

The background of the entire page is a solid black. Overlaid on this are numerous white, irregular, teardrop-shaped or blob-like forms. Each of these white shapes contains a solid, bright red circle in its center. The shapes are scattered across the page, creating a rhythmic, abstract pattern.

texas tech—
progress through knowledge

James Spill



Texas Tech University

Lubbock, Texas 79409

Office of the President

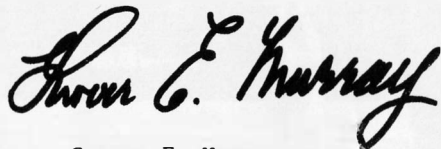
January 3, 1972

The information which is being presented to you by this team of Texas Tech students has been compiled carefully and accurately and is designed to give you the student's point of view. The students and I share a keen desire to help you in any way we can to reach one of your very important decisions. The choice of a university is a major step, and you should consider it well.

All of us here at Texas Tech University are most willing to guide and counsel with you, but we also feel that when you enter a university, you have done so because of a real desire to acquire knowledge which will qualify you for a career. It is also our hope that, through association with this University, you would have a sense of responsibility as a citizen of whatever community you serve.

Education is much more than attending classes. It is a mingling of ideas, personalities, beliefs and nationalities.

I hope that your own university experience will be a rewarding and enriching one.

A handwritten signature in black ink, reading "Grover E. Murray". The signature is written in a cursive, flowing style with a large, prominent "G" and "M".

Grover E. Murray
President



College of Agricultural Sciences

Department of Agricultural Economics

Concerned with all business and economic aspects of agriculture and marketing, the department provides seven special areas of undergraduate emphasis: Agribusiness Management, Agricultural Finance, Farm Management, Ranch Management, Agricultural Education, Rural Socioeconomics, and Agricultural Economics Research. Training in farm appraisal, agricultural policy, price analysis, and agricultural marketing are also provided.

Department of Agricultural Engineering

This department is primarily concerned with the application of basic engineering principles to the conditions and requirements of agriculture as an industry, and as a field of applied science.

Department of Agronomy

The undergraduate instruction program is one of the finest in the nation. The Department of Agronomy has the second largest undergraduate enrollment of the non-land-grant colleges in the nation. It ranks within the top ten. The department itself is concerned with the technology of plant growth and development in both the scientific and economic phases of producing agricultural income from soil and water through growth of useful crops. Courses and curricula are offered to prepare interested students for service and graduate studies in the areas of agronomic industry, crop science, soil science, and fruits and vegetables. These curricula meet the standards recommended by the Crop Science Society of America. All curricula meet the Civil Service standards for their respective professions.

Department of Food Technology

The department emphasizes the technological aspects of food processing and quality control and maintains a modern milk plant for teaching the fundamentals of dairy processing. Laboratories are available for microbiological and chemical analysis of food products and for research in food product development.

Department of Park Administration

The park administration curriculum provides for training students capable of directing the various facets of park and recreation development.

Department of Horticulture

Through the application of science and art, prepares young people as managers of greenhouses, nurseries, garden centers; as salesmen, technicians, agribusiness specialists and representatives; and as managers of parks, recreational activities and areas, landscape services, and many other diverse areas.

Department of Entomology

Includes the study of the principles of biology, ecology, and agriculture and their applications to the management pest and beneficial insect populations.



Department Range and Wildlife Management

Concerned with the application of basic ecological principles to the management and the use of uncultivated rangelands as found on ranches and public rangeland. The range curriculum meets the standards set by the Range Management Education Council for Range Managers and exceeds the standards for training recommended by the Wildlife Society for wildlife biologists.

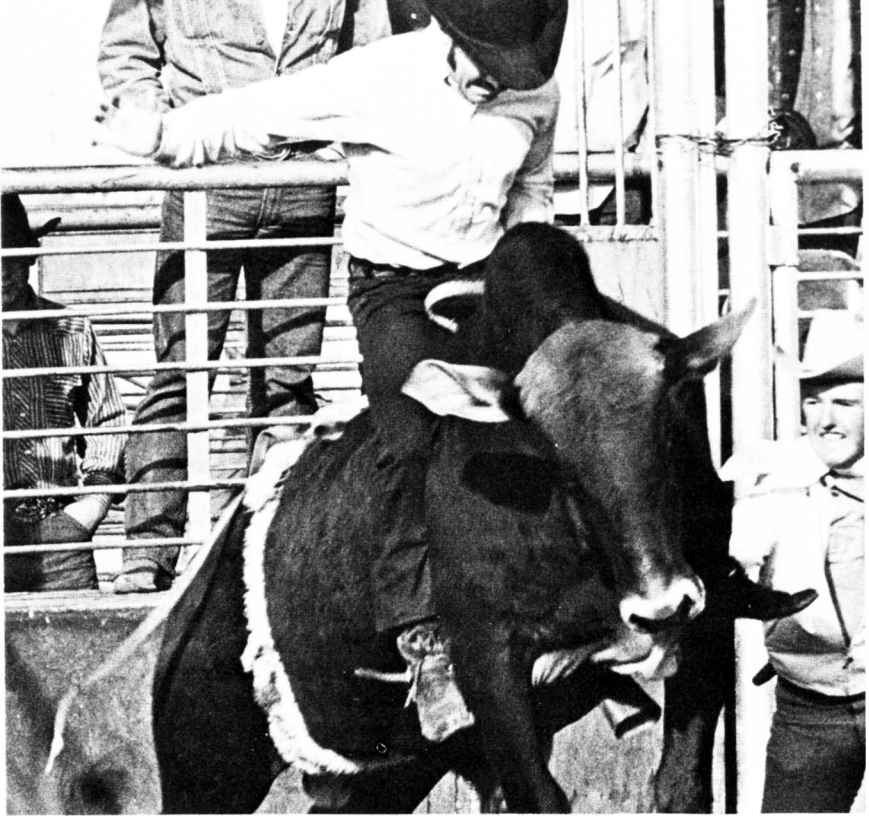
Animal Science

College training in Animal Science prepares an individual to follow any of the diverse professions which are based upon the productions, sale, and processing of livestock and livestock products. These professions may be in direct contact with the animal, or indirectly involved through related industries or businesses associated with livestock and livestock products.

The modern livestock producer must be knowledgeable in the fields of production economics, genetics, nutrition, physiology, and marketing. In addition to these, he must be familiar with possessing an effective management ability.

The animal science program at Texas Tech University employs a revised curricula to provide for current and anticipated needs. Instruction and research are combined to present the student with latest concepts while completing requirements of the curriculum best adapted to his needs. The graduate contemplating whether to return to a ranch or farm, might consider the animal production or animal business emphasis.

