

HISTORY OF OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE
SCHOOL OF TECHNICAL TRAINING
OKMULGEE BRANCH

By

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CHAPTER I

Introduction

INTRODUCTION

Statement and Purpose of the Study

This report is made for the purpose of recording and preserving important events in the establishment and development of the Oklahoma Agricultural and Mechanical College School of Technical Training, Okmulgee Branch, and the circumstances under which the various functions of the school have developed.

It is intended to give historical facts and information about the school which may prove interesting and profitable to interested persons in future years who will not have had the advantage of firsthand contacts with the school in its beginning. Authoritative information concerning the beginning of any organization is soon lacking in detail when a record is not made as events occur or soon afterwards. It is the purpose of the writer to record such facts and information as appear to be of significance which otherwise might be forgotten in the near future.

Importance of the Study

The writer feels that the Okmulgee School of Technical Training is of sufficient importance to justify that its record of beginning and progress during the first five years of its existence be recorded for future reference.

The Okmulgee Trade School is the only school of this type in the state of Oklahoma and one of the few in the southwest.

It is filling an educational need in this southwestern area that has long been felt.

The writer believes that this school is a great step forward in vocational and trade and industrial education in general, in this area, and feels that in the future other schools of this type will be established. He feels that the experience gained by the staff and instructors during this development period will be felt in the vocational education field for many years to come.

The school has employed instructors who are skilled in the trade which they teach and in addition have been given an opportunity to learn the skills and techniques of teaching. They have been indoctrinated with the philosophy and ideals of vocational education. This is not only true of shop teachers but is also true of related teachers who have, in the main, been recruited from the ranks of academic teachers.

To round out the educational experience of the Technical Training student, the school offers related subjects. These subjects give the student that "something extra" that helps to sell his skill when it comes to securing and holding a position. The skilled workman who aspires to managerial duties cannot afford to miss any opportunity to enlarge his scope of information. Therefore, each semester the student is required to enroll in a minimum of ten clock hours per week of related subjects.

Approach and Method of Securing Information

First, the writer was one of the first staff members employed and worked in a supervisory capacity during the development of the school from July, 1946, to the present time, July, 1952.

Second, he accumulated the monthly divisional reports as they were reported during his time of service with the school.

Third, those who served as department heads and instructors, during the formative years of the school, were interviewed for firsthand information concerning the development and growth of each department.

Fourth. Access to all news reports, and other factual and statistical reports that were recorded during the time that the events happened and the reports were made, was available.

Scope and Arrangement

The school is so large that it would not be practical to attempt to report in minute detail all of its functions. Therefore, the writer will limit the study to items concerned primarily with trade and industrial education.

The report covers the five divisions of the school, namely: the Industrial, Related, Food Trades, Intensive Business, and Agricultural; it covers also the School Administration.

The arrangement of the material will correspond with the general arrangement in the school bulletin of 1951-52.

CHAPTER II

Administration

ADMINISTRATION

In the spring of 1946 a group of citizens of Okmulgee, Oklahoma, met to decide the best use to be made of the government controlled property known as the Glennan General Hospital. Their desire was for this property, located at the east out-skirts of the city, to be used for something that would benefit the city of Okmulgee and the community as a whole.

Governor Robert S. Kerr, State Congressman Bill Stigler, and State Senator Elmer Thomas wanted the state and Oklahoma A. & M. College to take over the property and run it as some kind of educational institution. Dr. Henry G. Bennett, president of Oklahoma A. & M. College, was extremely interested in the educational aspect of the property.

Mr. L. K. Covelle, who had served as a commissioned officer in the Navy during World War II, returned to Stillwater and was appointed on the administrative staff with the title of Director of Engineering Extension.

In March, 1946, Dr. Bennett requested that Mr. Covelle go to Okmulgee as his personal representative, to determine the most practical use to which these facilities might be put. Mr. Covelle made a tour of the Glennan General Hospital facilities, and met with the local committee, composed of Tom Dean, then Mayor of Okmulgee, Joe N. Croom, editor of the "Okmulgee Daily Times," Bob Lucky, merchant, and several interested citizens of Okmulgee.

Mr. Covelle realized that many veterans would return from military service unable to enter colleges or universities because they would not have high school diplomas, and probably would not want to go back to the high schools or grade schools to get them. For those who could not enter other schools, he decided it would be advisable to set up a trade school. Mr. Covelle reported this to Dr. Bennett and the committee, and every effort was made toward the acquisition of the property.

Many involved entanglements followed. The college found itself dealing with the War Assets Administration, Public Land Property, the Army Signal Corps, the Medical Corps, the Engineering Corps, and many others who had connections with the property. All of these agencies had to be cleared before permission was granted for the college to establish and operate an institution within the property.

Mr. Covelle and his co-workers met many discouraging problems. One day the college would have the property, and the next day the newspapers would carry a heading saying that no government property was going to be released. The next week the college would have it again. The college would get one agency in line, and then another agency would balk, holding up a complete title to the property. All this time negotiations were going on in Washington with the Eighth Army Corps area in Houston, Fort Worth and Dallas.

Mr. Covelle, with the local committee, was sitting in Dr. Bennett's office when he was appointed as director of the school. Mr. Covelle's comment was, "It will take five years off my life if I set up that institution." Mr. Covelle stated that many times since he has thought that he was ultra-conservative in that five-year decrease in life prediction.

Early in July plans were being outlined and preparations made to open school and start classes with the beginning of the fall semester.

No other school in the country started under any more difficult circumstances or with more problems than this one. One of the first problems was that of building an organization. A staff had to be hired.

The first staff consisted of Mr. Covelle, Director of the School; Mr. Pervere, Assistant Director; Dr. Hayden, School Physician in charge of the infirmary; Miss Dorothy Richter, Secretary and Personnel assistant to the Director; T. P. Chapman, Head of Related Subjects; R. L. Dyke, Head of Intensive Business; J. C. Crawford, Head of the Industrial Division; Wayne Miller, Head of the Agriculture Division; Mrs. Ellen Tyler, Head of the Food Trades Division; Dr. James H. Zant, Head of the College Division; Grady W. Clack, Veterans' Co-ordinator; Paul England, Head of Health and Recreation; and Herbert M. Huser as Finance Officer.

School started with an enrollment of approximately four hundred students and a faculty membership of total strangers. The first year was a year to be remembered in our school history. Everyone, including the student body, worked and co-ordinated their efforts and ideas.

The organization grew—and it is hoped that a foundation has been laid for the future of an educational institution that will be of lasting benefit to the industrial development of Oklahoma.

CHAPTER III

Department of Engines and Transportation

Facilities

- (a) Automobile Mechanics
- (b) Automobile Trim
- (c) Automobile Metal and Painting
- (d) Diesel Mechanics

AUTOMOBILE MECHANICS

Automobile Mechanics, which from the beginning has been the most popular course on the campus, had its beginning in the small building 401-N in conjunction with the Body and Fender group.

The department was set up on October 1, 1946. The first enrollment period showed twenty-five students in the course. Mr. H. R. Hedgecock was the first instructor hired in the department. With the first twenty-five students, a three-stall garage which had to be shared with the Automobile Metal and Painting Department, a few privately owned tools, and some make-shift equipment, the department got under way.

On October 10, 1946, Mr. Frank Tozer joined the department.

By December, 1946, the department had grown into a full-fledged shop and had been moved into building 409-S which it had to itself. New tools and equipment were added and a new tool room was set up. In January, 1947, the class was divided into crews, each with individual responsibilities.

Doors large enough for an automobile to enter were cut in the building and electrical outlets with a 220 volt circuit were installed.

By March, 1947, two new instructors—Mr. Adair and Mr. Hames—were employed in view of the increased enrollment. This made four instructors in the department. Some of our first automotive equipment was lent to us by the Okmulgee High School and by Connors Agricultural College.

The next month the department made another expansion, by taking in building 407-S. The need for communication between the two buildings arose, so a public address system was installed.

During the following June and July much new equipment was added. Each student was issued a tool kit of new hand tools. Mr. Harry A. Beech was added to the department as an instructor in July, 1947.

Before our first year was to end in September, the school dismissed for the month of August, marking, incidentally, our last full month's vacation. While the students were gone during this period, the shop was painted, a cleaning vat was installed, and engine stands and trestles were built. Some of the new equipment added at this time consisted of one engine tune-up tester, one distributor synchronizer, valve refacer, valve spring checker, wheel balancer, brake drum lathe, brake riveting machine, Allen generator starter, reamer drive, 140-ton hydraulic press and one AC200 volt amp arc welder.

In order for the students to advance properly, the group was divided into four classes. They were: (1) engine department, (2) machine shop, (3) ignition and carburetion, and (4) front end.

In October, 1947, the Automotive Department and the Diesel Department were merged into one department, called the Department of Internal Combustion Engines. This department was headed by Mr. Beech. Mr. Good was also added to the department. A strip film projector was purchased along with films for most phases of automobile mechanics. This was a great step forward in the theory instruction.

By January, 1948, the enrollment had increased to such a point that an over-crowded condition existed in the shops; indeed, there was talk of curtailing enrollment rather than jeopardizing the continued

progress of those enrolled. During this month the department graduated its first students.

In March, 1948, Mr. Beech resigned, and Mr. Hedgecock was appointed acting head of the department. The following June Mr. Jack Shields was assigned to the department to have charge of the stock room, tools, and shop orders.

With a greater enrollment than ever, the department had to look for more room for expansion. Building 405-N was selected and Mr. Earl Carter was employed to be in charge of the first semester automobile mechanics and diesel students in what was called a basic shop. At the end of one semester the students were enrolled in their respective trade courses.

About this time factories over the country began to send us their trained men to teach short courses at night to our students and personnel. Some of these were the Carter Carburetion course and the Perfect Circle Piston Ring course.

In August, 1948, Mr. Henry Dickson was added to the faculty. By October, 1948, additional equipment consisted of Sun testing machine, battery charger, Van Norman boring bar, large hydraulic jack, Sun portable tachometer, and films from the Chrysler Corporation.

The graduating service in January, 1949, was one of the outstanding events for the department and the entire school. This was the first official graduation held, although more than twenty students had previously graduated. In the early days of the school we had continuous enrollment; students progressed individually and were graduated when they had completed the course.

In June, 1949, the first order of white coveralls with the lettering, "Auto-Mechanics," on the back, was received, and the shops took on a commercial shop atmosphere.

Additional equipment purchased during the following July, August, and September included a Sun generator regulator test bench, a Clayton dynamometer, four hydraulic jacks, pin-hole grinder, bench grinder, clutch pressure plate cleaning machine, valve seat replacing tool, rod aligning tool, spark plug cleaner, and a reamer drive. New instructors employed in September, 1949, were Mr. John Freeman, Mr. Samuel J. Robinson, Mr. Jim Bodine, Mr. Nelson Eaton, and Mr. Howell.

The following November the entire department as well as the whole school was saddened by the death of our good friend and co-worker, Mr. Jack Shields of the parts department.

