

Date: July 16, 1954

Name: Albert M. Thompson, Sr.

Position: Student

Institution: Oklahoma A. & M. College

Location: Stillwater, Okla.

Title of Study: A Study of the Distribution and Frequency of Industrial Arts Courses Taken by the Industrial Arts Graduates at Langston University, 1939-1954

Number of Pages in Study: 40

Under Direction of What Department: Industrial Arts Education

Scope of Study: A brief survey of the beginnings of the industrial arts program at the Colored Agricultural and Normal University is presented in the second chapter of this study. This survey covers quite a span of history. The developments of that period provides a foundation for the industrial arts program of 1927-1954. The third chapter considers the present program in Industrial arts and the directors of the division for this period. Chapter IV depicts by its tables the courses taken by the graduates and the frequency of the courses taken.

A Summary of Findings: The summary tables of Chapter V indicate the distribution of the courses taken by the graduates. Mechanical Drawing, Bench Work and Productive Basis show the highest frequency of the required courses. Of the elective courses, Tailoring, Automobile Mechanics and Shoe Repair are the most popular. Generalization of the required courses is not possible as the need is reflected by surveys made by the department directors. In the instance of elective courses it is felt that the graduate elected those courses which would prove most significant financially during his post-college life.

ADVISER'S APPROVAL

Albert M. Thompson

A STUDY OF THE DISTRIBUTION AND FREQUENCY OF INDUSTRIAL
ARTS COURSES TAKEN BY THE INDUSTRIAL ARTS GRADUATES
AT LANGSTON UNIVERSITY, 1939-1954

A STUDY OF THE DISTRIBUTION AND FREQUENCY OF INDUSTRIAL
ARTS COURSES TAKEN BY THE INDUSTRIAL ARTS GRADUATES
AT LANGSTON UNIVERSITY, 1939-1954

By

Albert M. Thompson, Sr.

Bachelor of Science

Hampton Institute

Hampton, Virginia

1939

Submitted to the Faculty of the Graduate School of
the Oklahoma Agricultural and Mechanical College
in Partial Fulfillment of the Requirements
For the Degree of
MASTER OF SCIENCE IN INDUSTRIAL ARTS EDUCATION

1954

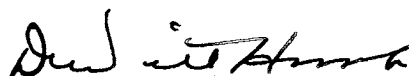
A STUDY OF THE DISTRIBUTION AND FREQUENCY OF INDUSTRIAL
ARTS COURSES TAKEN BY THE INDUSTRIAL ARTS GRADUATES
AT LANGSTON UNIVERSITY, 1939-1954

ALBERT M. THOMPSON, SR.

OKLAHOMA
AGRICULTURAL & MECHANICAL COLLEGE
LIBRARY
JUN 9 1955

MASTER OF SCIENCE IN INDUSTRIAL ARTS EDUCATION
1954

REPORT APPROVED:



Report Adviser and Head,
School of Industrial Arts Education and
Engineering Shopwork



Associate Professor,
School of Industrial Arts Education and
Engineering Shopwork


Dean, Oklahoma Institute of Technology

Dean of the Graduate School

343548

ACKNOWLEDGMENTS

To Dr. DeWitt Hunt, Head of the Department of Industrial Arts Education and Engineering Shopwork, Oklahoma Agricultural and Mechanical College, for his assistance in selecting the problem, and for his guidance and constructive criticism throughout the development of this study, the writer is indeed grateful.

Special appreciation is herein expressed to my wife, Bernice W. Thompson, for her patience, inspiration, and encouragement throughout the preparation of this report.

A. M. T.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Purpose of the Study	2
Delimitations	2
Presentation	2
II. THE BEGINNINGS OF THE INDUSTRIAL ARTS PROGRAM AT THE COLORED AGRICULTURAL AND NORMAL UNIVERSITY	3
Mechanical Department Established	3
Department of Mechanic Arts	4
Diplomas and Degrees	4
III. INDUSTRIAL ARTS FROM 1927-1954	6
Directors of the Department	6
Present Program in Industrial Arts	6
IV. COURSE DISTRIBUTION AND FREQUENCY TABLES FOR THE YEARS 1939-1954	8
V. A SUMMARY OF FINDINGS	24
APPENDIX	
A. A Selected Bibliography	40

LIST OF TABLES

TABLE	PAGE
I. Course Distribution and Frequency	10
II. Summary of Course Distribution and Frequency	26
III. Summary of Frequency of Elective Courses	34

