principal Research Programs: Lawrence Campus

The Office of Research, Graduate Studies, and Public Service administers research and service support units. It also administers all KU grants and contracts and encourages scholarly activities. In the last decade, the sector has worked to coordinate services so that every academic subcommunity at KU has access to the infrastructure necessary to assist in proposal development and administration. It has also developed and modified special programs to aid and stimulate research (see Research Productivity, below). In general, its policy has been to focus resources on areas of strength, ones that show promise of being national and international leaders.

Each of the research and service programs was evaluated as a part of the non-instructional program review conducted during 1992. Factors considered included program mission, centrality to institutional mission, quality, and cost effectiveness. Most research units obtain a significant part of their funding from
external sources; however, all rely to at least some extent on university base budget resources. It is essential, therefore, that these resources be well-utilized. The factors cited above helped measure current contributions and set future directions. In several cases, recommendations for modifications in focus or organization resulted from the review. The following brief discussions of the major research units reflect program review analyses.

**c2. Kansas Geological Survey:** The Kansas Geological Survey conducts geological studies and research to collect, correlate, preserve, and disseminate information leading to a better understanding of the geology of Kansas, with special emphasis on natural resources of economic value, water quality and quantity, and geological hazards. The survey was created by legislative action and has line-item status in the state budget. Thus, funding appropriated for the survey cannot be used for any other purpose, and the survey operates with some independence.

The work of the survey is highly complementary to the mission of the institution. It offers a broad spectrum of mission-related activities in the areas of research, graduate education, technical/professional services, and public service to KU faculty and students and to the public. It collaborates effectively with academic units, primarily with the departments of Geology, Geography, Electrical and Computer Engineering, Chemical and Petroleum Engineering, and Civil Engineering, and is indispensable to the Kansas community. The Kansas
Geological Survey is ranked fourth among state geological surveys in overall budgets, according to the American Association of State Geologists.

The survey has been aggressive in seeking external funding; recent success in this area is an indicator of the survey’s quality. In FY 1994, the survey obtained over $1 million in external grants and contracts (up from around $300,000 in FY 1989). The survey was a principal player in the establishment of an interdisciplinary Energy Research Center. As a result of program review, the survey has been encouraged to continue efforts to leverage its resources and to monitor expenditures to determine whether they might be used more effectively elsewhere within the survey, e.g., in support of new endeavors such as the Energy Research Center.

.Kansas Biological Survey:. The Kansas Biological Survey was formally established in 1911 and was recognized by the Legislature as a state agency in 1959. It conducts basic and applied research about regional, national, and global environmental issues. It gathers information on the kinds, distribution, and abundance of non-domesticated plants and animals; compiles, analyzes, and interprets the information; and makes it available through reports and publications. The survey specializes in the fields of aquatic ecology, agrochemical testing, environmental assessment and monitoring, and remote sensing and geographic information systems technology. It develops new methodologies, predictive models,
and protocols for action. It also offers grant development and administrative support to KU faculty with similar interests.

The survey collaborates with the departments of Systematics and Ecology and of Geology in graduate education and is considered essential to these academic programs. It maintains a research collection of over 300,000 macroinvertebrate specimens and provides technical services to the state and region. In the program review evaluation, the quality of the survey was judged as excellent and the cost effectiveness as high. (For example, in FY 1991, the survey had external grant funds totaling four times the amount of state allocations.)

Schiefelbusch Institute for Life Span Studies: The Schiefelbusch Institute for Life Span Studies was launched in 1990. It is a network of some 70 grant projects originating from the Bureau of Child Research, the KU Gerontology Center, the Institute for Black Leadership Development and Research, the Merrill Advanced Studies Center, and related academic departments. The institute assists behavioral scientists in developing and administering grants. Its mission includes conducting research related to human development and the quality of life, providing technical assistance related to problems of life quality, providing professionals and students with interdisciplinary research and service opportunities, and shaping the direction of future policy research.

Today's institute grew from the Bureau of Child Research, which was
established by state statute in 1923 to study "the problems of child life in the state." Over the years the bureau expanded its role to include language research, developmental disabilities, and related aspects of human development. Creation of the institute reflects the realization that the study of problems related to development requires a life span perspective.

The institute is broadly interdisciplinary, involving some 200 faculty from 15 Lawrence campus and 19 Medical Center departments. An average of 147 graduate students per year complete theses or collaborative research with institute-associated faculty. The institute generates more than $5 in external funds for each state dollar invested. Today, projects total more than $10.5 million annually. In addition to activities in Lawrence and at the Medical Center, the institute has longstanding programs at the Parsons Research Center (Parsons, Kansas) and Juniper Gardens (Kansas City).