January, 1950, brought another increase in enrollment and a shortage of live project work. A meeting of automobile dealers was called for the purpose of obtaining work for our students through the local garages. New instructors added at this time were Mr. Paul Shelton in ignition and Mr. Edgar Vasser as stock room clerk.

During February of 1950 many more of the factory short courses were held, including those of the Purtain Brake Fluid Company, and McQuay-Norris Piston Ring Company. Mr. Hedgecock also attended a dyna-flow transmission school in Tulsa. At this time Mr. A. A. Jennings and Mr. Antone Bileck were employed as instructors in the Basic Shop.

Another expansion took place in May, 1950. A small-units and ignition shop was set up in the old fire station building. Several engines donated by car dealers were installed to be used as experimental units. Mr. Tozer was put in charge of this shop.

Mr. Hiram Flannery joined the group in June, 1950. We were still purchasing new equipment. Some pieces were: several automatic transmissions, one new Sioux valve refacing machine, a John Bear headlight tester, and a new valve rescaler.

In September Mr. Dickson and Mr. Good visited several manufacturing plants in Detroit, Michigan, securing many auto mock-ups for the school. Mr. Hedgecock and Mr. Robinson attended the automotive show at the Texas State Fair in October, 1950.

A. & M. Tech Week was a week for all of us to remember. A building was secured in town and every department had a display. Automobile Mechanics had a rocket engine mounted and test equipment to show visitors what type work we were doing at the school. We also had one of our automatic transmissions on display.

February of 1951 saw the department making plans for the coming Air Force training. It was to be a course in automotive preventive maintenance. By March, 1951, we had several of the classes on the campus and the course for the Air Force was under way.

The Air Force contract was for six months, which extended to August, and the school received an extension to December, 1951.

Thus the Automobile Mechanics Department ended its first five years as a well-equipped and efficiently staffed department.

AUTOMOBILE TRIM

The Automobile Trim Department was added to the Industrial Division in July, 1948. Mr. J. W. Harelson was selected as Supervisor of the course, and, the first day, two students enrolled.

The department was first located in building 403-S in a small corner of the Automobile Metal and Painting Department. Both automobile trim and furniture upholstery were taught at this time. The only equipment was a large panel machine and a regular trimming machine.

This was one of the courses set up for the training of severely handicapped persons, and the enrollment was continuous.

In December, 1948, eight students had enrolled, and, by January, a total of eighteen students were crowded into the small room.

The first location had become too small for the class, so a new one had to be found. The fire station building was selected and the move was made to the new location. The department now had room for three automobiles for the auto trim students, and a larger room for the furniture students. In May, 1949, Mr. Earl R. Van Dolsen was employed in the furniture phase of the Upholstery Department. During this year supplies, small hand tools, and some power tools for furniture rebuilding and refinishing were added, and four sewing machines to be used by both auto trim and furniture repair students were secured.

From September, 1949, until January, 1950, ten new students were enrolled, making a total of twenty-eight. In February, 1950, Mr. Wilford T. Hand was employed as the third instructor for the department.

With this increase in enrollment it was decided that the department should be divided and the furniture section moved to a separate location. Building 303-N was selected and Mr. Van Dolsen moved the furniture upholstery there. This move provided adequate space for the furniture phase.

The Automobile Trim group had by this time outgrown its location, so building 105 was secured and another move made.

This department, as in the case of the other departments, used live work for instruction. The students not only learned the making of seat covers and panel and deck upholstery, but also to do the glass fitting and installation.

Although this department has only been in operation for three years, it is considered one of the more stable departments of the school. During this three-year period the need of this type of training in Oklahoma has been proven by the requests for men trained in this work.

AUTOMOBILE METAL AND PAINTING

Each day some one hundred body and fender students systematically pick up the tools for the job they may be doing. This is a big change from the day when Mr. C. H. Starr, head of the department, would unlock the door to a small cabinet containing very few tools and jump clear to avoid being mangled by the first students of the department in their rush and tussle for a tool.

The department was first set up in building 401-N in conjunction with the Automobile Mechanics Department. Mr. Starr chose that particular building because it was the only building on the campus that had a door wide enough to get a car through.

When asked what his reaction was to the first day of class work, Mr. Starr said he wondered from what source he was going to get something to work on, and when he got something, he wondered what he was going to do with it.

The equipment students had to work with at that time consisted of a ten-ton hydraulic jack, some chains, a piece of railroad iron used to straighten frames, and two old spray guns left by the government, plus Mr. Starr's own set of hand tools and the will power to get ahead.

In October, 1946, the Automobile Metal and Painting School began with an enrollment of seven students. By the beginning of the semester in January, 1947, it had increased to sixteen, which made the situation worse because of the lack of floor space and equipment. When asked how he managed to get along during that semester, Mr. Starr said, "I was

hired as an instructor and it was my job to find a way to get along. We needed more space and we got it."

At the beginning of the semester in May, 1947, the department was moved to 403-S, and with a little time and hard work, tool boards, work benches, and a paint spray room were built.

A little equipment was added every few months, and more students enrolled every semester until building 403-S was fully equipped and three four-hour classes were being held daily.

In June, 1948, Mr. Vernon Himes and Mr. Neil Keathley were employed as instructors. Mr. Keathley was one of our first body and fender graduates.

In September, 1949, building 403-N was added to the department to take care of the ever-increasing number of students. All students were taught in the two buildings by holding two classes a day in each building during that semester.

Early in 1949 it became necessary to employ more instructors. Mr. C. E. Harelson was employed on March 1, 1949. More students enrolled, and on August 30, 1949, Mr. J. A. Davenport was hired. With the beginning of the September semester, the enrollment still grew, and Mr. A. W. Graham was added to the staff.

At the beginning of the semester in January, 1950, enrollment was so heavy it necessitated holding three four-hour classes in each building, beginning at seven A. M. and ending at seven P. M. The peak enrollment was one hundred four students during this semester.

Mr. W. H. Henderson was added to the staff on January 3, 1950. By January 25, Mr. M. R. Shelton, another of our graduates, was hired, and Mr. L. E. McCutcheon was employed on January 27 to round out our teaching staff.

The latest equipment to be added to the department is a DeVilbiss spray booth and equipment. It is 24' x 12' x 9', dust proof, fluorescent lighted, and equipped with exhaust fans. It was purchased at a cost of \$3150.41. With this new equipment added to the department, it is now one of the best-equipped automobile metal and painting schools in the country.

At the present time, equipment and tools are valued at over \$10,000, and purchased supplies used cost around \$1000 monthly.

In the summer of 1951, Mr. C. H. Starr, Head of the Department, died after an extended illness. The whole school mourned his death, but his efforts and enthusiasm had been well entrenched and the department continued with Mr. C. E. Harelson taking over as department head.

DIESEL MECHANICS

October 2, 1946, the Diesel Mechanics Department was set up and students enrolled for the first time. Instructors hired for this first class were Mr. C. H. Steinman and Mr. Charles T. Watts. The initial enrollment was twenty students, and the building selected was 407-N, which had been used for hospital storage.

For the first three months the class work consisted chiefly of diesel theory taught by Mr. Steinman in building 406-N. The shop equipment during this period included just a few parts picked up by the instructors, a parts catalogue, and some charts.

During this period of October to December, it was uncertain whether the course would continue to develop, because of the impossibility of securing equipment of any kind. There was also the uncertainty of job possibilities. It was the consensus of opinion of the school administration that we should discontinue the course, but due to the persistence of the students, we did keep the class open, and somehow it continued to grow, and tools and equipment began to trickle in.

On January 2, 1947, the department acquired two engines, one four-cylinder four-stroke cycle gasoline and one two-cycle, and one lathe, one drill press, and two grinders. In February the tool room was completed and two road patrols with diesel engines were secured from the Highway Department.

On account of the lack of suitable training tools and equipment, the laboratory classes were dismissed for a two-week period.

By March, 1947, more tools and equipment were purchased, and classes were resumed. Two new shop instructors were employed—Mr. C. J. Holcomb and Mr. L. B. Roberts. The shop also received one six-cylinder Hercules diesel engine.

In April the school purchased four new three-cylinder Gray Marine engines and one Hill engine.

The large wooden tank was removed from the tower by the heating plant and installed by the diesel shop; this served as a cooling system for the engines in the shop.

During the months of May, June, and July the shop received a six-cylinder Caterpillar diesel air compressor, cutaways, and display boards, a new band saw, a 500 CFM air compressor powered by a Waukesha diesel, and one six-cylinder Euda diesel.

In September, 1947, the shop got a complete face-lifting with paint and permanent installations. The work on the course outlines also was nearing completion.

In October, 1947, the Diesel Shop was combined with the Automobile Mechanics Department to form the Department of Internal Combustion Engines. Mr. Harry A. Beech was appointed to head the department.

Building 405-N was cleared of hospital supplies and some equipment was moved in. With a large increase in enrollment, more instructional help was needed, so three of our diesel students were hired as part-time instructors. They were Mr. Warren G. Williams, Mr. George Southerland, and Mr. Robert A. Mahaffey.

In January, 1948, we had nine of the beginning class of October, 1946, graduating. This was fifteen months from the stormy unsettled beginning of the department. In order for the graduating students to

obtain instruction on fuel pumps, many trips to Tulsa were made.

The school purchased a new diesel fuel injector testing machine in May of 1948. This was the beginning of our fuel-testing department.

By this time the department was receiving some outside work from oil contractors and coal companies. This probably did more to boost the morale of the Diesel Department than anything that had been done up to this time.

Mr. Earl Carter was employed in June, 1948, as an instructor, and placed in charge of the basic shop. This was a course in which all first-semester students in Automobile and Diesel Mechanics would study machine shop practices, forging, and the basic fundamentals of internal combustion engines.

With the purchase of the new fuel pump equipment, plans were drawn and a fuel system room was completed. This eliminated the need for taking students to Tulsa to study fuel systems.

New instructors employed in September, 1948, were Mr. Harry Moore, Mr. O. D. Patton, and Mr. J. I. Bodine.

In September, 1949, Mr. F. C. Howell was employed in the department.

New instructors hired in January, 1950, were Mr. Arthur Jennings, Mr. Robert J. Armstrong, and Mr. Earl Howland. Mr. George Noble was hired as head of the Diesel Department in February, Mr. Anton Bileck in April, and Mr. John Owen in November.

In February, 1951, Mr. Donald J. Langham was employed. The next month Mr. Joseph E. Lawrence and Mr. Levi Cassaway joined the staff.

Mr. F. C. Howell was appointed head of the Diesel Department in March, 1951.

From this uncertain beginning the Diesel Mechanics Department completed its first five years as a highly recognized diesel school.

CHAPTER IV

Department of Construction

- (a) Cabinet Making
- (b) Carpentry
- (c) Drafting
- (d) Plumbing
- (e) Furniture Upholstery

CABINET MAKING

The Cabinet Making Department was organized in conjunction with the Carpentry Department in October, 1946. The building most suited for this course was building 523, which had been used as a maintenance shop during the occupancy of the facilities by the army.