Supporting the classroom work in animal science is an extensive livestock center adjacent to the campus. Modern facilities include two feed lots for teaching and research purposes, a large dairy complex, quarter horse herd and barn, sheep and goat (mohair) barn, poultry barn, and future swine complex to replace the temporary installation. These facilities include large numbers of livestock for teaching and research purposes. Many students find employment on the farm while completing their academic requirements.



Special research equipment is being added constantly to support the masters degree program in animal science. This equipment is also used in various undergraduate classes and laboratories to expose the undergraduate to research trends and findings. Some of these facilities include four environmental chambers where groups of livestock can be managed under controlled conditions, with complete observation and recording of physiological and nutritional responses. A complete chemical laboratory is provided for nutritional evaluations.

The large Meat Industries Laboratory on the campus proper provides the student with an opportunity of recognizing the final end product value of animals previously evaluated in the live state. Further opportunity is given in learning the processing of meat and meat products while working under USDA—Federal Inspection Supervision.

Pre-Veterinary Medicine

A pre-veterinary medicine curriculum is administered by the department in preparing the student for the veterinary school of his choice. In total, the college of Agricultural Sciences has eight departments which offer 16 degree programs with 31 different emphases or options.

“Intellectually, I have awakened from a dull stupor to realize that there is a hell of a lot I don’t know. And that condition will never change, the process of assailing my ignorance has been a tremendously exciting and self-giving one.”

College of Arts and Sciences

The College of Arts and Sciences offers students a liberal education in the arts and sciences to provide an intelligent familiarity with modern civilization and enlarge and enrich the individual's life. The College has a total of 22 programs offered; these programs are specifically set up to develop depth of thought, breadth of view, personal integrity, along with independent and creative thinking.

The College offers a diversified and interesting program of study. The students are given the opportunity to learn of the society in which he lives and how that society developed through its history, its literature, its art and music. Through political science the student learns how society governs itself. Through the physical and biological sciences he learns the fundamental laws of the universe.

Though a part of the student's course of study is required, he exercises a wide choice in selecting particular courses to meet the requirements. The student must accept a large share of responsibility in shaping his own program of study. Every student is assigned a faculty adviser, but has recourse to other sources of advice in making the most of his educational opportunities at Tech.

In order to give the student a more specific look at the College of Arts and Sciences we have compiled information from a majority of the departments. We can only touch on these departments but hope that from this information the student will benefit.

Honors Program

The Honors Program of the College of Arts and Sciences is dedicated to the belief that the superior student needs opportunities for intellectual achievement which normally are not found in a traditional classroom situation. The program is characterized by smaller classes which facilitates discussion and allows the class to digress or delve more deeply into subject matter; association with other superior, independently thinking students; interdepartmental seminars which combine social sciences with pure sciences; opportunities for individual work and studies on a one to one ratio between students and professor; an atmosphere that is not restricted to consumption and regurgitation, but is conducive to free expression and exchange among members of the class; and a freedom of choice of courses within the program.

Honors courses available to the students in the program include special sections in courses required for a degree, seminars and individual study under a faculty member selected by the student. One-half of the class is usually used for discussion which is led by well qualified, full-time faculty members. The program synthesizes the art, music, drama, literature, philosophy, government and history of each culture into a unified study of all civilizations.

Department of Art

The Department of Art not only offers degree programs that lead to the Bachelor of Fine Arts, Bachelor of Arts, and the Master of Fine Arts,

but also offers courses which are designed to appeal to non-majors who desire experiences in the visual arts as a part of a liberal education.

The department reserves the right to retain, reproduce, and exhibit work submitted by students for credit in any course. The student is provided with specific problems, guest lecturers, carefully planned courses, business contacts, field trips and tours, and research opportunities.

The full-time faculty of 35 is well trained, versatile, and is represented by graduate degrees from over 20 institutions in various parts of the United States. Work of the faculty is regularly published and exhibited at a national level and includes professional production in all areas of studio art as well as graphic design, interior design and theoretical research.

“There has to be something outstanding to offer the higher level student in order to convince him to come to Tech. I feel that Tech has something outstanding.”



Department of Biology

The Department of Biology is subdivided into the major areas of Zoology, Botany, and Microbiology. Bachelor of Arts, Bachelor of Science, MS, and PhD's are offered in the three fields. It should be emphasized that these divisions are artificial to an extent, and a number of programs cut across the traditional boundaries.

The facilities within the department are new and exceptionally good. A new biological sciences building of approximately 149,000 square feet was occupied in the fall of 1969. Included in this building is modern, up to date laboratories, darkrooms, animal rooms, a plant bioassay laboratory and an electron microscope laboratory.

The department has an excellent faculty of 27 and 39 graduate assistants. A majority of the faculty are young, participating in research and have the students welfare in mind. The department has its own faculty evaluation and sets high standards for the faculty to meet. The department is very selective upon choosing faculty and is constantly trying to improve it.

Department of Chemistry

The courses offered by the department are designed to serve the needs of three distinct groups of students:

- 1) Those majoring in other subjects who desire to elect chemistry courses as a part of their programs,
- 2) Those majoring in chemistry with the intention of entering other professional fields, and
- 3) Those majoring in chemistry with the intention of entering the chemical profession.

The department offers BA or BS, MS and PhD degrees.

The present faculty numbers 23, of which 20 are PhD's. The professors are chosen selectively by looking into their credentials, academic background, and post doctoral experience. Research is encouraged and considered as part of the instructional mission of the department.

Presently research is being carried on vigorously in the major branches of chemistry: analytical, inorganic, organic, physical chemistry, and biochemistry. Undergraduate research students and post-doctoral fellows participate in several research groups, so there is a blend of interchange all the way from undergraduate scholar through full professor.

The facilities of the department are excellent. In the fall of 1970, the department expanded into a 5.5 million dollar addition to the chemistry building, thus increasing the size of the building 2.5 times. This addition provides first class research laboratories and seminar rooms. The laboratories are well supplied with up to date safety equipment so necessary to today's chemistry.

Department of English

The Department of English has a capable faculty numbering more than 100, of which are 44 graduate assistants. Research and good teaching are substantially encouraged among faculty. The faculty members have distinguished themselves by regular publication of books and articles. Awards and special recognition is given for those who have done an outstanding job in teaching. The department also brings in various distinguished visiting professors and speakers.

Activities of the department include a technical writing institute and an international symposium on comparative literature.