The program review analysis found the institute essential to academic programs, of excellent quality, and exceptionally cost effective. In fact, the success of the institute in stimulating creative and productive interactions among faculty from many disciplines has served as a model for more recent interdisciplinary efforts on campus.

The Higuchi Biosciences Center is a KU Center of Excellence sponsored by a state agency, the Kansas Technology
Enterprise Corporation. The center consists of a scientific and administrative staff plus researchers from the departments of Pharmaceutical Chemistry, Chemistry, Pharmacology and Toxicology, Biochemistry, Medicinal Chemistry, Microbiology, and Chemical and Petroleum Engineering. The center incorporates the activities of the Center for Bioanalytical Research and the Center for Biomedical Research. It sponsors biomedical research and serves as the equivalent of the research arm of a pharmaceutical or biotechnology company, creating and transferring new products to the private sector.

The program review evaluation found the center essential to KU's academic and research program, of excellent quality, and highly cost effective, generating (for FY 1991) more than $5 million in external funds with a state investment of less than $500,000. The center was judged important to the economic development of the university and local industry.

.Center for Research, Inc.; The Center for Research, Inc. (CRINC) is a KU-affiliated, not-for-profit corporation that is the administrative umbrella for research programs in engineering and related scientific areas. Corporation officers are elected by the board and historically the offices have been held by University officials. Typically the vice chancellor for research, graduate studies, and public service serves as president, the dean of engineering as vice president, the executive vice chancellor as secretary, and the comptroller as treasurer.
Funding for CRINC-sponsored research programs, federal, state, and private, has been growing significantly. The 1992-93 annual report shows funding from all sources at $7.6 million for more than 200 projects for the prior fiscal year. CRINC helps faculty with start-up packages and seed funding, equipment acquisition, identification of funding opportunities, proposal preparation, administration, accounting, electronic services, and travel support. It is evolving into a base for KU's growing effort in technology transfer.

The Center for Excellence in Computer Aided Systems Engineering: The Center for Excellence in Computer Aided Systems Engineering (CECASE) is the newest Regents-approved Center of Excellence. It is partially funded by the Kansas Technology Enterprise Corporation (KTEC, a state entity).

The center collaborates with the departments of Electrical and Computer Engineering, Aerospace Engineering, Civil Engineering, and Mechanical Engineering. Its full-time staff, faculty associates, and students engage in research that will lead to the development of investment grade technologies in systems engineering software and other computer-aided design and analysis tools.

Program review evaluation found the center's mission highly complementary to that of the institution, the quality very good, and cost effectiveness high, with most funding coming from KTEC and external grants. If the unit continues its current efforts, it should be successful in facilitating technology transfer between the
The Hall Center for the Humanities: Expanded in the last 10 years with support from a National Endowment for the Humanities Challenge Grant and from the Hall Family Foundations, this center facilitates faculty development and provides services for humanities faculty. It administers NEH summer seminars and cooperative and individual grants. It also awards internal faculty fellowships and research grants, assists faculty in grant and fellowship applications, conducts faculty seminars and workshops, administers several humanities journals, and oversees the Humanities Lecture Series and the Horowitz Lecture Series.

According to program review evaluations, the center has made excellent progress over the past five years in developing external support and encouraging interdisciplinary exchange among faculty. Quality is very good to excellent, and the center is cost effective, with only about one-fourth of the budget coming from state funds.

The Institute for Public Policy and Business Research: The Institute for Public Policy and Business Research (IPPBR) performs applied research on Kansas-oriented issues in the areas of business, economics, and public policy and provides service to state agencies, the legislature, municipalities, and the private sector. It supports social science and School of Business research
activities, including economic modeling, a major tool in state financial planning. State decisionmakers call upon the institute to perform work in the areas of state policy analysis and economic development.

The program review analysis found the institute highly complementary to the institutional mission and of good quality. However, its cost effectiveness does not compare well with other research units on campus. In FY 1991, the institute relied on university base budget resources for nearly two-thirds of its budget, and few of the external grants and contracts that provided the remaining budget included full indirect costs. As a result of program review, a three-year plan for expanding the research mission and capability has been developed, and closer links to academic departments have been encouraged.

.\textbf{Tertiary Oil Recovery Project};. The Tertiary Oil Recovery Project (TORP) was established in 1974 to research and develop technologies applicable to Kansas petroleum recovery and to disseminate information about these technologies to state industry, mainly independent oil operators. Investigations range from reservoir management and established technologies like waterflooding to advanced technologies, termed enhanced or tertiary oil recovery.