CHAPTER I

INTRODUCTION

From its establishment, the Agricultural and Normal University had a mechanical curriculum. The first catalogue of the institution for the year 1898-1899 validates this fact. The mechanical curriculum was divided into three areas: engineering courses leading to a degree, industrial arts courses leading to a degree, and a trade course which offered a diploma. There is no available evidence of early graduates from engineering or industrial arts; however, it may be assumed that diplomas were granted in the trade courses. The materials, equipment, housing, and faculty, from a research point of view, were adequate for the conduct of a mechanical curriculum and were expanded yearly. By 1927 E. A. Miller (1) was called in to organize an industrial arts course that would meet the need of the varying students demands or requests. The new curriculum was also to lead to the degree of Bachelor of Science. Miller, a graduate of Pennsylvania State College, had proven himself capable and worthy of filling the task through his previous experiences of six years of practical industrial work at the Jones and Laughlin Steel Corporation, Pittsburgh, Pennsylvania, teaching in secondary schools in North Carolina and at Virginia State College, and Tuskegee Institute.

The new position proved to be a challenge and opportunity to organize and administer a needed program. A review of the courses taken by the graduates of the Agricultural and Normal University, later named Langston University, will show justification and diversification. It

is worthy to note in this connection that many students accumulated sufficient theory and practice in a single shop subject as would provide an adequate background for earning a livelihood. The creation of this opportunity is a credit to Miller's farsightedness in keeping with preparing an offering to meet the need of the varying students demands or requests. The director of the Mechanic Arts Department for the years 1931-1936 was L. Gude. During this period, criteria, educational standards and the recording and keeping of records as were pertinent to the department were neglected.

Purpose of the Study. The purpose of this study is to show the distribution and frequency of industrial arts courses, both required and elective as taken by the industrial arts graduates at Langston University from 1939-1954.

Delimitations. Materials for this study obtained through personal interviews with E. A. Miller, (1) Director of the Department of Mechanic Arts at Langston University, C. D. Batchlor, (2) Registrar at Langston University, and from information contained in catalogues and transcripts.

Presentation. Chapter II depicts the beginnings of the industrial arts program at the Colored Agricultural and Normal University. Chapter III describes industrial arts from 1927-1954. The main body of this report is Chapter IV. The tables in this chapter show course distribution and frequency of industrial arts courses taken by the industrial arts graduates at Langston University. A summary of the course distribution and frequency, and a summary of frequency of elective courses indicating the popularity of courses, based on the number of times a course was taken by a certain number of students, is presented in Chapter V.

CHAPTER II

THE BEGINNINGS OF THE INDUSTRIAL ARTS PROGRAM AT THE COLORED AGRICULTURAL AND NORMAL UNIVERSITY

The obligation of any institution of learning is to serve the needs of the people. Individual requirements follow numerous channels, and Mechanical and Industrial Arts represent a segment of the services offered to meet the needs. In the instance of the Colored Agricultural and Normal University, so named by an Act of the Territorial Council and House, March 12, 1897, the choices of services offered to meet these needs were governed by the types of work done by various groups of people of the state. There is evidence that a mechanical curriculum was needed.

Mechanical Department Established. Through the farsightedness of the Council in formulating plans for the University, the Mechanical Department was included in the Act which is evidence that this phase of education was regarded as essential to the well being of the people which the institution was to serve. It is also evidence of the cognizance of members of the Council for their educational responsibility to a people and their attempt to do something about the situation.

In Section One of House Bill No. 151, the Council designated the purposes and defined the objectives of the institution as follows:

. . . . shall be the instruction of both male and female colored persons in the art of teaching and various branches which pertain to a common school education; and in such higher education as may be deemed advisable by such board, and in the fundamental law of the United States, in the rights and duties of citizens, and in the agricultural, mechanical and industrial arts. (3, page 19)

In recognition of the implications of the Act, the following depart-

ments were established:

1. Mechanical Department--Electrical and Mechanical Engineering.
2. Mechanical Department--Civil Architecture. (3, page 19)

Department of Mechanic Arts. The leaders of the University realized that divisions of the department, courses of study and objectives were the next tasks after establishment of the Mechanical Department. To this end the Department of Mechanic Arts was formulated. Its three divisions were Trade, Manual Training and Engineering. The trade division offered courses in carpentry and joinery, machine work, blacksmithing, steam engineering and foundry practice. (4, page 103) The manual training division offered to all academic students woodworking, forging, machine shop practice, foundry practice and mechanical drawing. (4, page 20-21)