Mr. L. L. Douglas was employed as supervisor and has been in constant contact with the department's development from the very beginning.

The students in the cabinet making class were very fortunate, as were the students in the other shops, in that there was sufficient work to be done over the entire campus to furnish work for practical instructional purposes.

In February, 1947, the carpentry and cabinet making courses were made separate departments with their own course outlines. Although they used the same building, the work was entirely different.

An additional instructor, Mr. W. R. Bailey, was employed to teach carpentry and Mr. Douglas taught cabinet making and supervised both departments.

In March, 1947, plans were completed and shop lay-outs made in preparation for moving into larger quarters. This was building 405-S.

Although this shop was one of the better equipped on the campus, in the early development of the school, it still was far from being adequately equipped. Several items of equipment were added to the department through war surplus purchases, but much more had to be purchased

before the shop training could be done properly.

The acquisition of building 405-S provided more space and a better arrangement of equipment could be made.

Samples from various lumber and allied companies were donated to the department for instructional purposes, and it also familiarized the students with the type of merchandise on the market.

The cabinet making students made many useful articles of furniture for the school. One of the outstanding projects of this department was the building of the large walnut desk for the director's office. This desk was designed by Mr. Douglas, head of the Woodworking Department. In addition to this project many desks, bookcases, speaker's stands, classroom arm-chairs, and other items were built.

An Advisory Committee for Carpentry and Cabinet Making was organized in April, 1949. The committee has proved to be of great value to the department in that it insures instruction in the phases of work which will be necessary for the student to know when he goes out on the job.

In 1949, Mr. W. H. Thomas was employed in the department. He was in charge of the cabinet making students and also taught related cabinet making to the furniture upholstery students.

Cabinet making is one of the oldest trades, yet it is still very popular. The demand for students who have been trained in cabinet making is great and with the type of equipment available, and the instruction given, seems to be meeting the demand of industry.

CARPENTRY

The Carpentry Department was organized in October, 1946, in the same building with the Cabinet Making Department.

Mr. L. L. Douglas was employed as instructor and supervisor of the department.

Building 523, which had been the maintenance shop while Glennan General Hospital occupied the facilities, was assigned to the department.

There was carpentry work to be done from the very first day the school took over the property. Carpentry students were fortunate in that this work was used for instruction.

One of the first projects was a conversion of the barrack type buildings into apartments for married students and their families. This, as well as the conversion of buildings for classrooms and offices, kept the class in work during the first year.

Early in February, 1947, Mr. W. R. Bailey, from Muskogee, Oklahoma, was employed as the carpentry instructor. This was the time that separate course outlines were made for the courses of carpentry and cabinet making. Although Mr. Douglas was relieved of his duty as carpentry instructor, he was still supervisor in charge of the Woodworking Department.

In 1948, the need for a farm foreman's house on the east side of the campus arose. This was an ideal project for the carpentry class. The students received some very practical work and instruction before this house was completed.

Their material was mostly used lumber but enough new materials were used to make it practical for instruction. This job gave them experience from the foundation to the roof.

In 1949, an Advisory Committee for the Woodworking Department was organized. It was composed of local contractors and builders. The committee is of great value to the school and instructors in the preparation of course outlines. They know the type of work the student will be doing when he goes out on the job and this work is incorporated in the teaching outline.

Mr. Bailey resigned in May, 1949, to return to public school work. Mr. E. R. Brinson was employed to fill the vacancy.

With the rapid increase in enrollment it was impossible to keep up with the maintenance and construction work with only one instructor, so additional carpenters, Mr. Jack Harshaw and Mr. Melvin Evans, were employed. This gave more supervision and instruction to the carpentry students and much better work was done.

Since the organization of the class in 1946, the students of this department have never lacked for practical live work. At the end of the first five years there is still much work to be done on the campus, which can be used for instruction.

DRAFTING

The Trade Drafting Department was organized and classes started in February, 1947, in building 412-N, with Mr. W. A. Scott as department head.

The course is designed to teach students in the drafting phases of architecture, pipe-line, mapping, machine, and structural. The student must complete eight weeks in mechanical drawing and eight weeks in each of the five fields before choosing his objective course. The second year of the two-year course is devoted to his chosen objective.

The department was poorly equipped during the first semester. Cafeteria tables, drawing boards, and blueprint frames were converted by carpentry students into furnishings which could be used in the department. Most of the drawing equipment was war surplus material which had been secured from the government.

Additional equipment was secured from the Douglas Aircraft Plant in Tulsa. Included in this were several metal drawing tables which the department needed very much.

One of the first practical jobs of the drafting students was to draw plans for conversion of the barrack type buildings into apartments, classrooms, and offices. This work proved to be very satisfactory for instructional purposes.

The enrollment had increased from eight students, the first semester, to thirty. With this increase an additional instructor, Mr. Paul S. Wheeler, of Bartlesville, Oklahoma, was employed. He was placed in

charge of the afternoon drafting classes and helped with the related drafting.

January, 1948, building 412-S was assigned to the department, doubling the space of classrooms. With more space and an increase in enrollment the need for more equipment arose. A large blueprint machine, a washer, and a dryer were given to the department by the Phillips Refinery.

The acquisition of the carbon light printer facilitated the making of clearer prints in the reproduction of drawings.

By 1948, contractors and builders of Okmulgee were requesting the department to draw plans and blueprints to be used in their building programs. The students were assigned these projects. It proved to be very valuable instruction, in that it created interest and motivation, by enabling students to see their plans put to use and the houses and buildings in the finished form.

The drafting course was further enriched by the addition of two related courses. They were the fundamentals of surveying, taught by Mr. T. J. Wharton, an agricultural engineer, and the perspective sketching course, taught by Mr. Roy Belford of the Intensive Business Division.

In January, 1949, several related subjects were added to the drafting course of study, namely: applied mechanics, descriptive geometry, kinematics, and strength of materials.

The construction of the new Graphic Arts building afforded an opportunity to the students to see actual steel construction as the work was in progress.

March, 1950, the department purchased a new blueprint machine which is of great value to the classes.

May, 1950, new equipment costing approximately \$2000 was added to the department. Major items consisted of new drafting tables, filing cabinets, one transit, one dumpy level and two plane tables.

September, 1950, Mr. Shannahan was employed to instruct in pipeline and in map drafting. This increases the drafting staff to three instructors.

During the month of November, 1950, Mr. E. W. Hopper, Supervisor of Employment, Mr. B. G. Spence, Chief General Engineer with Oklahoma Gas and Electric Company of Oklahoma City, Mr. Ross, Personnel Manager, and Mr. Munsford, Chief Draftsman of the Shell Petroleum Company, Tulsa, Oklahoma, visited the department. These men were interested in familiarizing themselves with the type of training offered.

At the close of the year 1951, the demand for draftsmen was far greater than the supply.

PLUMBING

The Plumbing Department was organized in October, 1946, at the time the rest of the school was being set up. The building assigned to the department was one that had formerly been used as a plumbing shop. It had a few benches, shelves, and pipe and filling racks for long pieces of used pipe.

The equipment consisted of one pipe machine, a few large pipe wrenches and an assortment of used materials. All small tools and good materials had been sold at three surplus sales while the government was in control.

Although the shop was opened in October, 1946, the first students enrolled in the course in May, 1947.

For the first three months the plumbing department operated with tools owned by the department head, Mr. Herbert Denney, and his father, Mr. Ray Denney. Most of the materials used were obtained either from Mr. Ray Denney's shop or through his contacts with wholesale houses.

By October 3, 1947, the plumbing department had fourteen students. Two of these fourteen graduated; the others dropped out of school before graduation to take good paying jobs as plumbers.

By 1949, the plumbing shop was well equipped and materials were becoming available. Although the shop was too small it served its purpose as headquarters for the students and for theory instruction. The entire campus became the laboratory for the plumbing students. They had plenty

of new installations in the construction of apartments for student families and enough old plumbing for the maintenance work.

The peak enrollment in the plumbing department came in 1950 when the plumbing classes numbered forty students.

Before this, an additional instructor had been hired, Mr. J. H. Marlin, who came to work in 1948.

The great demand for plumbers in industry and the good salaries paid attracted many students into the trade.

In the summer of 1950, Mr. John A. Swenson was added to the teaching staff. This afforded an arrangement whereby one instructor could manage the shop, one the new installations, and one the maintenance calls.

The plumbing course is now firmly established and the demand for plumbers is growing every day.

FURNITURE UPHOLSTERY

The Furniture Upholstery Department was organized in July, 1948, in conjunction with Automotive Trim. Mr. J. W. Harelson was instructor-supervisor for both phases.

The first location was a small room in the Body and Fender shop--403-S.

In May 1949, Mr. Earl R. Van Dolsen was employed in the furniture phase of the Upholstery Department. With an increased enrollment it was decided that the two should be separated. Building 303-N was selected and Mr. Van Dolsen moved the Furniture Department there. This move not only provided ample room for the furniture classes but also allowed it to be placed under the proper department heading, that of the Department of Construction.

It became apparent that all furniture students should have instruction in woodwork and wood refinishing. Arrangements were made with the Cabinet Making Department, and now all students in Furniture Upholstery take their first semester's work there.

The department purchased new sewing machines and other hand equipment and supplies. With these purchases and work table made by the Carpentry Shop, the Furniture Upholstery Department is set up to do a nice job of furniture upholstery.

CHAPTER V

Department of Electricity

- (a) Electrical
- (b) Radio and Television
- (c) Refrigeration and Air Conditioning

DEPARTMENT OF ELECTRICITY

The Department of Electricity was organized in October, 1946. The first class of twenty-three students met in building 452-N with Mr. J. C. Crawford, head of the Industrial Division, as their temporary instructor. Mr. L. J. Ridge, Head of the Radio Department, acted as instructor for a short period. The radio class and the electrical class were using the same building at this time. Later Mr. John Pickard filled in as a temporary instructor.

In November, 1946, Mr. Clarence Bainum was hired as the first permanent instructor.

Building 523 was selected as the best-situated for the Electrical Department and the electrical equipment was moved there from the Radio Department.

One of the first jobs of the electrical class was to check all electrical equipment of the school, and that equipment not being used was winterized. There was plenty of work in the various shops of the campus to give good instruction to the first students. In general, the students of this department became acquainted with the operation and care of the many different types of electrical equipment, and in theory of the electrical currents and the precaution necessary in that type of work.

By January, 1947, the students were getting some experience in pole climbing, street lighting systems, power distribution systems, and uses of A. C. power.

In February, 1947, the department employed an additional instructor, Mr. Charles A. Latterell, who came from Minnesota.

The electrical students assisted the radio students in the installation of the inter-communication system in the administration building, a project which was particularly valuable as electrical instruction.

The department by this time was receiving some new equipment and supplies. This was a great improvement over the first the department had, which was mostly war surplus materials, well-worn and very inaccurate. It was still difficult to buy copper wire and many electrical parts and equipment.