TORP has become part of the interdisciplinary Energy Research Center and was awarded Department of Energy funds to develop a national technology transfer model. TORP's mission was viewed as complementary to the institutional mission
and the quality was considered very good in the program review evaluation. The evaluation was supportive of involvement in the Energy Research Center and encouraged further efforts to secure external funding.

 .c2.**Space Technology Center**; The Space Technology Center, located in Nichols Hall on West Campus, provides building management functions with the goal of promoting and developing multidisciplinary and interinstitutional scientific and engineering research, with special emphasis on space technology research. The center provides office, laboratory, meeting and related space, support staff and telephones, and related services to faculty and research associates from some ten departments.

 .c2.**Center for Research on Learning**; The center was established in 1977 as the Institute for Research in Learning Disabilities. It was one of five federally funded institutes created at major universities to study learning disabilities, and it is the only one to continue operation after the conclusion of the initial six-year funding period. It has influenced the instruction of students, research strategies for studying adolescents and secondary schools, and strategies to use in upgrading educational staffs. The institute's research, product development, dissemination, and professional development efforts have resulted in numerous awards for research excellence and educational impact.
During program review, the unit's mission was judged as highly complementary to institutional mission, the quality very good, and the cost-effectiveness high. Only about 5 percent of its funding comes from the university's state budget, the remainder, about $1.2 million annually, from grants, contracts, and fee income. The new name of the center reflects a broadened focus.

**Energy Research Center**: The Energy Research Center is an interdisciplinary effort of the Kansas Geological Survey, the Department of Chemical and Petroleum Engineering, and the Tertiary Oil Recovery Project. The Department of Geology also participates in the Center. The Center coordinates and encourages energy-related research. The objective is to develop a broad program of energy research and to provide technical assistance to the energy industry, educate the public, and assist policymakers. The program review evaluation found the center's mission complementary and its cost effectiveness high. The School of Engineering and Tertiary Oil Recovery Project sections of this chapter include further information about the center.

**Experimental and Applied Ecology Program**: The Experimental and Applied Ecology Program administers the Kansas Ecological Reserves—1,625 acres of land on seven tracts—for environmental research and education. The tracts provide diverse environments for plant and animal ecological studies: tall grass
prairie, deciduous forest, and old field-succession habitats. The program includes an experimental lake and experimental pond facility. The Biotic Succession Facility, a natural laboratory for the study of community dynamics and their change through time, is a national resource.

Program review found the program highly complementary to the institutional mission, the quality very good, and cost effectiveness good. Research efforts complement a number of strong academic programs. A study of possible closer administrative alignments between this program, the Biological Survey, and the Kansas Applied Remote Sensing Program was recommended, and discussions are going forward.

Water Resources Center. The Water Resources Center promotes water resources research and education at KU and in Kansas. It interacts with the departments of Geology and Civil Engineering and also with biology, botany, law, economics, and the geological and biological surveys. The center integrates the water-oriented research community with state and federal agencies and searches for funding sources among them. It also takes an active interest in the development of water-related courses and curricula. Its work is considered highly complementary to institutional mission and of good quality. The center was encouraged to continue efforts to coordinate water research at KU and to expand its external funding.
The Transportation Research Center benefits the state and region by conducting sponsored research on transportation issues, providing technical assistance, and disseminating transportation-related information. Principal academic units involved are the Department of Civil Engineering in the School of Engineering and the Urban Planning Program of the School of Architecture and Urban Planning. The program review analysis found quality of the center's work good to very good, and particularly praised the high quality of outreach materials. The center generates more than $15 in grants and contracts for every dollar in its base budget. It maintains good relationships with external constituencies.

Principal Research Programs: The Medical Center

Federal and private research funds disbursed to the Medical Center have more than tripled in the last 10 years. The Medical Center received more than $36 million in FY 1993; four campus centers garnered $3 million of that. Most of the research funds were awarded to School of Medicine faculty by the NIH, though the schools of Allied Health and Nursing are both approaching $1 million each on an annual basis.

The Cancer Center stresses a cooperative approach to
research and clinical care. Research programs are conducted by basic, clinical, and behavioral and social scientists. More than 30 research investigators from the Medical Center, the Lawrence campus, and Kansas State University are working on molecular biology and cell-growth regulation, anticancer drugs and multiple drug resistance, and tumor immunology and host resistance. Clinical research addresses virtually every tumor type. Breast cancer clinical research includes the study of biomarkers for high-risk patients. Behavioral and social science research programs address the psychosocial implications of high-risk status, chemotherapy side effects, medical decision-making, and physician-patient communication.