The department has its own modern building with ample classrooms and office space. Since there is no shortage of classrooms, convenient scheduling according to the faculty members and needs of the student is currently

"I came to Tech not knowing anyone or what to expect but after being here a semester I've discovered countless friends and an administration that will do all they can for the student."



followed. The courses are planned to direct the student toward a more perceptive and appreciative reading of literature and to train him in the principles of effective writing. The department offers a curriculum leading to teacher certification in English under both the Bachelor of Arts degree and the Bachelor of Science in Education, MS and Ph.D.

Department of Geography

Geography seeks to describe and interpret the character of the earth with emphasis on elements of its makeup, and attempts to integrate these elements within particular areas. Geography for the most part deals with patterns of distribution of various types of features, resources, and conditions to which people have reacted differently according to varied cultural backgrounds and stages of economic and political development. A knowledge of methods and techniques for regional analysis is needed so that the study of area problems in different parts of the world constitutes a discipline in itself.

The geography department began in the fall of 1971, but was formerly connected with the department of geosciences. However small the department, a wide variety of courses are offered from regional to cultural geography.

Despite its newness the department has an up to date cartography laboratory and has an up to date map library. The faculty is presently undergoing research from the changing functions of small towns to the study of water resources.

Department of Mathematics

The Department of Mathematics at Tech is considered to be exceptional on the undergraduate level. The faculty numbers 43 full-time faculty whose research interests cover a broad spectrum of topics, from algebraic topology and lattice theory to statistics and numerical analysis. In a large state university the necessity of a faculty being competent over such a broad basis is mandatory to serve the varied interest of a large student body. Both levels of students, undergraduate and graduate, benefit from the research activity since mathematics at all levels of industrial and governmental services perform research or applied research as an integral part of their vocation.

The professors are more than willing to help the students with any problems that they are confronted with. The department rates itself in the various fields open to the students with the students benefit in mind. The facilities are very good. Included is a new Math/Foreign Language Building that has modern equipment to students at all levels. Tech has a computer center that is available for any math student's use upon request.

Department of Music

The Department of Music has five main objectives: 1) to train professional musicians and educate teachers of music; 2) to help each student achieve the skills and proficiencies of a strong musician for instruction, understanding, and experience in music; 3) to develop talent to the highest degree of artistic capability; 4) to help students acquire discriminating taste and critical judgement through courses in music; and 5) to serve as a center of musical art and culture for the community at large.

The department is fully accredited by the National Association of Schools of Music, and offers bachelor and master degrees in a wide variety of subjects. The faculty of 55 includes a performing specialist on each one of the band and orchestra instruments. Students receive much individual attention in private applied music study, in theory classes and advanced music literature classes which are held to small enrollment, and in many small ensembles.

The Red Raider Band is nationally famous and has been singularly honored for its spectacular football pre-game and half-time performances. The Tech Choir has drawn national attention for its distinguished performances throughout the country. There is also a Chamber Orchestra which is made up of highly selected players, and emphasizes works of the Baroque era.

The department houses an impressive recording library, and music holdings in the University Library are excellent.

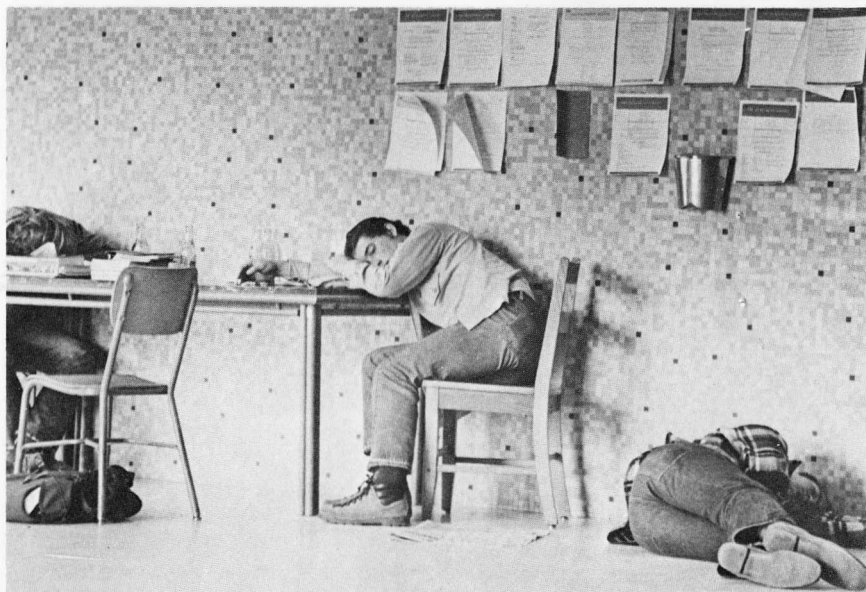
Department of Psychology

The undergraduate training by the psychology department serves three major related purposes. For the liberal arts major, the study of psychology provides an opportunity for increased self understanding and insight to the behavior of others; for students preparing for medicine, education, business, and other professions, psychology provides important basic knowledge useful in these vocations; and for those planning to carry on to graduate study,

instruction seeks to establish a sound foundation for a career in professional psychology.

The department offers degrees in Bachelor of Arts, Master of Arts, and Doctor of Philosophy. The faculty numbers 26 full-time equivalents whose interest area shows six counseling and rehabilitation, four clinical and eleven general-experimental. A further breakdown of the latter group reveals specialized interest in learning, verbal learning, physiological; comparative, social, experimental-child, psychometrics, perception and motivation, statistics and human factors.

The department is housed in a relatively new building which is attractive and comfortable. There are a number of research laboratories for conducting both human and animal studies and the department maintains an adequate animal colony. There are excellent clinic facilities in the building and the department supports a teaching clinic as part of its program.



Department of Sociology and Anthropology

Sociology introduces students to the scientific study of society. The basic problems common to all human societies and the varied institutional solutions to these problems make up one large area of sociological interest; hence the sociological study of the family, social class, economic and political institutions, religion, science ideology, etc. The study of rural and urban communities, human relations in groups, social structure and personality are other areas of sociological interest. So also is the understanding of social change. Sociology is concerned not only with the normal functioning of social institutions but also with social problems such as racial and minority problems, industrial conflict, crime, and other areas of social disorganization. In studying these subjects, materials about american society are given primary emphasis. Finally, sociology seeks to acquaint students with its method of investigation, from which students can learn important facts about scientific method in general. The department's mission is to get this across to the students. It's a very demanding job but the professors are well equipped for such a job.

Within the department as a whole is the department of Anthropology. The undergraduate training in anthropology is designed for various groups of students: 1) those desiring scientific knowledge of the social and cultural determinates of behavior; 2) those planning to enter a public service profession; 3) those expecting to engage in some form of work with the public; 4) those looking forward to teaching anthropology or another social or behavioral science; 5) those preparing for a career in international studies; 6) majors in anthropology or graduate studies in anthropology.