The objectives of the courses offered were also included in the curriculum planning. The objectives expressed the expected outcomes of instruction, the subject matter being the vehicle through which these outcomes are sought. The purposes of the trade and manual training courses were similar in that each, ". . . is to prepare young men to become skilled workmen of the highest type, and to give them preparation which will enable them to reach the more advanced position of foremen, contractors and builders." (4, page 104) Engineering was: ". . . offering a general education and of preparing young men for the profession of mechanical and architectural engineering." (4, page 20-21)

Diplomas and Degrees. As a result of satisfactory work done in the Mechanical Department, "graduates from the mechanical course received a diploma and the degree of mechanical engineering." (5, page 32) The significance of this information no doubt supplied an additional incentive

to the students of this department.

It appears that a functioning organization in the Mechanical Department was in effect shortly after the opening of the Colored Agricultural and Normal University. The writer feels this to be true in view of the well planned curriculum. The Territorial Council and House of the Oklahoma Territory also appears to have shown a great interest in discharging its educational responsibility to a people as revealed by its stated purpose and by the objectives of the University. The beginning program of Mechanic Arts was an adequate response to the need of the people.

CHAPTER III

INDUSTRIAL ARTS FROM 1927-1954

The Legislature of the State of Oklahoma, the community served by the school, and the leaders of the institution were all instrumental in contributing to the rapid growth of the Colored Agricultural and Normal University, which, on May 1, 1941, became Langston University. The Mechanical Department of the Colored Agricultural and Normal University grew rapidly through its beginning years.

Directors of the Department. In 1927, the President of the University, deciding to initiate a four year program leading to a degree, engaged E. A. Miller (1) to formulate such a program and to chair the department. Miller, holding a Bachelor of Science degree in Engineering from Pennsylvania State College and Master of Science in Industrial Education from Iowa State College, was, in point of educational proficiency, eminently qualified for the position. This was further reinforced by six years of practical experience as a workman and supervisor at Jones and Laughlin, Pittsburgh, Pennsylvania, and several years of teaching experience at both the secondary and college levels. Miller, except for a period between 1931 and 1936, has served as head of the department since 1927. In the 1931-1936 period, L. Gude served as head of the department.

Present Program in Industrial Arts. In keeping with the best practices of educational systems and with a sympathetic understanding of the problems facing the areas of service, the Division of Mechanic Arts has been operated under the following objectives:

- (1) To satisfy the needs of the prospective teacher of Industrial Arts.
- (2) To satisfy the needs of the individual who desires information or trades experience in a particular field. (6, page 98)

To implement these objectives, the work of the division has been organized into the following curricula.

Curriculum 1. To offer adequate education and training for teachers of and skilled workers in Industrial Arts and Vocational Education in Electricity, Plumbing, Tailoring, Shoemaking, Steam Power Plant Operation. (6, page 98)

Curriculum 1 is a four year program that leads to the degree of Bachelor of Science.

A second curriculum program is offered for those students who do not attempt to satisfy the requirements of the State Board of Education in regards to requirements in education, and therefore no certification for teaching in Oklahoma is offered. Further, this is not a degree granting program. A certificate is issued by the University to the student who completes this course.

The Curricula in technical training are designed to give the student actual practice in the selected trade under the direct supervision of an expert in the trade. (6, page 106)

Although no effort is made to trace in detail the development of the program of the division under the directorship of E. A. Miller, the progress that has been made during the years since 1927 can readily be recognized. The present program of the division, while not an end in the evolution of the curricula of the department, indicates a marked advance from the disorganized program of the era of the late twenties, both in the area of the objectives of the department and in the specific matter of courses offered to prospective graduates.

CHAPTER IV

COURSE DISTRIBUTION AND FREQUENCY TABLES FOR THE YEARS 1939-1954

An index to the growth and development of the offerings of the division can be seen in a representation of the courses pursued by the graduates. The information presented in the following tables represents the frequency with which the various courses were taken by students who received degrees from the department. These charts do not represent the total list of graduates, but are based on the number of graduates from 1939 to 1954.