In August, 1947, Mr. Latterell located and purchased from the Electrical Motors Company, Cedar Rapids, Iowa, one ton of small motors. These were all burned out and badly worn, and of one horsepower or less; but were really a great help in the department due to the great need for this type of work in the shop.

In September, 1947, the Electrical Department was rearranged and a great many improvements were made. Tool, supply and storage rooms were built, new benches with test panels were added and a theory classroom was provided.

In October, 1947, the Electrical and Radio Departments were more closely co-ordinated by a merger of the two, with Mr. L. J. Ridge as head of the department.

In November, 1947, the department established a maintenance program for the campus for future use and study. This program required a complete record compiled in index form of all the electrical installations. This included the construction, trouble shooting, and maintenance line.

In May, 1948, the department divided its training into three phases, namely: wiring and construction, machinery repair, and appliance repair. This was to give the student an opportunity to major in one phase of the work.

In March, 1948, Mr. Painum became ill and was forced to resign. On March 8, 1948, Mr. R. E. Horswill was employed to teach in the basic electric shop. This shop was set up to teach all electrical and radio students the fundamentals of electricity during their first semester.

Mr. R. W. Fulsam was employed on April 1, 1948, to replace Mr. Painum in the wiring construction work. Mr. Fulsam resigned September 1, 1948, and Mr. George Binnall was employed to fill the vacancy. Mr. Binnall worked for two months and resigned on November 11, 1948. At this time Mr. James Quayle was employed to teach in the department.

The department received the best relationship and co-operation from the electrical dealers and companies. In February, 1949, the Public Service Company gave the department used meters and meter testing equipment. They also furnished information pertinent to their company, for study by the electrical students.

In the fall semester, 1949, the electrical instructors conducted an evening class, sponsored by the State Department of Trade and Industrial Education, for the employees of the Rural Electrification Association.

On June 1, 1949, Mr. John E. Moriarty was employed to teach machinery repair with Mr. Latterell.

The year 1950 was the outstanding year for the department. The enrollment reached its peak during the summer with one hundred seven students. The department had enlarged as the need arose. The floor

space had been doubled. The tools, supplies, and equipment had been brought up to par and the teaching staff was adequate.

On March 7, 1950, Mr. H. T. Cannon was added to the staff to teach machinery repair. Mr. Trammel resigned in September, 1950, and Mr. James Quayle was shifted from the machinery repair to the construction phase.

In 1951, the enrollment had declined and a reduction of force was made. Instructors who resigned were Mr. H. T. Cannon, Mr. R. F. Morewill, and Mr. C. A. Latterell.

During 1951 the department was more closely co-ordinated and consolidated by moving the shop from building 523 to buildings 410 and 412-S.

New instructors added this year were Mr. Hugh F. Lafferty and Mr. A. L. Hoff.

At the end of the five-year period the department was firmly established, and recognized as a fine school for electrical instruction.

RADIO AND TELEVISION

The first enrollment in the Radio Department was in October, 1946. Mr. J. C. Crawford, head of the Industrial Division, was the first instructor. He taught the class during the time that negotiations were being made for a department head for radio.

For the first few weeks the radio and electrical departments were using the same building, 452-N.

Mr. L. J. Ridge was employed as head of the Radio Department early in the first semester.

The first enrollment in the Radio Department was twelve students. Enrollment was continuous and by the end of the second semester there were twenty-five students.

The first equipment was from the war surplus stock which had been secured by the school. Some used radios and parts were donated by local radio dealers.

In January, 1947, Mr. W. G. Williams was employed to teach in the Radio Department.

The classes were set up with four hours of instruction in the shop and two hours per day in related instruction. The work consisted of repairing radios and other electrical equipment, and theory of radio taught by the shop instructor.

One of the first large jobs was the building and installation of an inter-communications system in the administration building. This

was completed in March, 1947. The radio students were assisted in this installation by the electrical students.

In May, 1947, the students were permitted, as part of their training, to make an inspection trip through the local radio station, KHBC.

The September enrollment of 1947 found the students checking various watches for class time. The radio class came to the rescue by installing the program clock system. Wiring from the public address system used in the hospital was utilized for this purpose and at a considerable saving to the school.

September 1, 1947, Mr. E. J. Falcom, a radio shop operator of Tulsa, Oklahoma, joined the radio staff.

New equipment was being ordered and received regularly at this time and new individual tool kits for students were purchased.

The advanced students began a study of the basic principles of television circuits in October, 1948. It was the groundwork for the television course which was to be added to the radio course when television became more common in this section of the country.

On August 31, 1948, Mr. W. G. Williams resigned to enter private business, leaving only two instructors in the department.

In March, 1949, the department did some experimental work with television in preparation for the opening of the course in television. In May the television course was organized and an antenna was erected on the water tower.

Mr. Clarence S. Crayson was added to the teaching staff of the department.

Building 454-N was acquired for a television laboratory and shop, and was put under the supervision of Mr. Ridge.

Television reception was consistent from WKY-TV, Oklahoma City, and under unusual conditions, reception was made of stations WNEF, Washington, D. C., WMAR, Baltimore, Maryland, KNEH, Hollywood, California, and a WCBS station.

In August, 1949, the entire class spent a day in Oklahoma City to get firsthand information on modern radio transmitters and television studios. They were guests of station WKY.

In September, 1949, the first semester radio students were enrolled in the basic electricity course under Mr. Horswill. It was the belief of school officials that all electrical and radio students would advance faster if they had one semester of basic fundamentals.

In October, 1949, the television station, KOTV, in Tulsa, began transmitting a test pattern for the proper alignment of television sets on that channel.

The students in both radio and television were afforded an opportunity, through the co-operation of local dealers, to get practical experience in the fields by being permitted to work on used sets and install television sets and aerials. They were also invited to radio and television stations in Tulsa where they were given thorough tours and much helpful information.

By the summer of 1950 the department had been well-equipped and ample supplies had been purchased to do almost any job that came in.

One outstanding feature of the shop theory was the conference method used in the classrooms; however, this had to be limited due to the experience of the class.

On February 28, 1951, Mr. L. J. Hidge, head of the Radio Department, resigned and was replaced by the radio instructor, Mr. E. J. Balcom.

REFRIGERATION AND AIR CONDITIONING

The first class of fifty-five students enrolled in the Refrigeration Department on October 1, 1946. The shop was located in building 412-N, now occupied by the drafting department.

Mr. J. L. Robison, now assistant head of the Industrial Division, was in charge of this department. He now states that his only reason for choosing that building from the many buildings available at that time was that it contained a piece of equipment that he wanted for his department. This was a Chieftain single-cylinder compressor, valued at approximately \$22. So, with this piece of equipment, a desk, and a chair, one of the most popular courses in the school had its beginning.

The curriculum then consisted primarily of refrigeration theory.

In October the enrollment increased to the point where an additional instructor became necessary. Mr. S. A. Riley was employed to assist in the department.

The shop was moved to 401-S in November, and the equipment then had increased to two reach-in refrigerators, one morgue box, and five small water-coolers. The students, with a few hand tools which had been secured through war surplus, were beginning to do some minor work on the available equipment.

The department began buying equipment and shop tools, both used and new, but this was not keeping up with enrollment.

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Robinson as a student instructor.

During the following summer, the students, under supervision, were doing all necessary maintenance repair on the school refrigeration equipment. Charts and mock-ups were being used for class instruction in lieu of the actual equipment. One piece of equipment made by the instructors was a machine to demonstrate the purposes and use of all types of refrigerant valves, cold controls, and pressure controls.

In April, 1947, the north portion of building 401 was vacated by the Automobile Metal and Painting Department, making room for expansion of the Refrigeration Department. The class was by this time broken into groups of ten with an instructor for each group.

The next month found the department handicapped by the resignation of one instructor, Mr. Messer. A five-ton air-conditioning unit was received and used in demonstrating the principles of air-conditioning. Students also began receiving some training involving small office-type air-conditioners.

The student load increased to eighty-five in the summer term of 1947, and it was necessary to enroll students in evening classes. Mr. Terry Jamison was employed to teach these. At the same time, Mr. D. B. Robison was employed as a full-time instructor.

The fall semester of 1947 got under way with eighty students. About \$5000 worth of new equipment and parts for repairs was purchased, bringing the total value of shop equipment and tools up to around \$15,000.

During this semester the refrigeration course was divided into household and commercial refrigeration.

By October it became necessary to employ additional instructors, and a new theory class in the principles of air-conditioning was added

to the course. Mr. J. L. Evans was employed as air-conditioning instructor. Mr. Leamon Bush was hired as a student instructor to assist Mr. Jamison with the evening class.

December, 1947, found the work on job sheets, instructors' guide sheets, and information sheets nearing completion. These were designed to aid the instructor in job assignments, and to give the students a more thorough understanding of their work.

Mr. Bush completed his work in January, 1948, and accepted a teaching position in refrigeration at the Southwestern Institute of Technology, Weatherford, Oklahoma.

Mr. Leroy Melton was employed to replace Mr. Robison as an instructor.

The department acquired the north half of building 400 in January, 1949. This formerly was occupied by the library. The building was equipped for the commercial refrigeration and air-conditioning class. At this point evening classes were discontinued, and students were enrolled in commercial refrigeration and air-conditioning.

In January, 1950, an electrical motor repair shop was equipped and made available for the training of students in the electrical portion of refrigeration.

At present the department has training equipment valued at \$30,000, cost price. Students in the repair and maintenance section are responsible for service on campus equipment. This includes two hundred twenty-five domestic refrigerators in apartments, seventy-five small water-coolers, five reach-in refrigerators, six walk-in refrigerators, one ten-ton cold storage plant, one self-service meat and vegetable case, one ice maker, one soda fountain, six ice cream cabinets, one bread wrapping machine, one bread cooler, two proof boxes, eight

five-ton air-conditioners, ten window-type air-conditioners, and six soft drink machines. This equipment is maintained as part of the training program in field service work.

In June, 1951, Mr. J. C. Crawford, head of the Industrial Division, resigned and was replaced by Mr. J. L. Robison, head of the Refrigeration Department.

CHAPTER VI

Department of Fabric Services

- (a) Dry Cleaning
- (b) Laundry
- (c) Tailoring

DRY CLEANING

On August 1, 1948, the Advisory Committee for our Dry Cleaning Department was busy working with the department head, Mr. F. M. Perkins, and the assistant head, Mr. Eulas Massey, in the selection of new equipment for the plant. The committee met and gave assistance in locating some of the equipment being installed. During this period a skeleton outline for a course of study was drawn up, details of which were to be approved at a later meeting.

There was much to be done before the fall semester started. Mr. Perkins and Mr. Massey, assisted by the Dry Cleaning Committee, made a complete shop layout in one of the old Army mess halls.

New equipment began to arrive from the factory, but there was a tremendous job of installation to be done.

When the first students enrolled in September, 1948, the shop was far from being ready for operation. As it turned out, this first class received many lessons that the future students did not get. They acquired firsthand information in location and installation of this new equipment. In addition to this experience they were also receiving instruction in fabrics and theory of dry cleaning.