Anthropology itself is the study of biological and cultural development of man and of the contemporary variety of human societies and their cultures.

College of Business Administration

In a "business society" the activities and functions that are collectively labeled Business Administration become the web that keeps the fabric of our society together.

The primary goal of the College of Business Administration is to emphasize understanding and application of knowledge rather than on acquiring expertise *per se*. In relating to the student, the primary objective of the College is to provide an educational experience rather than only an exposure to knowledge. A difficult and intangible objective is to develop positive attitudes relative to the function and role of business in society, to the necessity of continuing one's education through a personal effort and experience gained in subordinate positions in order to prepare for more responsible executive positions in the future, to the reality of a changing society and to the requirement for a person of education to recognize and accept change and to work in an environment of relative uncertainty.

The College of Business Administration assumes that students enter the program with diverse interests and aspirations. However, the management function is emphasized because of the implicit assumption that many of the students aspire to eventually become managers. Nevertheless, diverse alternatives for specialization are provided to build job entry level skills.

The market to which our graduates are attracted varies from the very large complex businesses to very small local endeavors. In addition, many of our graduates will spend their careers in government and other non-profit organizations. Therefore, we are organized by program areas. The College of Business Administration is divided into four functional parts: under-



graduate programs, graduate programs, research and special programs and the Center for Applied Business Studies. These programs are supported by faculty organized in six research and teaching areas. These are: Accounting, Marketing, Finance, Information Systems and Quantitative Sciences, Administration and Human Resources, and Policy and Environment.

When a student chooses an area of concentration in the College of Business Administration, during his first two years of academic work, he will be assigned to the lower division of the College. Lower division students are counseled by a Freshman and Sophomore advisor located in the Office of the Dean of the College of Business Administration. During the second semester of the sophomore year the student should declare an area of concentration at which time he will be transferred to an upper division counselor in that area. Transfer students should check with the office of the Dean of the College of Business Administration to be directed to the appropriate counselor.

A student should reserve the decision on choosing an area of concentration until he has had an opportunity to investigate the study programs which are available to him in the College of Business Administration. The freshman course, Business Enterprise, should be of considerable help to the

“Texas Tech is a place to learn and develop ideas; unless we are willing to challenge these ideas we should not be human beings trying to live in an organized society, but rather in a pasture following like sheep until our game of life is over.”



student in making his decision. The student is encouraged to counsel with faculty advisors in those fields which he believes to be of possible interest to him. Aptitude tests are available to give students additional help in deciding upon their areas of concentration.

During the last semester of his lower division work each student must declare an area of concentration and have it approved by an advisor from that particular area. These areas of concentration are discussed below. The student should notify the Dean's office of his choice of area of concentration.

Any delay in declaring an area of concentration beyond the completion of the lower division in the College of Business Administration may complicate students scheduling and progress through the program since some of the required courses may be offered on alternative semester or yearly basis. Thus, it is necessary for the student to plan his upper division curriculum very carefully with an advisor in order to assure completion of requirements within his planned graduation time.

Degree programs in the College of Business Administration can be completed within normal load limits in eight semesters. A student may be required to attend more than the normal eight semesters because of poor schedule-planning or failure of one or more courses, or for other reasons. Before the close of his junior year each student should plan carefully the scheduling of his remaining degree requirements to determine his proper graduation date and should file an application for the degree in the office of the Dean of the College of Business Administration.

A student majoring in Business Administration can choose to concentrate in Accounting, Finance, Management and Marketing. In addition to the above, there is a program in General Business Studies. If the latter curriculum is selected, the person takes the basic courses in Business Administration plus twelve hours of approved business electives and gets a minor in an area outside the Business School. Many students who plan to attend law school follow a Business Administration major. It has proven to be a good background for people interested in the legal profession. Professor Charles Dale of the College of Business Administration counsels with students interested in pursuing a profession in law.

"If you're unhappy with something, they want to know. If they think you have a good gripe, you can rest assured they'll do something about it, and soon.

The College of Education

The preparation of prospective teachers is the primary function of the College of Education. Being a part of the College of Arts and Sciences until 1967, Education is the youngest college on Tech's campus and it seems to be capitalizing upon its youth. Helping students is, of course, its main concern and the Education department is the process of initiating new programs which will benefit the student. It isn't bogged down by traditional patterns and there is plenty of room to experiment and grow, thus bettering the student, the college, and the university.

The Education faculty is among the best in the nation. Eighty per cent of the faculty have either a PhD or an EdD, and almost all have had previous experience in public schools, enabling themselves to work well with the college age student. Junior college personnel are also being increasingly added to the Education faculty.

As for the student-teacher ratio, it too, is probably above average for



"When I finished all my foundation courses and didn't know what in the hell to take, I walked into my counselor's office, told him what I wanted to specialize in, and walked out with a complete degree plan in ten minutes. I'm graduating in two weeks and I can't believe it."

schools equal to Tech in population. There are fewer students per teacher than the average school, thus enabling a more favorable operation between the student and the teacher.

The main facilities that would directly be of an advantage to the student include the Education Library, the Reading Laboratory, and the Laboratory for Audio Visual Services. The Library, used by both graduate and undergraduate students, is excellent in that it houses adequate materials for their use.

Three primary fields of study are offered in Education, elementary, secondary, and special. The main programs in elementary education focus upon the kindergarten and very early elementary year levels, which is somewhat of a new trend in public schools and one that is increasingly popular. A major in elementary education may also elect to pursue a concurrent program leading to certification to teach the mentally retarded or physically handicapped. Special Education is a rapidly growing area at Tech and students in the College of Education may also prepare or specialize in Deaf Education and Speech Therapy. In Secondary Education programs, a student may elect to pursue one of three routes to his certification objective. Plan I requires selection of two fields in which he wants to teach and a completion of 24 hours in each. Plan II, the broad field program, requires completion of 48 hours in one broad field. Plan III, the vocational field, is for a student who wishes to obtain certification in vocational, agricultural, or home economics education. Also, because of the growing demand for junior college personnel, the education department is planning to set up programs for the preparation of junior college administration.

A very important feature in Tech's College of Education is that the Education faculty is involved with student organizations and concerned with student life. The faculty takes a very personal interest in students and their progress. This is proven by the fact that almost all of the faculty participates in undergraduate programs. They involve themselves with students in every aspect of student life concerned with education. Where student teaching is concerned, prospective teachers are supervised by the most experienced in undergraduate work, while at most schools graduate students are in charge of undergraduates involved in student teaching.

There are two student organizations in the College of Education—The Student Education Association, and The Association of Childhood Education International. The SEA is composed solely of Education students who want to further their knowledge in education. The ACEI is an international organization for teachers of young children. Members are elementary education majors who meet to discuss problems and trends in the education of children.