Table I shows individual number one of the graduating class of May 23, 1954 as having pursued five courses in Automobile Mechanics, individual number two with four courses in Tailoring, and individual number three with five courses in Shoe Repair. Required courses are indicated with asterisks. In the class of July 24, 1953, individual number two elected six courses in Tailoring while the remaining numbers sought a general industrial arts curriculum. Of the two graduates of the May 24, 1953 class, individual number one completed five courses of Automobile Mechanics with the second individual following a general industrial arts program. Class of July 20, 1952 shows individuals number one and four as having taken seven courses in Automobile Mechanics and seven courses in Tailoring respectively. Table I (Continued) on page 11 indicates former students number two, four and five as having accumulated eight courses in Tailoring, seven courses in Tailoring and six courses in Shoe Repairing.

These former graduates accrued sufficient theory and practice as to

equip them with an adequate background as would be necessary for them to become employed in an automobile repair shop, tailoring establishment, or shoe repair shop. These graduates then, enriched themselves by adding another tool by which to earn a living.

TABLE 1

COURSE DISTRIBUTION AND FREQUENCY

Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing **	Ind. Safety **	Bench Work **	Auto Mech.	T. & I. Ed.	Metal Work **	Wood Turning	Care of Tools **	Probs. Ind. Arts**	Cab. Making **	Ind. Arts. Ed. **	Wood Finishing**	Prod. Basis**	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making**	Pract. Elec.	Orientation Shop**	Photography	Carpentry	Plumbing	Welding	Printing	
1	141	61	80	7	1	2	5	2	1	1	1	1	2	2	2	1	2											
2	143	63	80	8	1	2		2	1	1	1		2	3	1	2	4	1										
*3	160	64	96	7	1	2		1	1	1	1	1	2	2	1	2	1	5	1									
										Class of May 23, 1954																		
1	149	59	90	8	1	2		2	2	2	1		2	3	1	2		1										
2	138	66	72	7		2		1	1	1	2	1	2	2	1	2	6	1										
3	135	56	79	7		2	1	1	1	1	1	1	2	2	1	2		1										
4	134	57	77	7		2		1	1	1	1	1	2	2	1	2		2	1									
										Class of July 24, 1953																		
1	149	70	79	7			5	1	2	1	1		2	6	1	2		1										
2	144	49	95	7		2		1	1	1	1		2	2	1	2						1	1					
										Class of May 24, 1953																		

*Cum Laude

**Required Courses

TABLE 1 (Continued)
COURSE DISTRIBUTION AND FREQUENCY

	Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prod. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing		
1	137	60	77	7	1	3	7			2		1		2	3		2													
2	135	36	99	5		1	2	1		1	1	1			1	1	2		1			1								
3	129	42	87	4		2		2		1	1	1		2	2	1	2					1								
4	135	61	74	7		2		1		1		1		1	4	1	2	7	1				1	1						
5	136	53	83	7		2				1	1	1		2	4	1	2		1		1	1	1							
1	136	52	84	8	1	2		1	1	1	1	1		2	3	1	2		1		1									
2	144	63	81	7		2		1	1	1	1	1		2	2	1	2	8	1			1								
3	143	57	96	7		2		2	1	1	1	1		2	3	1	2		1			1	1							
4	142	61	81	7		2		1	1	1	1	1		2	2	1	2	7	1			1	1							
5	151	64	87	7	1	2		1	2	1	1	1		2	3	1	2		1		6	1								

Class of July 20, 1952
Class of May 25, 1952

TABLE 1 (Continued)
COURSE DISTRIBUTION AND FREQUENCY

	Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prod. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
1	146	55	91	7	2	4	1	1	1	1	1	1	1	1	1	1	2	1	4	1	1	1	1	1	1	1	1	1	1
2	134	57	77	7	2	1	2	1	1	1	1	1	2	2	1	1	2	1	6	1	1	1	2	1	1	1	1	1	
3	136	50	86	7	2	1	2	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	2	1	1	1	1	1	
4	141	57	84	7	2	1	2	1	1	1	1	1	2	2	1	1	2	9	1	5	1	1	1	1	1	1	1	1	
5	143	57	86	7	2	2	2	2	1	1	1	1	2	2	1	1	3	2	1	1	1	1	1	1	1	1	1	1	
6	133	47	86	7	2	2	2	2	1	1	1	1	2	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	
7	130	50	80	7	2	1	2	1	2	2	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	
1	146	53	93	7	2	4	1	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	
2	154	68	86	8	2	2	2	2	1	1	1	1	3	2	1	1	2	8	1	1	1	1	1	1	1	1	1	1	
3	141	66	75	7	2	3	2	7	1	1	1	1	2	2	1	1	2	1	1	1	1	1	2	1	1	1	1	1	
4	143	58	85	7	2	2	2	1	2	2	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	
5	132	60	72	7	2	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