Mr. Perkins and Mr. Massey attended the Oklahoma State Cleaners' and Dyers' Clinic in Oklahoma City in February, 1949. At this time the Association voted unanimously that their one project for the year would be the promotion of the Dry Cleaning School at Okmulgee.

The cleaning plant actually cleaned its first load of clothes

February 7, 1949, and the total number of students had increased to twenty-one.

From that first load of clothes the department had a steady growth, and the enrollment reached eighty-five during the summer of 1950.

By April, 1949, the department began rotating students in the different phases of the work so that they would become accustomed to the operations of the equipment, and the dependency of each department on the other.

A short course sponsored by the State Association of Dry Cleaners and the T.A.U. Chapter Alumni Society N.I.C.D. was held on the campus with dry cleaners from the entire state participating with many of the regular students. The sponsors of the course donated two steam spotting boards and a digester tank to the school. In September the department received a Glover wool spotting board donated by the Oklahoma State Dry Cleaners' Association and an Easly press control from the Easly Press Control Company.

Mr. Perkins resigned as head of the department in September, 1949, and Mr. Massey was appointed head.

The training was divided into short courses which included: dry cleaning, taught by Mr. M. G. Lunger, who was employed in September, 1949; spotting and wet cleaning, taught by Mr. H. E. Golden, employed in September, 1949; silk finishing, taught by Mr. G. B. Smith, employed January, 1950; wool finishing, taught by Mr. R. D. Crawford, employed October, 1949; and front end and checking, taught by Mrs. R. A. Barnett, employed October, 1949.

Adco, Incorporated, of Sedalia, Missouri, donated two atomizer injectors and one pressure tank to be used in wet pre-spotting. By

the use of these the cleaning room procedure was changed considerably. The United Machinery Company, Fort Smith, Arkansas, gave the department a forty-two inch press.

A very successful three-day short course in spotting was held on the campus. Cleaners from Kansas, Oklahoma, Texas, New Mexico, and Missouri attended. The spokesman for the instructors, who was from the National Institute of Cleaners and Dyers, Silver Springs, Maryland, stated that we had the best facilities he had seen.

In February, 1950, installation of a fire-proof wiring system throughout the Dry Cleaning Unit was completed, including an entirely new explosive-proof panel system.

The Dry Cleaning Advisory Board Committee met February 22, 1950, and plans were made to start a Hat Cleaning and Blocking Department to wholesale accounts for the cleaners throughout the state.

The department had, by February, 1950, a total enrollment of eighty-five students.

In April, at the end of the 1950 semester, the first students graduated. Of the five graduating, four had accepted employment in dry cleaning establishments before the semester ended.

By June, 1950, all equipment for the Hat Cleaning, Blocking, and Renovating Department had been received.

Arrangements were made with the Good Will Industries, of Tulsa and Oklahoma City, Oklahoma, to clean and finish clothing for them. This has been a great help in supplementing the volume of regular work.

In September, 1950, Mr. Kenneth B. Stanley was employed to replace Mr. Crawford, who resigned.

The Dry Cleaning Department held open house December 10, 1950, and

approximately seven hundred persons attended. Oklahoma, Kansas, Texas, and Illinois were represented.

The Dry Cleaning movie entitled, "After the Ball is Over," filmed in the Dry Cleaning Shop, was shown for the first time.

Due to commercial shops' using a variety of systems in dry cleaning, the A. & M. plant has kept its training flexible, to help graduates adjust to these different methods. This has been accomplished through the help of the Advisory Committee of which Mr. John Cash, executive secretary of the State Board of Dry Cleaners, is chairman.

At this time the Dry Cleaning Department has been in operation only three years, yet it is one of the best-equipped departments in the school. With continued backing of the State Board of Dry Cleaners, the school will continue to be of great service to the dry cleaning industry in Oklahoma.

LAUNDRY

The Laundry Department started operations in October, 1946, with the opening of the school. The department was fortunate in starting where the Army left off in the hospital laundry which was already set up and equipped at an estimated value of \$55,000.

Mr. Emil V. Erock was employed as instructor and manager of the laundry Department in 1946.

The department had sufficient work from the beginning for instructional training. It not only did all campus laundry but also laundry work for several of the dormitories and cafeterias in Stillwater.

Mr. Erock resigned from the school to accept employment in South America.

Mr. Harry G. Williams, former manager of Dinks Parrish Laundry, in Oklahoma City, Oklahoma, was employed to fill the vacancy in September, 1948.

During 1949-50 the number of students in the department increased to sixteen and additional work was received from Connors College, Warner, Oklahoma.

In April, 1950, Mr. G. M. Crouch was employed as an instructor in laundry. He resigned in September, 1950, and Mr. Harry West was employed to fill the vacancy.

Approximately \$25,000 worth of equipment has been added to the department and present plans call for replacement of old equipment with new and more modern facilities.

The laundry students, like those of other trades, are enrolled in ten clock hours per week of related subjects. Some of these subjects are: English, human relations, mathematics, business practices, chemistry, and fabrics.

Employment of our graduates through our employment office has been very satisfactory.

At the end of the first five years of operation, the department was well-equipped, adequately staffed, and giving excellent instruction.

TAILORING

In August, 1949, Mr. T. A. Van Curon was employed to organize and set up a course in tailoring. This was another of the courses under the supervision of the War Veterans Commission of Oklahoma. It was designed to meet the need of the severely handicapped persons in Oklahoma who needed training in a vocation.

Tailoring was set up, as were several of the other courses, on a continuous basis of enrollment. The student could enroll at any time and progress at his own rate of speed. The reason for this continuous enrollment was to meet the need of the handicapped person, who needed the training immediately for therapy reasons, and for whom several months of waiting to enter would be harmful.

Mr. Van Curon did not have the difficulty in securing equipment, supplies, and furnishings that the other departments had, due to the fact that the course was organized later and supplies were not so hard to get, and also the carpentry and electrical shops were in a position to help, since their own shops were well organized and running smoothly.

The students in the tailoring classes are trained to be alteration clerks, suit designers and general tailors.

This report covers only the first two years of the growth and progress of the Tailoring Department, yet it is sufficient to show that there is a demand for this type of training. The graduates are finding employment and it is hoped that a foundation has been laid to aid many of the severely handicapped, and others, in becoming independent.

CHAPTER VII

Department of Graphic Arts

GRAPHIC ARTS

From a small shop with nine students, in five years the Graphic Arts Department has grown to its present size—valued at an estimated \$200,000, with fifty-three students, a department head and six instructors, and a new \$56,000 building which offers opportunities beyond those offered at most printing schools.

In January, 1947, Mr. E. W. Eaton, head of the Graphic Arts Department, established the printing course in part of building 403-N, which also housed the Shoe Rebuilding Department.

The equipment for the shop consisted of one old linotype machine, a few very small hand presses and several buckets of type which had to be sorted by hand and distributed in the proper cases. Six months later the department enrollment had increased to the point where more shop work was necessary. A new section in linotype instruction was added. Mr. Bruce Heydenburk was employed as instructor for this phase.

The department soon became cramped for room so building 106 was assigned to the department and the move made.

Growth was steady as additional linotype machines, presses, and other equipment were purchased. The department soon was able to print the college bulletins as well as the school newspaper, "The Roundup," which had been printed previously at the Okmulgee Times plant.

In 1949, a \$117,000 appropriation was granted for additional equipment for the department through the state legislature.

During this time the department expanded so rapidly that

three new instructors were added to the department faculty. They were Mr. John P. Gilbreath, Mr. James J. Bertone, and Mr. E. C. Brown.

The first new building of any size to be added to the campus was in the Graphic Arts Department, at a cost of \$56,000. Ground-breaking ceremonies were held at eleven A. M., Friday, March 3, 1950. With the new building, sixty-five feet by one hundred twenty-five feet, adjacent to the printing building, the department more than doubled its floor space of 13,125 square feet.

Those attending the ground-breaking ceremonies were Mr. O. L. Lackey, member of the Board of Regents of Oklahoma Agricultural Colleges; Mr. Joe N. Croom, editor of the Okmulgee Daily Times, and member of Oklahoma Press Association; Mr. Gabe Gierhart, Sapulpa, representing the OPA Advisory Board; Mr. T. P. Chapman, head of the Related Subjects Division; Mr. W. E. Wood, Mayor of Okmulgee; Mr. Hoyt Ostrander, president of the Okmulgee Chamber of Commerce; Mr. Tom J. Dean, manager of the Chamber of Commerce; and Mr. Dan C. Kenan, from radio station KHBG. Members of the Oklahoma Press Association Advisory Committee for the Graphic Arts Department present were Mr. Paul Miller, Wagoner, Mr. Gabe Gierhart, Sapulpa, and Mr. Joe N. Croom, Okmulgee.

The Manhattan Construction Company contracted to complete the new addition within sixty to ninety days on the new building to house \$117,000 worth of new equipment and for classroom and office space for the department.

Over 677 fluorescent lights, at a cost of more than \$6000, were installed in the new building. This is one light for every twelve square feet of ceiling space. When installation of equipment was completed, this department represented an investment of approximately \$200,000,

making it the "finest school of graphic arts in the nation," according to the head of the department.

A complete offset section, made up of more than \$15,000 in equipment, was finished and ready for students to enroll in September, 1950. Providing training in camera work, press work and plate making, the section offers an excellent opportunity for short courses in those fields as well. Lithography, or offset, the newest field in graphic arts, is a phase not as well developed in the mid-west as nearer the larger cities.

The offset section was set up under the direction of the Graphic Arts Department's Advisory Committee, composed of engravers and lithographers of Oklahoma, as a full-time course within itself. Training is divided into two units, extended over a period of eight months. Offset press operation and maintenance is a continue unit covering the same period.

Nine composing machines now in use by the department are a variety of linotype models such as 5, 8, 31, and 32. Intertype Model GSM and additional composing machines are under consideration as new additions to the department's wide range of equipment. Open jobbers, automatic cylinders and flat bed presses are in use in the increased training program.

The department now has in use more than \$4500 worth of new foundry type, together with sufficient new cabinets and additional equipment such as a monotabular machine, routers, miterers, a strip casting machine, and saws, to offer elementary and advanced training in floorwork.

Students in the Graphic Arts Department, in addition to courses in basic English, human relations, and basic mathematics, are required

to take a two-hour course in related journalism dealing with the problems of copy writing, news gathering, headline writing, make-up and proofreading. The course was opened in January, 1949, with Mr. George Burris instructing it. Class members, mostly third semester printing students, prepare copy for the "Roundup," official bi-monthly publication of the school, as practice in the journalistic field. The "Roundup" has a circulation of 3500. In September, 1949, Miss Patsy Ruth Peterson joined the faculty for a year as journalism instructor. In September, 1950, she was replaced by Mr. Jack A. Hixson, and in March, 1951, Mr. Brown, of the Graphic Arts Department, took over instruction of the course.

New instructors employed in 1950 were Mr. James B. Dixon, Mr. H. F. Turner, and Mr. Paul V. Norrell.

The only instructor to resign during the period of this report was Mr. Bruce Heydenburk.