Despite the youth of the College of Education, it has already been accredited with the National Council for Accreditation of Teacher Education. This signifies that the teaching certificate earned at Tech is accepted at a majority of the states throughout the United States and that hours in Education earned at Tech are accepted by other colleges in the U.S.

Concerning grades, Tech's College of Education insists upon a higher grade point average than the other undergraduate colleges on campus. This

higher requirement for teacher education is because the faculty wants only the best students to be admitted into education programs so that only the best students will eventually become teachers.

Tech's College of Education has adequate facilities and qualified specialists as members of the faculty. The college is new and it is growing, constantly developing new ideas to keep up with the ever increasing pace in education.



"The Education Department has expanded so much, even since I've been here. There are so many more opportunities to expand upon and there's tons of things anyone can become besides just being a teacher."



College of Engineering

The College of Engineering is characterized by emphasis on understanding and controlling the forces at work in nature with an ultimate objective of the advancement of intellectual and physical capabilities for application of knowledge in the service of human goals. This objective is common to each of the three categories of programs within the college: architecture, engineering, and engineering technology.

Each academic program includes not only education in the basic sciences and mathematics, but its application in the solution of human problems.

The aim of the engineering curriculum of the College of Engineering is to impart a basic knowledge of the fundamentals of engineering, with specialization in one particular branch to that extent which experience indicates to be desirable. The course of study is planned to give the student training which is not readily obtainable after graduation. As an aid to the development of scientific attitude, the importance of the qualities of honesty, loyalty, thoroughness, and industry is emphasized. A desire for learning and for knowledge of the ethics of the profession is also fostered. As much specialization as possible is left to the students' later employment. Experience has shown that this type of training produces the most useful engineers.

All undergraduate engineering curricula are accredited by the Engineering Council for Professional Development. Degrees in architecture are accredited by the National Architectural Accreditation Board.

The College of Engineering offers degree programs leading to the Bachelor of Science in the respective engineering fields: agricultural, chemical, civil, electrical industrial, mechanical, petroleum, engineering physics, and textile. In the proceeding material certain departments have been discussed in the hope to give you an idea of engineering at Texas Tech.

Department of Agricultural Engineering

The Department of Agricultural Engineering is primarily concerned with the application of engineering principles to the conditions and requirements of agriculture as an industry and as a field of applied science.

Texas Tech University, being geographically located near the center of the largest highly mechanized agricultural area of the world, presents unusually large applied research demands upon the Agricultural Engineering department. These demands are further fostered by the area encompassing some seven million acres of irrigated cropland, all of which depends upon a diminishing underground water supply. Relatively high yields of cotton and grain sorghum are associated with the necessary area processing facilities and confined animal production. Local and regional demands alone provide the necessity for a strong Agricultural Engineering department.

Due to the various demands and acceptance of both regional and national research responsibility, the interests of the Agricultural Engineering department is quite diversified.

The major areas of emphasis are farm machinery development, irrigation efficiency, groundwater recharge, shelter engineering, environmental systems, pollution control, and agricultural materials processing.

Department of Architecture

The Department of Architecture offers a Bachelor of Architecture degree with options in construction or design.

Programs in the Department of Architecture concentrate on the concept that architecture and design are embodiments of the attitudes and ideas of society; that man's needs and requirements are basic to the realization of form and functional expressions; that the requirements of man's changing environment are major factors in design determination.

The department is housed in one of the finest facilities in the nation. For student use there is a reference library containing over five thousand volumes and forty thousand slides for educational purposes.

The degrees in architecture are accredited by the National Architectural Accreditation Board. Most of the faculty are registered architects and hold individual memberships in the American Institute of Architects, American Institute of Planners and the Association of Collegiate Schools of architecture.

Department of Chemical Engineering

The Department of Chemical Engineering offers programs leading to the degree of Bachelor of Science in Chemical Engineering, Master of Science, and Doctor of Philosophy. The department strives to maintain a balance between its main objective of producing well-educated undergraduates and conducting a research program which is relevant to the local area.

One of the particular advantages of being a chemical engineer is the wide spectrum of employment opportunities available upon graduation. Graduates of our department have been employed in almost every state in



the union as well as in foreign countries. Their careers involve not only the production but also the sale of such diverse things as instant coffee, polyethylene, rocket fuels, and crepe paper.

The department has also conducted research into a diverse set of problems such as the noxious component in the odor from cattle feedlots, the trace contaminants in spacecraft atmospheres, the removal of oil from sea water, the removal of dust from cotton gin effluents, and the design of more efficient carbon black plants. If it is a local problem, the Department will consider the chemical aspects and suggest a solution.

Department of Civil Engineering

The Department of Civil Engineering offers instructional programs leading to the BL, MS, and PhD degrees. Areas of specialty include structures, fluid mechanics and hydrology, soil mechanics, transportation, and environmental engineering. The Civil Engineering faculty consists of 15 professionals holding the rank of Assistant Professor or higher. The student teacher ratio stands at 11 to 1.

The capabilities of the department cover the entire theoretical, analytical, design, and experimental spectrum of Civil Engineering research and development. The training and experience of departmental engineers and scientists provide a well-rounded capability in the utilization and mathematical theories, computational and analytical procedures, and the experimental techniques required for the solution of structural, hydraulic, soils, and other Civil Engineering problems.

Available laboratories and supporting services facilities contain modern, basic equipment for the conduct of Civil Engineering education. Expansion and improvement of these facilities, reflected by the new \$1.2 million Civil Engineering Research Laboratory, are indicative of future goals in Civil Engineering.

Department of Electrical Engineering

The Department of Electrical Engineering offers instruction and facilities leading up to the degrees of Bachelor of Science in Electrical Engineering, Master of Science in Electrical Engineering and Doctor of Philosophy. Its faculty has recently been strengthened by the addition of four PhD's from across the country thus augmenting the total academic effort of the department in the various areas. Additional recruitment is underway.

This department is actively engaged in teaching and research activities in almost all areas that bear the name Electrical Engineering. Among these are Solid State Electronics, Plasma Dynamics, Quantum Electronics, and Electromagnetic Communications and Digital Systems, Circuits and Control Systems, and Biomedical Instrumentation. The findings of these are usually reported in students' reports or theses and published in professional journals of repute.

To accomplish these goals, the department is equipped with all necessary equipment. They have ultra-high vacuum equipment, a giant pulse ruby laser, high voltage D.C. power supplies, photo-multipliers with power supply to just name a portion of the equipment.