TABLE 1 (Continued)

COURSE DISTRIBUTION AND FREQUENCY

Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prod. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing			
										Class of May 26, 1950																				
1	143	62	81	7	1	2		1	2	1	1		2	2	1	2		1	3	1	1		1							
2	139	58	81	7		2		3	1	1	1		2	1		1			7		1									
3	173	69	104	7	1	2	7	3	1	1	1		2	1	1	2		1			1				1	1				
4	143	51	92	7	1	2		2	1	1	1		2	2	1	2		1			1									
5	149	53	96	7		2		1	1	1	1		2	2	1	2		1	1	1	1							1		
6	175	65	110	7		2		3	1	1	1		2	1	1	2		1			1							4		
7	140	63	77	7	1	2		2	1	1	1		2	1	1		9	1			1							1		
8	144	49	95	7		2		2	1	1	1		2	1	1	2		1			1									
9	186	71	115	7		3		1	1	1	1		2	3	1	2	8	1		1	1		1							
*10	137	56	81	7	1	2		2	1		1		2	1	1		8	1												
11	142	63	79	7	1	2		2	1	1	1		2	1	1	1		1	10		1									
12	136	45	91	7	1	2		1	1	1	1		2	1	1	2		1		1										
*13	135	46	89	7	1	2		1	1	1	1		2	1	1	2		1		1										

*Cum Laude

TABLE 1 (Continued)
COURSE DISTRIBUTION AND FREQUENCY

	Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prod. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
14	151	67	84	7	1	2	10	2	1	1	1	1	1	2	2	1	2		1									1	
15	140	59	81	7		2	7	1	1	1	1	1	1	2	1	1	1		1								1		
16	145	53	92	7		2		2	1	1	1	1		2	2	1	2		1		1			1					
17	145	57	88	7	1	2		2	1	1	1	1	1	2	1	1	2		1		2	1					1		
18	144	63	81	7	1	2	8	1	1	1	1	1		1	3	1	1		1			1					2		
19	167	64	103	7	1	2	2	2	2	2	1	1		2	1	1	2		1			1	1						
20	137	63	74	7	1	2			1	1	1	1		2	1	1	1	8	1			1							
21	136	56	80	7	1	2		1	2	1	1	1		2	2	1	2		1	1	1	1	1						
22	139	63	76	7		2		2	1	1	2	1		2	2	1	2		1		1	1	1						
											Class of July 29, 1949																		
1	145	54	91	7		2			1	1	1	1		2	4	1	2	1				1			1	1			

TABLE 1 (Continued)
COURSE DISTRIBUTION AND FREQUENCY

	Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prod. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing		
1	137	50	87	8			2		1	1	1	1		2	1	1	2		1											
2	131	45	86	8			2			1	1	1	1	2	2	1	2			1										
3	137	56	81	8		1	2		1	1	1	1		2	2	1	2	1				1	1							
4	139	55	84	8			3		1	1	2	2		2	2		1				1	1	1	1						
5	138	63	75	8			2	8	2	1		2		1	2	1	1					1	1							
6	143	62	81	8			2		1	1	1	1		1	1	1	1			8		2	1	1						
1	140	51	89	8			2			1	1	1		2	1	1		1		7						1				
2	144	49	95	8			2			1		1		2	1	1				7		2								
1	139	59	80	8		1	2	8		1		1		2	2			1							1					
2	135	46	87	8			2	1	1	1		1		2			1		1											
3	140	44	96	8			2		1	2	2			2		1	1					1								

TABIE 1 (Continued)

COURSE DISTRIBUTION AND FREQUENCY

	Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prod. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing
4	142	49	93	8	2	2	1	1	1	1	1	2	1	1	1	1	1	6	Continued	7	1							
5	136	48	88	8	2	2	8		1	1	1	1	2	2	1	1		1					1					
6	141	48	93	8	2	2			1	1	1	1	2	1	1					7								
7	136	33	103	8	2	2	9		1	1	1	1	2	2														
8	147	50	97	8	2	2			1	1	1	1	2	2				1				1						
9	141	42	99	8	3	3			1	1	1	1	2	2	1	2				1		1						
10	137	42	95	8	2	2			1	1	1	1	2	2	1	1	3	3		2		1						
1	150	36	114	8	2	2			1	1	1	1	2	2	1	1	1	1	1		1							
1	147	43	104	8	1	1			2	1			1	1	1	2				1		1		2				
2	145	49	96	8	2	2			2	1	1	1	2	2	1	2					1	1		1				
3	141	44	97	8	2	2	7	2	1	1	1	1	1	1														