Placement records for the department can be surpassed by no school. All students who have studied in the department as many as three semesters, or who have graduated, are now employed in the trade. This 100% placement record attests to the opportunities in the field and to the efficient training offered in this department in the Industrial Division.

CHAPTER VII

Department of Leather Industries

- (a) Art Leather
- (b) Shoe Rebuilding

ART LEATHER

Included in the group of departments offering specialized training for the severely handicapped or disabled is the Art Leatherwork Department.

The department was organized and classes began to meet on May 18, 1948, in building 306-N, with fifteen students enrolled. Four of these were taking the course as a vocation or objective, the others as a related subject.

Mr. Jack Rhodes, who had had industrial experience in leatherwork, was employed as supervisor of the department.

In comparison to most of the departments in the school, the Art Leathercraft Department had little difficulty in securing tools and equipment for instructional purposes. However, some difficulties were encountered in obtaining sewing machines due to some of the companies' being on strike.

Early in 1949, short courses in Art Leatherwork were offered as related subjects to the students enrolled in shoe rebuilding. These included preparation of leather, modeling or tooling of a design, templates, methods of decorating, belt making, strap cutting, use of thunging, lacing, and repair of leather articles.

The course of Art Leatherwork is operated on a continuous basis. Students may enroll every Monday throughout the year.

In 1950, the department was moved from 306-N to 304-N. This made more room available for the Shoe Rebuilding Department as well as for the Art Leather Department.

In the new location Mr. Rhodes arranged his work tables and machines in the best position for all students. The electrical students wired the room for better lighting and in general the move worked out to the advantage of both departments.

At the time of the writing of this report the department is only three years old, and Mr. Rhodes is doing a fine job in the supervision of the department. The graduates of the department are being placed on jobs with good salaries. At this point the future of the department seems to be firmly established.

SHOE REBUILDING

In February, 1947, the Department of Shoe Rebuilding was added to the Industrial Division. The department was set up in building 403-N in a small room ten feet by eighteen feet in the same building with the Graphic Arts Department.

When the first three students enrolled, Mr. W. R. Bradley, the department head, had very little equipment and supplies. They began with four machines formerly used by the Glennan General Hospital in brace-making. This machinery consisted of one sole stitcher, one finishing machine, a patch machine, and a sole cutter.

In September, 1947, the department was moved to 306-S by Mr. Bradley and his students. This gave them additional room but with the increased enrollment the department had to employ an additional instructor. Mr. Leo Tehee joined the staff in August, 1948, and student instructors were added during the year on a part-time basis. Two new instructors were employed in 1949, Mr. W. M. Foster and Mr. H. K. Joyce.

In March, 1950, the department had to expand again, so building 306-N was made available. The department now occupies nine hundred square feet of floor space.

There was a great demand at this point for training in the making of cowboy boots, so the boot-making course was added to the department.

Some equipment had been added to the original as time passed. From September, 1949, to June, 1950, the department made its greatest gain with the addition of over thirty-five pieces of modern equipment.

Since the department had increased in students and space, eight more stitching machines were added, four finishing machines, seven Singer patching machines, one auto-soler, one McKay stitcher, one stapler, six sole cutters, skivers, three two-pair cement presses, two one-pair presses, one two-pair cowboy boot shank press, and two sets of hand shank presses.

At the present time the department has space and equipment to handle sixty students per class, and is operating on a twelve-hour basis, this schedule consisting of three four-hour shifts running from seven A. M. to seven P. M.

One outstanding feature in the Shoe Rebuilding Department is the "model shoe shop." It is equipped with the latest type machinery and has everything necessary for the rebuilding of shoes by modern methods. Here the student is trained in customer approach, selling, all phases of shoe rebuilding, record keeping, and stock buying—in fact, in how to operate a modern shoe rebuilding shop.

At the end of the summer term of 1950, the department had, in addition to the department head, three instructors and an enrollment of ninety students.

CHAPTER IX

Department of Jewelry Manufacture
and Repair

JEWELRY

On December 4, 1947, Mr. W. R. Flatford was employed to begin the organization of one of the courses, which was set up for the training of the severely handicapped. This course was that of Jewelry Manufacture and Repair.

The organization of the rehabilitation courses was completed under the supervision of a special advisory committee appointed by the War Veterans Commission of Oklahoma. In planning the various phases of training, one of the major considerations is the opportunity for employment in that field once an individual has been trained.

Mr. Flatford had a large task ahead of him in the first few months. First, equipment, tools, and supplies had to be ordered. Second, the building, 308-N, had to be planned and the shop layout made. Third, work benches, shelving and tables had to be constructed and, fourth, wiring and light fixtures had to be installed.

Although the department was still in the process of organization, several applications for admission were received. The first enrollment of five students was in February, 1948.

This course was designed to train students in ring sizing, ring reshanking, shank overlay, reseating, recrowning, and fabrication of rings and other articles of jewelry by casting and other methods.

By March 1, 1949, the enrollment had increased to eleven students. This was nearing the maximum for the proper instruction and the equipment on hand.

On April 1, 1949, Mr. Flatford resigned to enter private business. Mr. Ray A. Tomlin was employed to fill the vacancy. Mr. Tomlin is a graduate of a horology school and has had practical experience in commercial shops.

The Jewelry Manufacture and Repair Department, under the supervision of Mr. Tomlin, has made many changes and much progress. The shop has been expanded and better lighting and ventilation obtained.

Several projects which were used for instruction have been completed. One of these was the designing of a school ring to be sold to graduates. Another project was the designing of a lapel button. This was manufactured in the shop and presented to all personnel who had been with the school for a period of five years or more.

The students who have graduated from this course have had little difficulty in finding employment. It is hoped that the course has accomplished all that the War Veterans Commission and the Department of Vocational Rehabilitation had expected.

CHAPTER X

Division of Agriculture

DIVISION OF AGRICULTURE

The Division of Agriculture had its beginning in September, 1946, with one student in the School of Technical Training, and some sixty boys taking College Division Agricultural courses. Many of these sixty have since graduated from A. & M. College at Stillwater.

Mr. Hugh Rouk, now Assistant Professor of Agronomy and coach of the collegiate crops team at Stillwater, was agronomy instructor and college agricultural advisor. He and Mr. Wayne Miller, head of the division, were the first instructors.

Facilities consisted of one building, 456-N, and two text books, privately owned by Mr. Rouk and Mr. Miller. There was no livestock of any kind. The ground surrounding the campus was completely bare, having been scraped for construction of the hospital, and there was no fencing for livestock available at that time. The former prisoner-of-war camp, now being utilized by the division, was still enclosed by a high barbed wire fence, and all the buildings were filled with surplus equipment. Agricultural classes conducted the first semester were by necessity those requiring very little field laboratory work.

In the fall of 1946 preparations were begun for restoring grass to the barren land, with Mr. Miller, Mr. Rouk, and a few students hauling cotton burrs from the local gins and spreading them on the area adjacent to the campus.

In the spring of 1947 the "Tech Ag" group increased to the number of fourteen with the college agricultural students around sixty in

number. It was at the beginning of this semester that a new instructor, Mr. Estle C. Smith, was added to the faculty to teach horticultural subjects and take over the job of overseeing the landscaping on the campus, which had become badly run down after the Army had left the hospital.

In addition to the regular classroom instruction, agronomy students, under the supervision of Mr. Rouk, started establishing a pasture for livestock use in the future. Animal husbandry students, under Mr. Miller, were being loaded into four of the surplus Army trucks and hauled about the country for practical livestock training. A big part of this work was accomplished on the Watson Ranch north of Morris. Dr. Fred and Mr. Gene Watson were both extremely co-operative in assisting the school in its early-day training program. That spring also saw the first student-operated garden in the far northeast corner of the campus.

During the summer of 1947, the old prisoner-of-war camp was allocated to the division to be developed into whatever agricultural project it was best suited for. To teach our agricultural students the construction of practical farm buildings and fences along with soil conservation and farm machinery work, it became necessary to add our fourth instructor. Mr. T. J. Wharton, Agricultural Engineer, who had spent eleven years as an engineer with the Soil Conservation Service with headquarters in Wewoka, Oklahoma, joined the staff.

It was soon decided that a former prisoner-of-war mess hall, the only permanent-type building in the group, should be used as a farm shop building. Funds available in the agricultural division barely met the instructors' salaries, so the first working parties engaged in

leaning out the excess kitchen fixtures consisted of the four instructors working on Saturdays. Another project was to remove the prisoner-type barbed wire fence in front of the farm shop building.

Later in the fall Mr. A. L. Rutledge, farmer and poultry man, joined the division and began helping with the renovation of two former army latrines that were to be utilized for chick breeding. The first animal life came to the campus in March, 1948, when some 1500 baby chicks representing four breeds were brought in. These chicks were divided into small groups with each brood assigned to a different pair of students. Mr. John K. Phipps, now poultry instructor, was one of those students assisting with the first poultry project.

By this time, after much conversation, the division had succeeded in getting a couple of the long wooden barracks emptied of surplus beds and mattresses. Work was begun on making these barracks into living houses for the future hen flocks. A great amount of farm carpentry work was taught the students while these buildings were being renovated for poultry purposes.

More pasture improvement work was carried on in the spring of 1948, with some land directly east of the campus being made ready for future pig lots. One outstanding event of that spring was the leasing of forty acres of land adjoining the northeast side of the campus. Cultivated parts of the land had been allowed to run down through successive years of improper management. Through co-operation of the Soil Conservation Service, county agents, Indian service groups, and all local implement dealers with the college agricultural group, a big soil conservation field day was held which consisted of plowing and terracing the cultivated leased land, plus pasture renovation on the school property, with

more Bermuda set out, pasture legumes planted, and fertilizer spread.

In the summer of 1948, students and instructors started constructing livestock fences. The entire tract of land adjoining the campus was fenced, and, in addition, five hog huts east of the prisoner-of-war area were completed. Farm shop students started constructing hog houses. One was made ready for three purebred Chester White gilts purchased in the fall of 1948.

Other livestock added was five purebred Holstein cows purchased at the state Holstein sale at Bristow. Two others were added from Orwig Dispersal sale at Wewoka, Oklahoma.

The milking barn, formerly an animal house for the hospital's rats and guinea pigs, was not yet ready for the cows. Mr. John Jander, who had just graduated from A. & M., joined the faculty in August, 1948, and found himself and the students milking the cows as they were tied to the fence. Not many weeks passed before the milking parlor was made ready, and we were selling Grade "A" products.

A forty feet by fifty feet combination hay barn and loafing shed was finished for winter feeding and protection. Several calves were born that fall. The first offspring was a set of twins. This loafing shed was constructed of material from prisoner-of-war barracks that had been dismantled.

Agronomy students, in the fall of 1948, met with a new instructor, Mr. Alex G. Wiederkehr. Mr. Rouk was transferred to Stillwater as Assistant Professor in the Department of Agronomy. Mr. Wiederkehr brought with him not only a very practical background, but several years' experience as a graduate assistant in the Agronomy Department at Stillwater, plus some time spent with the Soil Conservation Service in the Veterans'

Agricultural Program.