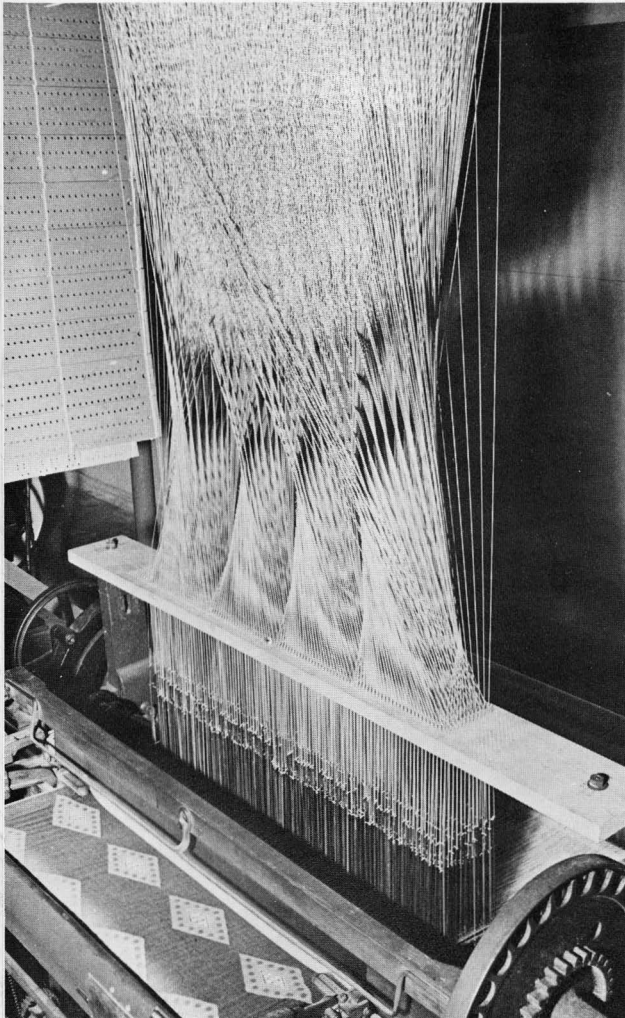
The department has at its disposal four analog computers to help in its teaching. Also, it has easy access to the digital computing center located not far from its own offices and laboratories.

Department of Textile Engineering

The Department of Textile Engineering has two undergraduate degree programs, leading to the BS in Textile Engineering, and the BS in Textile Technology and Management.

The major areas of study and teaching are:

- a) fibrous materials, protostructures, and structures, including their properties and metrology
- b) unit mechanical operations involved in the conversion of fibrous materials into protostructures



“For me, teaching is a two way exchange. I expect to learn from the students both from their questions and from their experiences. To me, a class without interaction is a meaningless ritual, and an indication that my presentation is neither stimulating nor responsive to their needs or expectations. As I know my students better, it becomes easier to fit my lectures to their needs. I expect students to question me in class, and to come to my office for more individual help. I also expect them to conscientiously do their assignments and homework. My job is to help them learn—and to evaluate how well we, as students and teacher, are succeeding. It is not my job to tutor the student who can’t find time to do his reading. I believe that learning is fun, and if it isn’t, then something is wrong. While I am sympathetic with students who feel learning is drudgery, I am more interested in helping them change their attitude than in changing the work load.”

- c) textile structuring operations
- d) unit chemical processes and operations on fibers, protostructures, and structures.

The Department of Textile Engineering has always been interfaced with the Textile Research Center in that the pilot plants of the Center are used for undergraduate instruction. The Center has a unique array of laboratories and pilot plants, which are indispensable for the general mission of textile product and process study and development.

With the 1968-69 expansion of the Textile Research Center, there has been an initiation of interdisciplinary interaction of other engineering departments with the Textile Research Center. This mechanism is for many reasons an attractive one, and substitutes for a graduate program within the Department of Textile Engineering.

The Textile Research Center is subdivided into three functional units—the Physical Measurements Laboratory, the Structure Fabrication Laboratory, and the Chemical Processes Laboratory, together occupying a 50,000 square feet modern facility.

Department of Engineering Technology

The Department of Engineering Technology offers work in the three technical specialty areas: construction, electrical electronics, and mechanical technology, each leading to the degree of Bachelor of Science in Engineering Technology. Graduates in engineering technology play an important role in such areas as construction, manufacturing, field service, sales, quality control, and other general engineering support activities. The technologists, whose work emphasizes the application of established fundamentals and procedures to the solution of technical problems, serve as important members of industrial and engineering teams. Technological developments and operations involve many activities for which sophisticated mathematical skills and deep understanding of scientific theory are unnecessary and for which knowledge and understanding of technical methodology is most important. The programs in engineering technology educate the student specifically for the technologists' role.

Technology curricula are oriented toward specialized areas but are less rigorous mathematically and scientifically than engineering programs.

The College of Engineering is one of dynamic goals and unlimited area of learning. The College is always progressing with the rapid growth of the technological problems of our society. The curriculum is kept up to the level of learning of today.

The student is always taken into consideration if it be the curriculum or his personal problems. One of the most outstanding features of engineering is the close contact with the faculty in each department and their readily accessibility to the student.

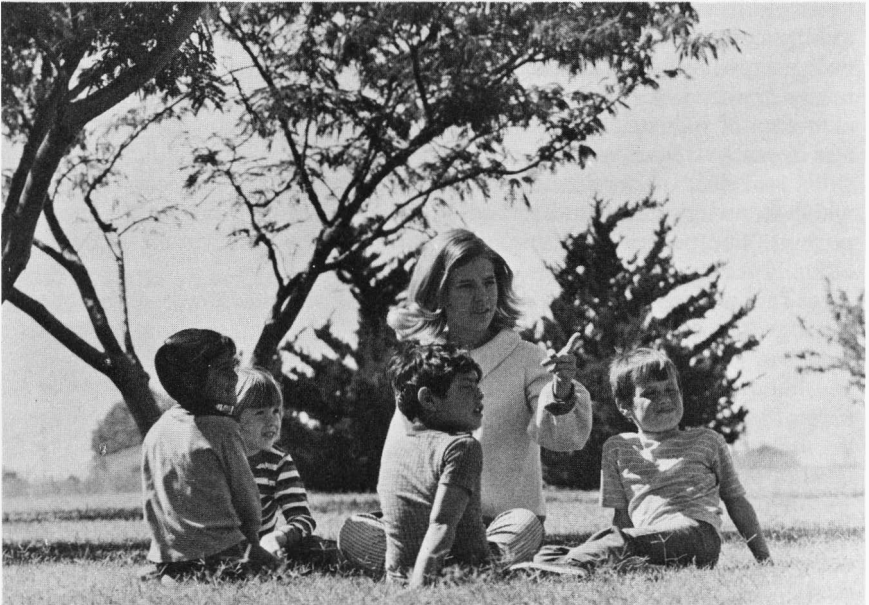
“Engineering does not slap you in the face. If you want to sit back and avoid hard work, pain, confusion, and the probably resultant learning, you can. Whether this is an attribute or a drawback is a good question. You might answer it before entering it.”