TABLE 1 (Continued)
COURSE DISTRIBUTION AND FREQUENCY

																			Individual
																			Total Sem. Hrs.
																			Total Ind. Arts Sem. Hrs.
																			Total Gen. Ed. Sem. Hrs.
																			Mech. Drawing
																			Ind. Safety
																			Bench Work
																			Auto Mech.
																			T. & I. Ed.
																			Metal Work
																			Wood Turning
																			Care of Tools
																			Probs. Ind. Arts
																			Cab. Making
																			Ind. Arts. Ed.
																			Wood Finishing
																			Prod. Basis
																			Tailoring
																			Upholstering
																			Shoe Repair
																			Adv. Fur. Making
																			Pract. Elec.
																			Orientation Shop
																			Photography
																			Carpentry
																			Plumbing
																			Welding
																			Printing
4	137	46	91	8	2	6	2	1											
5	140	55	85	8	1		2	1											
6	142	44	98	8	1	1	2	1	1										
7	146	48	98	8	2	6	2	2	1										
8	162	30	132	8	2			1											
9	145	45	100	8	2		1												
10	137	44	93	8	2		2	1	1										
11	156	36	120	8	2			1											
								Class of July 19, 1946											
								Class of May 24, 1946											
1	142	38	104	8	2	1		1	1										
								Class of May 24, 1946											
1	144	40	100	8	2														
2	141	49	92	8	2		1												

TABLE 1 (Continued)

COURSE DISTRIBUTION AND FREQUENCY

Individual	Total Sem. Hrs.	Total Ind. Arts Sem. Hrs.	Total Gen. Ed. Sem. Hrs.	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prod. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing		
3	145	40	105	8		2		2	1		1	2	2	1	1	1	1	1											
4	140	37	103	8		2		1	1	1	1	2	2	1	1	1	1												
										Class of May 24, 1946				Continued															
1	142	40	102	8		2	7		1		1	2																	
										Class of July 20, 1945																			
2	139	40	99	8		2			1		1						8												
										Class of May 23, 1945																			
1	151	42	109	8		2	1		1		1	2		1	1	1	6												
										Class of July 21, 1944																			
2	146	38	108	8		2			1		1			1	1	1	6												
										No Graduates																			
3	145	34	111	8		2			1	1	1	2		1	1	1	1												
										Class of May 24, 1944																			
1	149	34	115	8		2			1		1	2				2													

CHAPTER V

A SUMMARY OF FINDINGS

The sixteen commencement periods covered by this study show 142 graduates from the Division of Industrial Arts. The tables in the foregoing chapter and the summary tables to follow indicate the distribution of the courses taken by these graduates. It will be noted that courses in 24 subject matter divisions have been or are being offered by the department during this period. Of these, work is required in 12 divisions, and work in the other 12 divisions is elective. An attempt is made to generalize on the relative popularity of the elective courses based on the frequency with which they have been taken by students. In the area of required courses, no such generalizations are possible, because it must be assumed that the selection of such courses is based on the evidenced needs as reflected by surveys made by department directors during the period of curriculum planning.

It will be seen that the courses offered in Mechanical Drawing (required), Bench Work (required), Productive Basis (required) are those having the highest frequency. It is understood that these are basic courses in any program dealing with the industrial arts program and would be essential to the prospective teacher of industrial arts subjects regardless of his specialization. On the other hand, Advanced Furniture Making (elective), Carpentry (elective), Welding (elective), have drawn the fewest number of students. It can be assumed that the prospective teacher would find such specialized courses undesirable in the preparation for the type of general shop program likely to be encountered in

the typical modern secondary industrial arts program. Of course, in the larger and better equipped high school shop, courses in welding and carpentry would be offered.

In the area of elective courses, Tailoring, Auto Mechanics, and Shoe Repairing, in that order, were revealed as the most popular courses. In the surveyed period, 48 students elected 220 courses in Tailoring, 34 students elected 162 courses in Auto Mechanics, and 34 students elected 150 courses in Shoe Repairing. These courses would be the most popular for one of two reasons, or possibly both: These courses are generally offered in the secondary school program, and in the case of Tailoring, at least, the commercial possibilities might possibly influence the popularity. It would, of course, be a general truth that the student would elect those courses that would offer to him the highest probability of financial return in his post-college employment opportunities. It should also be noted that a number of elective courses—Printing, Welding, Plumbing, Carpentry—show a decreasing frequency of election. This could be explained by the fact that the majority of graduates realize the probability that these areas will not be offered in the situations in which they will teach. A further reason may be advanced in that the average student is not preparing for industrial employment but is readying himself for teaching.