The baby chicks purchased the previous spring were now comfortably housed in the two twenty feet by one hundred feet barracks buildings, and Grade "A" eggs were being sold about the campus. By the fall of 1948, the remaining seven twenty feet by one hundred feet barracks buildings had been emptied of surplus equipment and were being used for poultry feed and storage of seeds, fertilizers, and equipment.

A poultry broiler project of 1100 chickens was started in the fall of 1948, and these birds were sold the following January. Some 2600 other baby chicks were brooded that spring and many were sold as broilers while some 1200 pullets went to the range housed in six portable range shelters that were constructed by the farm shop classes the previous winter.

Our first baby pigs were farrowed in March of 1949.

The spring semester of 1949 added two new faces to the agricultural faculty. Mr. Grady F. Williams, dairy graduate from A. & M., and an experienced dairyman, replaced Mr. Jander, and Mr. Robert E. Daugherty, formerly assistant county agent of Creek County and a farm boy from western Oklahoma, was added as animal husbandry instructor. This same month another Holstein cow was purchased, this one from the state Holstein Classic at Tulsa. This animal later proved to be quite a high producing Holstein, giving 586 pounds of butterfat, 365 days' milking.

Fifteen beef steers were purchased in May as a steer feeding project for the students, and later were sold on the Oklahoma City market after having been fed out by the boys enrolled in beef production.

One of the most important steps in visual improvement was the painting of all our old prisoner-of-war barracks buildings and the installation

of new poultry fencing.

Another building was made into a laying house, and 1200 hens made up this laying flock. In the fall of 1949, a thirty feet by fifty feet farm shop and implement storage shed was constructed. This shed was constructed so as to typify the type practical for farm use.

In the fall of 1949 five more dairy cattle were added to the herd, three more gilts to the swine herd, and 3000 chicks were started as a broiler project. With all these steps of progress came many small improvements necessary to keep pace with this development.

By April, 1950, 2500 Leghorn chicks were in the brooder house, many of them to be added to the laying flock in the fall, making 2000 hens by midsummer. With the saving of heifers from our own herd, we had twenty Holsteins in the dairy herd. The total poultry number was 4700. We had seven portable hog houses. The pasture was greatly improved.

We now have a one-half acre vegetable garden that is on the campus and two and one-half acres of garden on a rented tract off the campus. We have seven-tenths of an acre in small nursery stock with two hundred deciduous shrubs. Fifty trees and other plants will later be transplanted to the campus. The products from the garden are sold to the college cafeteria, as are the eggs and broilers.

Some three hundred plants have been set out to improve the landscaping of the campus, and many more have been moved to more advantageous spots. A pond has been made on the east side of the campus to serve as a source of irrigation for the orchard and garden.

In February, 1951, a thirty-two feet by fifty feet greenhouse with a twenty feet by thirty-two feet classroom and potting shed was completed near the pond, at a cost of \$3000. The entire area is being

landscaped to add a spot of beauty to the campus.

On April 1, 1951, Mr. Miller, head of the Division, was called back into the Marine Corps. Mr. Daugherty was appointed acting head of the division to serve in Mr. Miller's absence.

CHAPTER XI

Division of Food Trades

- (a) Cafeteria
- (b) Culinary Arts
- (c) Bakery

CAFETERIA

The Cafeteria was put into operation September 30, 1946, with Dr. Daisy I. Purdy of Stillwater in charge. Working with Dr. Purdy was Mrs. Ellen Tyler, who was to be permanent dietitian.

Before the cafeteria could be put into operation, there was a huge task to be handled—food had to be checked, stockrooms put in order, equipment checked for efficient operation, and a thorough cleaning job done on all equipment and utensils. All equipment had been treated for storage, and China and silver had been crated and stored. The job of cleaning was tremendous in itself.

Equipment for the kitchen consisted of seven fifty-gallon steam fired stock pots, five steam fired pressure cookers, two broilers, eight ranges, and two bakers' ovens. In addition to the heavy equipment, several work tables, potato peelers, ice boxes, and assorted pots and pans were included in the small equipment. A large deep freeze unit was put into operation along with five large walk-in refrigerators. Ice cream cabinets, coffee urns and toasters were installed. Next came employment of personnel to operate this large establishment; cooks, counter girls, dishwashers, stockroom men, and others had to be hired.

The preliminaries taken care of, and the personnel hired, the kitchen was ready to go into operation. Service was to be on a full-time basis, serving three meals a day seven days a week.

Originally, a student purchased a meal book for all meals served in the cafeteria. If he should miss a meal, he lost that amount from

his book. There was only one menu made up and the student had no choice of foods; if he did not care for items on the menu, he had to eat elsewhere.

As the school grew, so did the cafeteria. New equipment was installed to facilitate handling of students through the line. A new type of checking system was inaugurated to speed the serving time. Students were allowed to miss meals on Saturdays and Sundays and cash in the tickets for those days.

The year 1948 saw several changes made in the department. The multiple choice menu was adopted and students were allowed to select the meat of their choice from a variety on the menu, the same for other types of food. Under this system the student paid only for food he actually put on his tray. This system met with the hearty approval of all concerned and has been continued up to the present time.

A new hot food serving line was installed in 1949. Also the dining room was painted, drapes put up, and fluorescent lighting installed. New units were purchased to enable the kitchen personnel to better handle the job of preparing meals.

The year 1949 also saw plans for a new Snack Bar being formulated and construction begun. Plans for a grill room were instigated but, due to other work's being carried on at the same time, had to be held over for a future date.

The Snack Bar was completed and in operation when school started in September, 1950. The grill room, called the "Red Door," was completed. This phase of training for the students completed a desirable training program.

CULINARY ARTS

Although Oklahoma A. & M. School of Technical Training had been in operation for nearly six months, the Culinary Arts Department was not established until the spring of 1947. The course was instituted under the direction of Mrs. Ellen Tyler, head of the Cafeteria and Culinary Arts.

The course was designed to give the student a full and comprehensive coverage of the cooking profession. It included not only the basic methods of preparing and serving a meal but also related theory as applicable to the field. Included also were butchering, salad making, stock-room control, and sanitation.

The enrollment in the first class was two students. Even though the class was small, large things were accomplished. The training was done in conjunction with the actual preparation of meals served in the cafeteria. Experimental laboratory work was carried on in the large kitchen under supervision of competent instructors.

Recognition by the Oklahoma Restaurant Association was obtained and an advisory board set up to aid in the work. The educational committee of the association has contributed much to the development of the department.

The department has grown from its original two students to the twenty-five now enrolled in the course. While this is not the largest department in the school, it is not to be outdone in interest.

Field trips to various hotel and restaurant kitchens as well as to

packing plants and poultry farms keep the student informed on the newer methods of food preparation and cooking. Many of these trips have been taking during the past few years.

Fountain operation and management was added to the course during 1950. Training in this phase was begun with the opening of the new Snack Bar in the west dining room of the Cafeteria. And, upon completion of the new grill room (the Red Door) the student spends a large portion of his time there, as it completes his training in kitchen and dining room management.

BAKERY

The Bakery Department began training students when the school first opened in October, 1946. It was more fortunate than most of the trades in that there was a bakery already set up on the campus.

The first instructor employed in the department was Mr. Joe Qualls, a local baker. Early in 1947, Mr. John Fite was employed to give instruction in the bake shop.

Mr. John C. Summers was employed in 1947 as manager of the bakery. Plans were immediately made to more fully equip the bread and cake shops; Mr. Fite and Mr. Qualls resigned from the department and Mr. George Minor and Mr. C. J. McAfee were employed to fill the vacancies.

There were fourteen students in training in December, 1947. In a very short time enrollment increased to seventy-five. Most of these students came from states other than Oklahoma.

Course outlines for bake-shop, baking theory, cake theory, and related subjects were more fully developed.

Through the leadership of Mr. Summers a four state baking committee was organized and, as a result, each of the state associations presented the school with \$1000 which was used to purchase ovens, machinery, and equipment for the Experimental Bakery.

Mr. McAfee was put in charge of the Experimental Bakery and Mr. Dennis Jett was hired to teach in the shop.

A baked foods store was constructed in "Times Square" and a sales-ady employed. This made available a complete variety of baked foods

for the students and employees.

A bread truck was purchased and bread and pastry orders were secured from the Cafeteria and student stores in Stillwater. Daily trips are made to the parent college with breads, rolls, and cakes. This gives the bakery a production outlet which greatly improved the instructional program.

On March 28 and 29, 1950, the Oklahoma Bakers' Association conference was held on the campus. An excellent program was planned and all staff members of the Bakery Department participated. Eighty-two bakers registered for this conference, many coming from adjoining states.

The state of Kansas has now joined the southwestern states and the school is receiving the sponsorship and support of five states.

In 1950 Mr. Jett and Mr. McAfee resigned from the department and Mr. Ira Eldridge and Mr. Lloyd Farthing were employed to replace them.

The end of the first five years found the department well equipped and with a capable teaching staff.

At the present time the demand for baking graduates greatly exceeds the number of men available.

CHAPTER XII

Division of Intensive Business

INTENSIVE BUSINESS

The Division of Intensive Business was organized in October, 1946, with Mr. R. L. Dyke, now business manager of the school, as head of the department.

A temporary office was set up in the old army equipment building on the west side of the campus.

The Intensive Business school began with an enrollment of nine students. During the first few weeks of the semester, this enrollment was increased to fifteen.

The division was assigned the building it now occupies, 351, which had been the receiving ward of Glennan General Hospital.

Classrooms were set up using nurses' desks and small night stands or student desks. For the beginning typing class, typewriters, which are stored on the campus, were moved to the department. With these meager furnishings and equipment, the division was launched.

Classes that first semester were taught by Mr. Dyke and Mrs. Hugh Luk, who served both as an instructor and as Mr. Dyke's secretary. Mr. R. Work, a pioneer of the division, joined the faculty early in the first semester to work with them.

Just before the close of the first semester plans were made to set up a Department of Commercial Art. Mr. Roy C. Belford was employed to teach in this department.

A number of changes were made in the arrangement of partitions in the building, in order to convert it for efficient use in business

training. One room in the building, however, has been utilized with very little change necessary. This is an operating room that was completely equipped with black-out curtains, sink, and a battery of overhead lights. Under the same battery of lights where German Luftwaffe men once underwent examination and surgery, commercial art students now turn out colorful posters by the silk screen process. It would be difficult to arrange a better system of lighting for this work. Also the lavatory with knee control faucets is excellent when the student is working with certain photographic stencils.

In 1947, with the enrollment getting larger, it became necessary to employ additional instructors. Mr. Roy E. Ayers and Mr. H. J. Watson were employed to teach in the department.

May 9, 1947, a new course in business machines was made possible by the receipt of fifteen new Monroe Calculators and adding machines. The accounting students found the machines profitable as time-saving devices.