Center for Environmental and Occupational Health: The Center for Environmental and Occupational Health combines research on the causes and effects of toxic agents in the work place and environment with patient care programs that focus on prevention, diagnosis, and treatment. The center’s agenda includes research on dioxin and chemicals present in ground, water, and waste dumps that are suspected of causing cancer or birth defects. Conferences and seminars are held for health care professionals and citizen groups statewide.

Center on Aging: The Center on Aging supports and conducts research on age and aging. It supports an interdisciplinary study of gait and posture abnormalities that contribute to falls. It collaborates with the Lawrence campus
Exercise Physiology Laboratory to study the effects of exercise on the aged. The center was influential in obtaining National Institute on Aging funding for an Alzheimer's Disease Center at the Medical Center. The Center on Aging also emphasizes rural health research and houses an Association on Aging-funded National Resource Center for rural long-term care.

.Ralph L. Smith Mental Retardation Research Center.: The Ralph L. Smith Mental Retardation Research Center supports research into mental retardation and developmental disabilities; early developmental processes associated with pregnancy; developmental processes in the brain and nerve cell response to injury; assessment of risk factors such as prenatal exposure to alcohol and radiation that lead to mental retardation and birth defects; language and cognitive function in the mentally and developmentally disabled; and strategies for mental retardation prevention.

.KUMC Research Institute.: The KUMC Research Institute, a not-for-profit foundation, was established in 1992 to promote and support biomedical, clinical, behavioral, and social science research. Its board of directors consists of administrators, faculty, and community leaders. The institute administers privately funded Medical Center research projects. Its objective is to enhance faculty research capabilities for public benefit. Its goal is to allow the conduct of
research at the lowest overhead cost possible, with the maximum flexibility to the principal investigator. The institute has divisions of Grants Management and Administration, of Clinical Trials, and of Technology Transfer. Grants management processes and manages grants. Clinical trials reviews the patient base for selection of qualified study participants, facilitates timely completion of trials, and provides a centralized budget preparation service that controls costs. Technology transfer assists faculty in identifying new technology, assists in the patent and copyright processes, provides legal and contract assistance, and supports technology transfer to companies.

.KUMC/Industry Relationships:. Since 1985, efforts have been made to increase the interaction between the Medical Center and the business and industrial community. This has been assisted by public and private agencies: the Kansas Technology Enterprise Corporation (KTEC), the Silicon Prairie Technology Association, and the Center for Business Innovation. Recently, with the assistance of KTEC, a Division of Technology Transfer has developed within the KUMC Research Institute (see above). We anticipate that this staff will educate faculty and support faculty efforts in bringing new biotechnology to the public.

.Research Productivity

.Sponsored Research:. The Office of Research, Graduate Studies and
Public Service has primary administrative and leadership responsibility for the research activities contributing to the university's mission. While faculty in many disciplines conduct significant research without external support, research productivity depends largely on an institution's ability to secure external funds for sponsored research that will support graduate students, research staff, and scientific instrumentation. That support, in turn, collectively improves the quality of academic programs.

The university is well on the way to its stated five-year goal of $100 million in external funding for the combined campuses by FY 1998. Between 1989 and 1993, sponsored program funding increased 64 percent, from $52.9 million to $86.8 million, an average of about 13 percent per year. In FY 1993, the external support for research reached an all-time high in peer- and agency-reviewed competitive programs.

### Sponsored Program Funding

**Awards Summary, 1989-1993**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawrence Campus</td>
<td>$30,601,707</td>
<td>$29,919,971</td>
<td>$39,332,079</td>
<td>$42,991,735</td>
<td>$50,302,378</td>
</tr>
<tr>
<td>KUMC Campus</td>
<td>$22,293,090</td>
<td>$26,519,454</td>
<td>$28,083,916</td>
<td>$34,161,240</td>
<td>$36,469,481</td>
</tr>
<tr>
<td>TOTAL KU</td>
<td>$52,894,797</td>
<td>$56,439,425</td>
<td>$67,415,995</td>
<td>$77,152,975</td>
<td>$86,771,859</td>
</tr>
</tbody>
</table>

KU's research productivity was appropriately recognized with the designation of Research University I status in April 1994 by the Carnegie Foundation for the Advancement of Teaching. Only 59 public universities nationally
earned the ranking out of the 3,600 private and public schools evaluated. Key points considered by the Carnegie Foundation in assigning the ranking include the more than 200 baccalaureate programs maintained at KU and the active upper level educational programs which, in 1992, granted 607 doctoral and first-professional degrees.

Research Infrastructure: Key components of KU's infrastructure are the facilities available for research. Three sizable grants currently are supporting needed renovation and construction of such facilities:

- A $300,000 grant from the National Science Foundation matched equally by university resources is making it possible to upgrade research laboratories in Malott Hall. The renovation will substantially improve KU's chemistry programs.