In view of the course offerings and in view of the frequency with which these courses are elected, the program of the Mechanic Arts Department at Langston University is adequate in that it meets the needs of its graduates.

TABLE 2

SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing		
1954	3	22	3	6		5	3	3	3		6	7	3	6													
	2									2					5	2											
	1				1												5	1									
1953	6	43				7	8	7	7		12	15	6	12													
	1		1											6				1									
	5			10															5								
	2				6											3	3										
	3									3										3	3						
1952	10	66		20					10		27		20														
	2		2														7										
	8							10								8											
	9										17																
	9						11						9														
	3													22			3										
	6																		6								

TABLE 2 (Continued)

SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
1952 Continued	5																			5						
	1																					2				
1951	19	134		38		37	23				37	19														
	13		13																13							
	4				17																					
	14							14																		
	18							18			25		37													
	6								6												9					
	8													41			31									
	11														11											
	1																					1			1	
1950	26	211		53		46	29		26		52	37														
	16		16																							

TABLE 2 (Continued)
SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
1950 Continued	6				42																					
	24							25			3		25	43		24										
	3																									
	25												25													
	7													43							7				8	
	5																22									
	9																10									
	22																		22							
	1																					1	1			
	4																								7	
1949	7	55		14			7	9		1	12	14		11					8							
	1		1		8														8		5		1			
	5					6																				

SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

TABLE 2 (Continued)

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
1949	Continued												6		2	2										
	6																									
	2																									
	3																					3				
1948	12	96		25			13		13		24															
	2		2													2										
	4				26	4											23									
	3							4																		
	5											6														
	6												6	7						7						
	1																				1	1	1			
1947	12	96		21							20															
	4				20																					
	10								10																	

TABLE 2 (Continued)

SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
1947	11						11																			
	3							3					9													
	9												9													
	7													9												
	2													4												
	1														1											
	6																		6							
1946	5	40		10						10																
	1				1									2												
	3					4	3							9		1										
	2							2									8		2							
	4							4				4														

SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

TABLE 2 (Continued)

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing
1945	5	40		10	8		5		5																
	2							1																	
	1																								
	3									6			3												
	4												21												
1944	1	8		2			1		1	2					2									1	
1943	1	8		2			1	1	1	2	1	1	1	1	1	1									
1942	6	48		14		8																			
	4				18					8									4						
	5					5			5				6		5										
	2							2					4											7	
1941	4	32		7						7			3						3						
	3					5			4																
	4						6																		

SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

TABLE 2 (Continued)

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
1941	Continued							2																		
	2																									
	1											1		2	4											
1940	13	104		26					13				13	6			19									
	3				6						16															
	8					9																				
	11						13																			
	5							5						24							5					
	7											9														
	4														4											
	10																									
	1																					1				
1939	12	96		24																						
	5											6														

TABLE 2 (Continued)
SUMMARY OF COURSE DISTRIBUTION AND FREQUENCY

Year	No. of Graduates	Mech. Drawing	Ind. Safety	Bench Work	Auto Mech.	T. & I. Ed.	Metal Work	Wood Turning	Care of Tools	Probs. Ind. Arts	Cab. Making	Ind. Arts. Ed.	Wood Finishing	Prob. Basis	Tailoring	Upholstering	Shoe Repair	Adv. Fur. Making	Pract. Elec.	Orientation Shop	Photography	Carpentry	Plumbing	Welding	Printing	
1939	Continued						8							13												
	8																									
	6							6													6					
	11								11											11						
	9									18																
	10											10														
	3														21											
	4															14										
	1																				1					

TABLE 3

SUMMARY OF FREQUENCY OF EFFECTIVE COURSES

Year	No. of Graduates	Auto Mech.	Carpentry	Pract. Elec.	Shoe Repair	T. & I. Ed.	Tailoring	Upholstering	Wood Turning	Welding	Plumbing	Photography	Printing
1954	1	1			5				3				
	3					5							
	2					5	2						
TOTAL NUMBER OF GRADUATES - 3													
1953	6				3	7	6		7				
	1		2					3					
	3												
TOTAL NUMBER OF GRADUATES - 6													
1952	5				5								
	2	9			7						2		
	1		2										
TOTAL NUMBER OF GRADUATES - 10													
	6			6									
	8					10		8	8				
TOTAL NUMBER OF GRADUATES - 34													