College of Home Economics

The emerging careers involving home and family life, management, new foods, and new textiles have kept the College of Home Economics at Texas Tech University constantly aware of the increasing advancements of our society. A shortage of Home Economics personnel for these careers, as well as teachers for youth and adults, has the College continuously revising its program to meet these demands. The college ranks well with other institutions in our nation and is among the top seven in size in its undergraduate programs.

The College of Home Economics endeavors to acquaint and educate its majors in existing and new careers of community services, teaching, consumer education, and home and family living. An increasing number of men is enrolling in home economics courses to obtain knowledge in the marketing of food, management of money, and counseling of family members. As more women enter the labor market, home economics can prepare them for their dual role of homemaker and wage earner.

The college faculty is selected carefully in their specialties. Teachers are assigned to an age group with which they work best, and students receive individual attention because of the nature of the courses and the in-

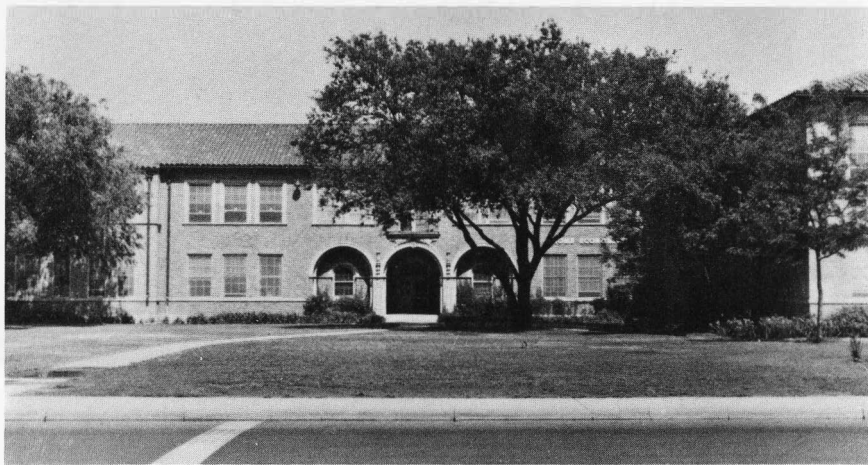


"The Dean's Office is always wide open and I never hesitate to go in and say what I want. I find myself more open and prone to the transfer of ideas in a discussion with my teachers."

terest of the faculty. Every student has an advisor, and in addition to academic counseling, orientations are given for freshmen and transfer students.

A serious evaluation of all courses is made by student representatives who examine teaching methods and grading practices of instructors, and also determine if the majors are achieving their goals. Each year, in senior seminars, the University Catalog and degree plans are studied for improvement. Home economics tries in many ways to get feedback from students and faculty members so that its program can offer a useful education.

Students at Texas Tech have the opportunity to be actively involved in the professional organization, the American Home Economics Association. There is also an active home economics national honorary society, Phi Upsilon Omicron.

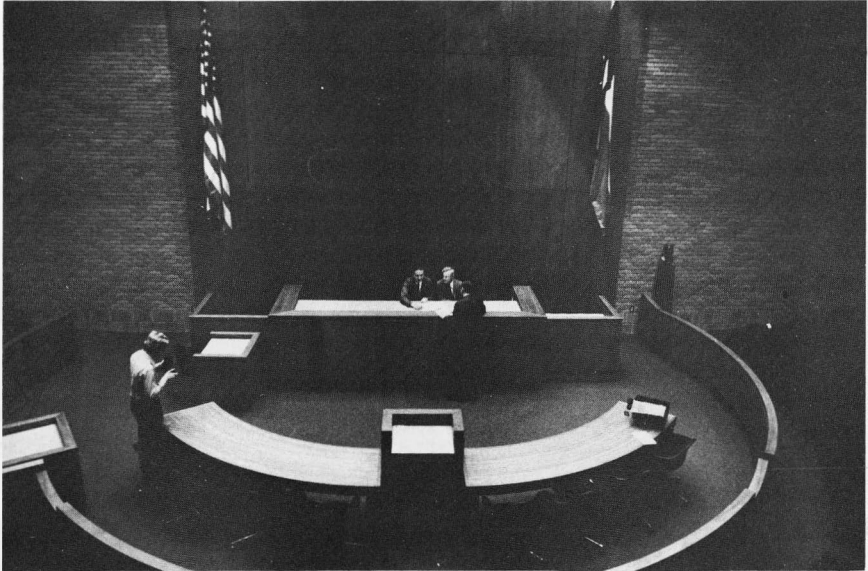


“We all work together. We help set the standards for the teachers to go by. Home Ec is always striving for improvement.”

School of Law

The School of Law is the newest existing school at Texas Tech University. In 1968, final approval was granted by the Supreme Court of Texas under the Rules Governing Admission to the Bar of Texas. The school met the requirements for full accreditation by the American Bar Association in August 1970, the earliest possible date. Graduates of the School of Law receive the Doctor of Jurisprudence upon graduation and are qualified to apply for admission to practice in any state in the United States.

The Texas Tech School of Law is an active member in the Association of American Law Schools. Students of the School of Law are trained to



practice law anywhere in the United States, whether it be as advocate, counselor, judge or law teacher. The curriculum and methods of instruction are designed to develop in the student his highest potential, whatever his reasons for entering the school.

An essential ingredient of the study of law is the outstanding law library, open over 100 hours per week. The present collection has over 75,000 volumes, including subscriptions to more than 560 periodicals. The school's law library is the principal repository for legal materials within a radius of more than 300 miles. In addition, the main university is a government depository containing a substantial number of legal documents and other material related to law.

"I think that anybody who graduates from the Tech Law School has worked harder, put in more hours, and learned more law than any student from any other law school in Texas."