- A $4.9 million award from the National Cancer Institute is helping build a cancer research facility for the Higuchi Biosciences Center. The award will be matched by $4.05 million in funds from external resources.

- A $790,000 National Science Foundation award will be matched equally by university resources to construct a Dyche Hall addition for specimen preservation.

The General Research Fund, created more than 30 years ago by the Kansas legislature, represents the University's most significant internal resource in
enhancing the research productivity of faculty. The annual appropriation for the fund now is approximately $1.9 million. Less than half the fund is used to support research across the university through the employment of research and scientific technicians. About $750,000 is spent each year to support 150 individual faculty research projects. During FY 1994 this component of the program was restructured to provide peer review closer to the applicants' disciplines and to increase opportunities for the disciplines or unit entities to identify priority projects.

Established in 1982, the new faculty research award program makes available non-competitive awards of up to $5,000 each for projects to be undertaken during a faculty member’s first two years at KU. Approximately $250,000 from the General Research Fund appropriation supports this program. The awards provide significant assistance to new faculty in establishing an initial program of research projects.

To stimulate increased external funding and faculty research productivity, a Research Development Fund has been established that allows teams of investigators to apply for up to $100,000 over three years to jump-start programs that can achieve significant external support with concomitant indirect cost revenues. The program has been in effect for only 18 months, so it is too soon to evaluate its eventual success. However, to date, KU has invested $660,000. The recipients report that this investment has resulted in new external awards totaling $3.12 million in direct costs and $768,759 in indirect costs. A similar bridging fund
allows researchers to continue their work uninterrupted when they are between major grants but are assured of, or expect, future grants.

.c. Public Service Activities

Because KU is a public institution, it could be argued that there is a public service component to nearly everything we do. This is reflected in the university mission statement. Most of the research units described earlier in this chapter provide significant public service. The university provides cultural enrichment for the larger community through the museums and libraries described in the Academic Resources section of Chapter V and through the offerings sponsored by the School of Fine Arts and the University Theatre. The graduate programs offered at the Regents Center and Capitol Center are a service to professionals in the region.

Three KU units have particular responsibilities for service to the state: the public radio station KANU, the Audio Reader program for the visually impaired, and the Division of Continuing Education. KANU and Audio Reader report to the office of Research, Graduate Studies, and Public Service; Continuing Education reports to the office of Academic Affairs.

.c2. KANU: A professionally staffed, non-commercial public radio station, KANU carries National Public Radio programs but produces most of its programs locally, including classical music in the day and jazz and blues at night. It is licensed
to KU and serves northeast Kansas and northwest Missouri. The station has earned national recognition for many of its news and entertainment programs. Most recently, "Imagination Workshop" won the 1993 Grand Prize for Entertainment Programs at the International Radio Festival. KANU commands a very supportive listening audience and has been successful in generating private support, which currently provides 60 percent of the annual operating budget.

 Audio Reader: The Audio Reader Network, affiliated with KANU, has been offering a radio reading service for more than 25 years. It was the second such service to be established, and is nationally recognized for the quality of its service. Audio Reader provides daily 24-hour service, with readings of newspapers, magazines, and current books to people who are visually impaired, physically disabled, or elderly. Its signal is carried by KANU and translator subcarriers; satellite brings it to listeners with dedicated receivers. Audio Reader has inaugurated a dial-up interactive service. Paid staff coordinate a volunteer corps of nearly 200 readers. The service has strong support from its listeners.

 The Division of Continuing Education: The Division of Continuing Education’s mandate is to extend teaching, research, and service to society and to meet the personal and professional needs of adult learners. To fulfill the mandate, the division, in collaboration with KU, provides leadership in the selection, design,
and delivery of educational activities and instructional materials to the public.

Each year the division conducts some 900 classes, seminars, short courses, and conferences for nearly 30,000 students. A staff of 100 professional and support personnel, plus instructors, conducts these programs. Off-campus and independent study credit courses are taught by university faculty. Fee income from registrations and grants provide 85 percent of the division’s $9 million annual budget.

Division staff members direct ongoing programs and work cooperatively on grants with the professional schools, the College, and other KU units. They also serve on KU committees.

Off-campus seminars utilize the KU Regents Center, KU Capitol Center, Kansas Law Enforcement Training Center, and other public and private facilities. Instructional television, produced in cooperation with academic units by two division units, Media Services and Independent Study, is delivered via compressed video and microwave, primarily to the Kansas City metropolitan area. As a result of program review, the Division of Continuing Education also has been assigned responsibilities on the Medical Center campus.