As an experiment, trade students were allowed to enroll in regular intensive business typewriting classes. These students were allowed to enroll at any time during the semester and to progress at their own rate of speed. Most of the students have shown an amazing reserve of self-reliance and initiative and have, in several instances, done better work than the students who were being kept together as a group. Of course it is impossible to draw any definite conclusion over such a short period of time.

Another interesting course taught by the Division of Intensive Business is trades business practice. The course aims to teach trades students who may wish to establish a small business of their own.

Forty-three students from the various trades groups enrolled in typing for the summer term of 1947. A survey was made to determine the reasons for selecting this course. The results of the questionnaire showed that about fifty per cent wanted typing for personal use and the other fifty per cent felt they would need it in their selected vocation.

In January, 1948, Miss Geraldine Ebert was transferred from the Related Subjects Division to the Division of Intensive Business. She was employed to teach stenographic work and general office training.

By May, 1948, the Commercial Art Department had developed the silk screen process. By utilizing this phase it becomes one of the few school art departments in the United States emphasizing the technique of silk screen processing.

In June, 1948, Mr. R. L. Dyke was appointed business manager of the school and Mr. Roy C. Belford was appointed head of the division.

Mrs. Marie Emory was employed as assistant instructor in the Commercial Art Department.

Other new instructors employed at this time were Mr. Joseph F. Taylor, who was to teach in the Department of Accounting and Business Administration, and Mr. A. B. Dishman, in Accounting.

Mr. H. J. Watson resigned from the department in December, 1948.

The first talk of a Ceramics Department was early in 1949. An advisory committee was formed with Mr. John Frank of the Frankoma Pottery Company of Sapulpa, Oklahoma, as one of the advisory board members.

Mr. Frank visited the campus and discussed floor space and building requirements with Mr. Belford.

It was decided that the ceramics course would become a part of the Art Department and Mr. Donald Rowland was employed as ceramics instructor.

Other instructors employed at this time were Mr. E. A. Olmstead, accounting, and Mr. L. W. Harrison, business practices.

Mrs. Emory, of the art department, resigned in May, 1949, and was replaced by Mr. D. D. Wittmer. Mr. A. B. Dishman was forced to resign in September, 1949, due to poor health.

In January, 1950, Mr. J. A. Brian was employed. Mr. Brian had taught some classes while a student in the department, but after finishing his degree at Stillwater he was added to the staff on a full-time basis.

Mr. Wittmer of the Commercial Art Department resigned July 31, 1950, and Mr. D. E. Phillips was employed to replace him.

The only other new instructor to be hired during this year was Mr. Stanley F. Hopper, to replace Mr. Ayers, who was recalled to the Armed Forces in September, 1950.

Mr. L. W. Harrison resigned in October, 1950, to take a position with the Federal Bureau of Investigation.

In January, 1951, Mr. W. R. Garey was added to the Commercial Art department, and in February Mr. Hopper resigned.

In June, 1951, Mr. Garey resigned to return to his private art work.

In September, Miss Ebert was transferred to Stillwater to teach in the military program and Mr. Phillips resigned from the Commercial Art department.

CHAPTER XIII

Division of Related Subjects

RELATED SUBJECTS

At the same time during which the foundation was being laid for the rest of the school, September and October, 1946, the Related Subjects Division was organized. This was an innovation in the field of technical instruction, and it was necessary to make many departures from accepted academic methods in teaching.

It was organized to give students that "something extra" which makes the difference between the basic skill and the finished social individual, able to get along in the world of reality. It aims at supplying the essentials with which to fit into the personality areas required in addition to the trade skills acquired.

On July 15, 1946, Mr. T. P. Chapman was employed by Mr. L. K. Covelle, director of the school, to head the Related Subjects Division.

The curriculum for the first semester consisted of technical mathematics and technical English.

With the beginning of the second semester and an increased enrollment it was necessary to add other courses. Those added the second semester were technical chemistry, blueprint reading, related drafting, industrial history, human relations, applied science, business practices, and perspective drawing.

Before the end of the school year, 1947-48, related diesel, related automobile mechanics, related electricity, and related woodwork and finish were offered.

In most of the departments in the division it was necessary to

develop our own text material; this was due to the lack of materials which could be purchased from publishing companies for this particular type of instruction.

Following will be a brief description of the courses and the manner in which they were taught, also, the instructors who were primarily responsible for the development of the courses.

English Department: The necessity for an English course to meet the needs of visual minded students was soon apparent. Mrs. Patricia Paden Hammond began the development of this course. It was slanted to meet the needs of the individual student. By reaching the visual minded student, predominant in the technical school, the course developed attained its objective of advancing the students' ability to progress on the job. The course content is organized into one single lesson sheet for each step in the teaching process; this makes it possible for students to be shifted from one class to another without missing any of the key lessons. Charts are kept so that students are enabled to be constantly aware of their progress in comparison with work schedules for the class. Progress is at the student's own rate, and instruction and explanation are kept on an individual basis.

A text with practice sheets for this basic course has been completed and copyrighted by Mrs. Hammond. It has proved to be the best text for this particular type of related training that we have seen.

In addition to the development of the basic course by Mrs. Hammond, some work has been done by Mrs. Ruby A. Mueller and Mrs. Alice M. Rhodes in the writing of special lesson material for students of less than junior high school background. This material is still in the process of organization and development.

Others who have served on the instructional staff in the English Department are: Miss Florence Royster, Mr. Joe Watkins, Mr. Robert O. Williams, Mrs. Ella Marie Rogers, Mrs. Kay Dudley, and Mrs. Emma Vernon.

Related Mathematics: In the field of related mathematics as taught in the technical school it is necessary to consider two phases of mathematics.

The basic course in mathematics was developed by Mr. Odell Carpenter. This course was based on mathematics skills usually taught in grammar schools. Students with less than a high school background are required to take this course.

Technical mathematics courses were developed by Mr. John Foster and Mr. George Stone; these courses were designed to meet instructional needs in practical phases of mathematics in the various technical fields.

Other instructors who have taught in the mathematics department are: Mr. Clarence Hodgson, Mrs. Josephine Terry, Mr. Gilpin Sessions, Mr. Woodson LeSeuer, Mr. William West and Miss Mattie Bogue.

Human Relations: Because of a great need felt by the administration of this school for the development in our students of desirable personality traits and attitudes toward working companions and superiors, it was decided to include a course in the elements of sociology; for purposes of simplification it was called human relations.

The course is taught in units by lecture, discussion and project work. Units were developed on the following subjects: Why We Work, Periodicals, Human Relations, Collective Bargaining, Introductions, How to Get a Job, Grow on the Job, Social Insurance, Private Insurance,

Organized Vital Living, Labor Problems, Leisure Time, Litigatory Living, Vitalized Living, and Organized Living. These units were written during several successive semesters by Mrs. Albertyne Moore, Miss Meddie B. Fitzgerald, Mrs. Emma Vernon, Mr. Raymond Holland and Mrs. Dorothy Harris. Work is, to the greatest possible extent, on an individual basis; progress is recorded on charts.

Much progress has been made in this course and in the indoctrination of our students with the need for the practical help to be gained from such instruction.

Other instructors in this department were Mr. R. H. Kingsoliver and Mrs. Kelva Moss.

Remedial Education: The Department of Remedial Education was organized to help those students who are unable to go directly into basic classes, either because of lack of educational background or having been out of school for a number of years.

Mrs. Helen D. Griggs developed the course in Remedial Education. She included in the course basic grammar, spelling, reading, and arithmetic.

In the development of this course visual aids such as charts, graphs, pictures and bulletin boards were used. The use of the strip film and the opaque projector was considered a definite part of the development of the course.

Those related subjects which have been discussed are the basic academic subjects. Other subjects of instruction in this division are related to specific skills in special fields of technical instruction. These subjects include: related blueprint reading, related drafting,

fabrics, related welding, related journalism, and related science.

Other instructors and positions are as follows: Miss Geraldine Ebert, industrial history; Mr. C. W. Morgan and Mr. James J. Littlejohn, chemistry; Mr. Lyle E. Roney, Mr. D. R. Didlake, Mr. E. D. Wallace, Mr. C. C. Sharp, blueprint reading and related drafting; Mr. James Morris, Mr. W. L. Swan, related welding; Miss Patsy Peterson, Mr. Jack Nixon, related journalism; Mr. Richard Burner, related electricity; and Mr. T. C. Anderson, audio-visual department.

CHAPTER XIV

Summary and Conclusions

SUMMARY AND CONCLUSIONS

Many interesting facts have been brought to light in making this study of the history and development of the School of Technical Training at Okmulgee, Oklahoma. It has been a most interesting experience to trace the institution from its modest beginning to its present size and importance in this state. It has been impossible within the limits of the report to recite all of the problems and difficulties which had to be overcome in promoting and establishing all of the functions of the school. The study does, however, reveal the significant growth and development of the school over a period of five years.

The farsighted vision, courage, devotion and untiring efforts of Mr. L. K. Covelle, the director, and his staff have earned the respect of industry and the general public. Due credit should be given to the trade advisory committees for their counsel and assistance. It is impossible to list all of those persons who have proven themselves friends to the school and who have contributed to its success during this period.

It is evident that with the able leadership which the school now has and with the need in this area for vocational training of the kind given at the Okmulgee School of Technical Training that the school is now a permanent part of our state educational system.

VITA

Theodore Pete Chapman
candidate for the degree of
Master of Science

Thesis: HISTORY OF OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE, SCHOOL
OF TECHNICAL TRAINING, OKMULGEE BRANCH

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Graduate Study: O.A.M.C., 1946-1952

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Date of Final Examination: July, 1952.

July 14, 1952

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Head of Related Subjects Division

Oklahoma Agricultural and
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Okmulgee, Oklahoma

History of Oklahoma Agricultural and Mechanical College, School of
Technical Training, Okmulgee, Oklahoma

Sixty-five pages

Under direction of the Trade and Industrial Education Department

Statement of Problem: The purpose of writing this report is to preserve a record of the organization, growth and development of the School of Technical Training at Okmulgee, Oklahoma. It should be of value and benefit to those who may have occasion to establish and develop a similar institution.

Method of Procedure: The information for this report comes from three major sources. (1) The writer had firsthand information in that he was employed in a supervisory capacity during the period of time covered by this report. (2) He had access to all divisional and departmental monthly reports as they were reported during this period. (3) Interviews were held with those people who were working as department heads or instructors during the period covered by this report.

Findings and Conclusions: The conclusions and findings drawn from the writing of this report are: A successful school can be established with a minimum of tools and equipment and continue to grow and progress; that the need for this type of training is prevalent in this section of the country; and that the graduates have found little difficulty in finding employment in the trades and industry of Oklahoma.

ADVISER'S APPROVAL

Gene Smith

THESIS TITLE: HISTORY OF OKLAHOMA AGRICULTURAL
AND MECHANICAL COLLEGE, SCHOOL
OF TECHNICAL TRAINING, OKMULGEE,
OKLAHOMA

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The content and form have been checked and approved
by the author and thesis adviser. Changes or cor-
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the author and faculty adviser.

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