TABLE 3 (Continued)

Year	No. of Graduates	Auto Mech.	Carpentry	Pract. Elec.	Shoe Repair	T. & I. Ed.	Tailoring	Upholstering	Wood Turning	Welding	Plumbing	Photography	Printing								
1951	4	17																			
	13			13																	
	6				31							9									
	19					37															
	8						41														
	11						11														
	14							14													
	1									1		3									
1950	6	42									1										
	1		1																		
	22			22																	
	5				22																
	26					46															
	7						43			8		7									
TOTAL NUMBER OF GRADUATES - 19																					

TABLE 3 (Continued)
SUMMARY OF FREQUENCY OF ELECTIVE COURSES

Year	No. of Graduates	Auto Mech.	Carpentry	Pract. Elec.	Shoe Repair	T. & I. Ed.	Tailoring	Upholstering	Wood Turning	Welding	Plumbing	Photography	Printing	TOTAL NUMBER OF GRADUATES -
1947	4	20												
	6			6										
	2				2		4							
	9					17								
	1							1						
	3								3					TOTAL NUMBER OF GRADUATES - 12
1946	1	1						1						
	2				2	8				2				
	3						4	9						TOTAL NUMBER OF GRADUATES - 5
1945	2	8												
	4													
						21								
	1								1					TOTAL NUMBER OF GRADUATES - 5
1944	1												1	TOTAL NUMBER OF GRADUATES - 1
1943	1													TOTAL NUMBER OF GRADUATES - 1

TABLE 3 (Continued)

SUMMARY OF FREQUENCY OF ELECTIVE COURSES

Year	No. of Graduates	Auto Mech.	Carpentry	Pract. Elec.	Shoe Repair	T. & I. Ed.	Tailoring	Upholstering	Wood Turning	Welding	Plumbing	Photography	Printing
1942	4	18		4									
	5				5		5						
	2								2				7
TOTAL NUMBER OF GRADUATES - 6													
1941	3			3	5								
	2				8		2	2	2				5
	1						4						
TOTAL NUMBER OF GRADUATES - 4													
1940	3	6			19								
	1		1										2
	10			11									
	8					9							
	5						27		5			5	
	4							4					
TOTAL NUMBER OF GRADUATES - 13													
1939	1		1										
	11			11									

TABLE 3 (Continued)
SUMMARY OF FREQUENCY OF ELECTIVE COURSES

Year	No. of Graduates	Auto Mech.	Carpentry	Pract. Elec.	Shoe Repair	T. & I. Ed.	Tailoring	Upholstering	Wood Turning	Welding	Plumbing	Photography	Printing
1939	Continued												
	4				14								
	5					6							
	3					21							
	10						10						
	6							6					
									6				
TOTAL NUMBER OF GRADUATES - 12													

Appendix A

A SELECTED BIBLIOGRAPHY

1. Miller, E. A., personal interview, June 23, 1954.
2. Batchlor, C. D., personal interview, June 25, 1954.
3. Catalogue of the Colored Agricultural and Normal University, 1899-1900, 34 pp.
4. Annual Catalogue of the Agricultural and Normal University, 1912-1913, 172 pp.
5. Catalogue of the Colored Agricultural and Normal University, 1900-1901, 35 pp.
6. The Langston University Bulletin, Catalogue Edition, 1953-1954-1955, 131 pp.
7. Franklin, Marion E., A History of Industrial Education in Oklahoma, (Unpublished Ed. D. Dissertation, The University of Oklahoma, Norman, 1952) 373 pp.

REPORT TITLE: A STUDY OF THE DISTRIBUTION AND FREQUENCY OF
INDUSTRIAL ARTS COURSES TAKEN BY THE GRADU-
ATES AT LANGSTON UNIVERSITY, 1939-1954

NAME OF AUTHOR: Albert M. Thompson, Sr.

REPORT ADVISOR: DeWitt Hunt

The content and form have been checked and approved by the author and report adviser. "Instructions for Typing and Arranging the Thesis" are available in the Graduate School office. Changes or corrections in the thesis are not made by the Graduate School office or by any committee. The copies are sent to the bindery just as they are approved by the author and faculty adviser.

NAME OF TYPIST: Bernice W. Thompson