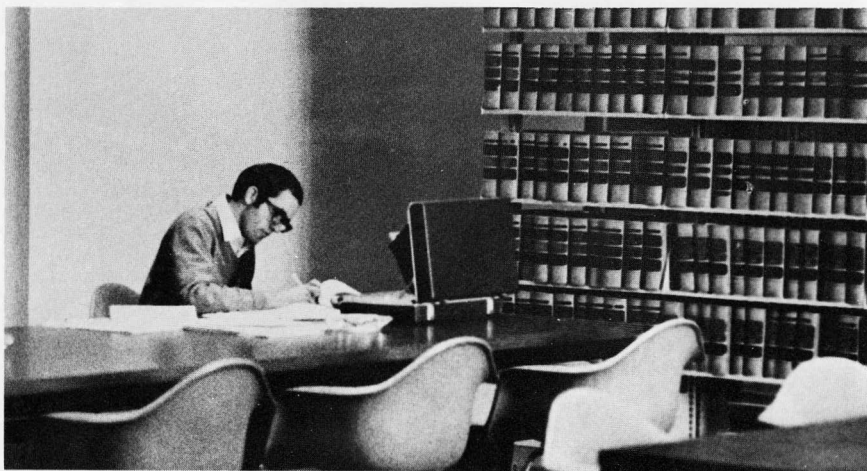
Scholarships, loans and part-time positions are available in the School of Law and in the University. Awards of financial assistance are made on the basis of academic promise and financial need. In addition, Texas Tech University administers numerous student loan funds.

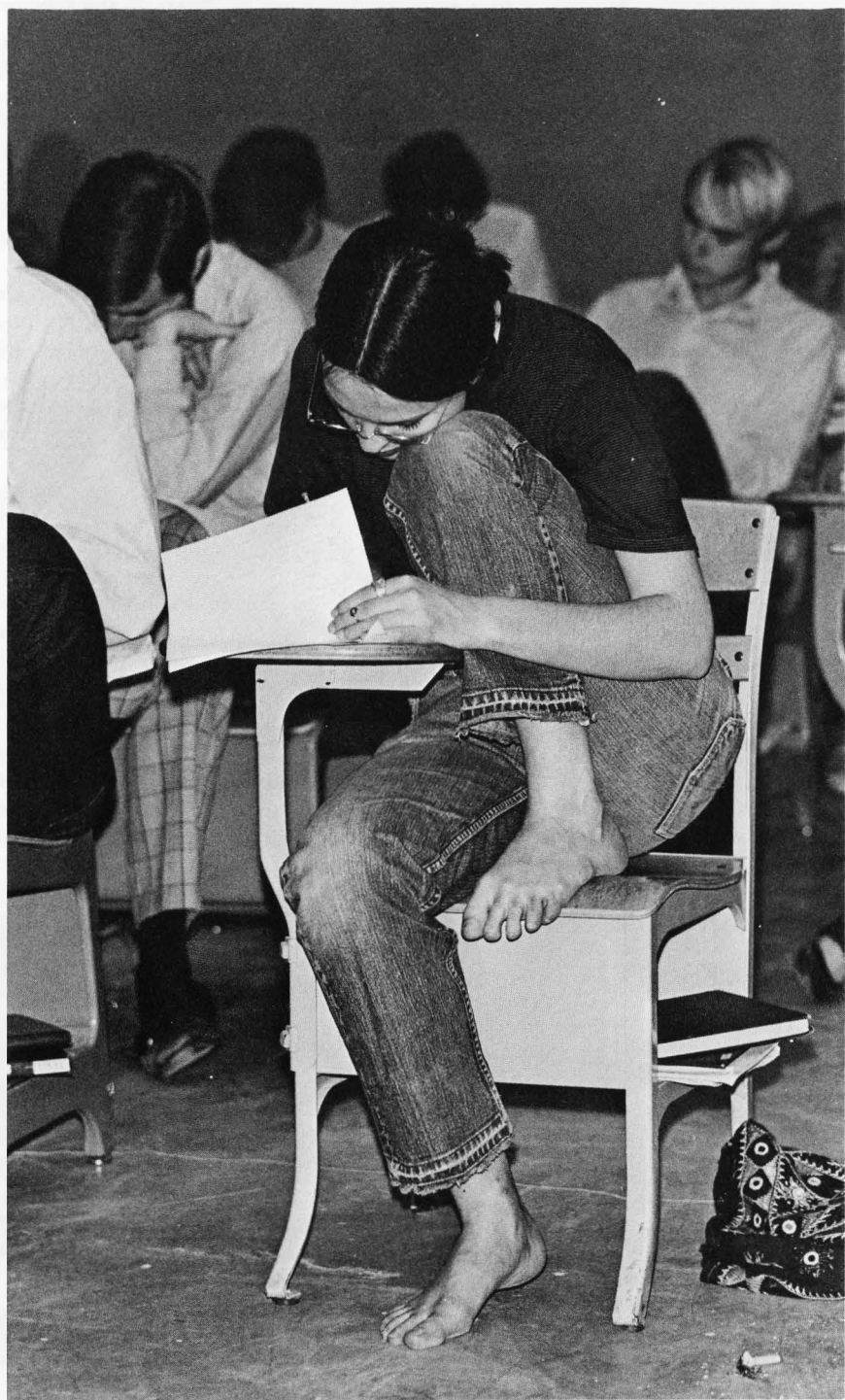
A placement service which assists students in finding legal and other positions during summers and upon graduation is maintained at the School of Law. The school is particularly proud of the employment obtained by members of the first class, which included one of the three White House Fellowships held by attorneys during 1970-71 and numerous clerkships with state and federal judges.

An applicant must have received or completed all requirements for a baccalaureate degree from a college or university of approved standing before he begins in the School of Law. His record must be of sufficiently high quality to demonstrate that he is qualified for the study of law. A satisfactory score must be obtained on the Law School Admission Test administered five times a year by the Educational Testing Service. Students are admitted only in the fall.

Numerous prominent people have lectured at Texas Tech. Among these are Ralph Nader, consumer advocate; former Supreme Court Justice Abe Fortas; Mr. Justice William J. Brennan; and Secretary of Labor Willard Wirtz. Jeffrey Wentworth, a Texas Tech Law School student, is the president of the American Bar Association, Law Student Division. Texas Tech Law School graduates took the top five places on the June 1970 bar examination. Although the Texas Tech School of Law is relatively new in years, it has already achieved a high reputation in the field of legal education.

“There is a trend toward independence and self-directed work at Tech. But that trend only affects those students who have the initiative and brains to assert themselves—to define their own goals and find ways to reach those goals.”





The preceding pages have presented the basic academic ingredients of a Tech education. Obviously your own views of education and the goals you bring when entering the university will greatly diversify the programs and resources available. Add to your own individuality, the benefits of a large university community composed of varying ideals and perceptions of an educational experience and you will have the opportunity for a lasting educational experience of value. The quality of education that you receive, of course, depends on you and your imagination. It is our hope that you will favorably consider Texas Tech University and join us in the fall for a new experience in learning. Once you have tried Tech, we feel that you will become as enthused about its educational opportunities as we are.



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