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Henry William McCary
Kansas State Teachers College

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THE STATUS OF INDUSTRIAL ARTS IN THE NEGRO SCHOOLS
OF OKLAHOMA AND SUGGESTIONS FOR IMPROVEMENT

A Problem Submitted to the Graduate Division in
Partial Fulfillment of the Requirements for
the Degree of Master of Science

By

Henry William McCary

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KANSAS STATE TEACHERS COLLEGE

Pittsburg, Kansas

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The writer wishes to dedicate this problem to the negro youth of the state of Oklahoma, who through their education under the segregated laws of the state must meet the requirements of life in this multi-racial society with training and experience sufficient to compete democratically with labor in the occupational fields of their choice.

ACKNOWLEDGMENT

The writer wishes to express his sincere appreciation to the Industrial Education and Art Departments of the Kansas State Teachers College, Pittsburg, Kansas, for the experiences gained in their graduate organization which forms the basis for an enlightened understanding of modern industrial education.

Appreciation is also expressed to the few faithful members of the Industrial Arts Association of the state of Oklahoma who have continuously carried on the idea that it is through the Negro Industrial Arts Association that industrial education within the negro schools will find its true strength.

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ABSTRACT

It has been the purpose of this study to determine the present status, the recent trends and the long range planning in the industrial arts field for the negro high schools of Oklahoma.

This survey developed from the idea that its findings might assist the Industrial Arts Association for Negroes in organizing the schools into a cooperative industrial arts program. It was also hoped: First, that it might inspire the present teachers to prepare themselves better in education and in modern training of the industrial arts; second, that they will take an active part in the association for state-wide improvement of all programs within the negro schools.

The basis of this study was conducted by the questionnaire method. It was designed to find out the following: The administrative organization of the ninety-seven high schools of the state of Oklahoma; the functions of the industrial educational curriculum in the high schools in the State Industrial Arts Exhibits; the loads, duties, and activities of the industrial arts teachers and suggestions for the growth of industrial arts in the near future.

Seventy-one per cent of the administrators and seventy-eight per cent of the industrial arts instructors returned their questionnaires.

The questionnaires reveal that industrial arts is offered

in thirty-nine accredited negro high schools in the state of Oklahoma. Other factors discovered by this study are the most dominant type of community is urban followed by rural; the leading frequency of courses are wood working and mechanical drawing; the school shops are located in wings of buildings, parts of main buildings and basements of buildings; concrete floors are used the most frequent; the machines found in most high school shops are listed in descending order: Circular saws, wood turning lathes, grinders, jointers, band saws, jig saws, hand drills, planers, cut off saws, paint spray guns, and metal lathes.

Sixteen instructors list maintenance work as part of their assigned jobs. Seventy-seven per cent of the schools list school shop libraries. Eight schools were visited and pictures were taken that revealed the modern trends in school building and construction.

Thirty-two of the industrial arts teachers have Bachelor degrees in industrial education. Six industrial arts teachers have Master degrees. Fifty per cent of the instructors devote all their time to industrial arts teaching, whereas others teach both industrial arts and academic courses. The teaching experience among the forty-four teachers range from one to twenty-seven years. Time devoted to teacher preparation varies from two to fifteen hours per week. Twenty-one teachers are hired for twelve months. Seventeen teachers sponsor extra-curricular activities. The salary range varies according to

the willingness of the school boards to pay.

The administrators suggest that there should be more industrial arts teacher preparation in the methods of instruction. The industrial arts teachers advise that a given time for meetings be scheduled. The junior college is recommended for the extension of the educational trend on the secondary level.

In spite of the limited undertaking by the Industrial Arts Association for Negroes to organize the schools into a functional unit for educational progress, there has been a very little awakening of both the principals and the industrial arts teachers to the urgent need of the industrial educational program.

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CHAPTER I

INTRODUCTION

The Source of the Problem

For many years a difference of opinion has existed regarding the relative effectiveness of the industrial arts program in the negro schools of the state of Oklahoma. Some insight into the industrial arts programs are based on information received through the writer's participation in the industrial arts meeting held annually. Other sources of information stem from opinions expressed by active members of the Oklahoma Industrial Arts Association for Negroes as to the non-participation of the various schools. The relative strength of the industrial arts program in the state's ninety-seven high schools is not fully known. It is as a result of attending these negro state industrial arts meetings that the idea of this problem arose. The question, "How good are our industrial arts schools?" was raised at that time. An additional question was also raised. "What are the schools teaching in the industrial arts program?"

Statement and Purpose of the Problem

The problem of this study has been to make an investigation of the present status of industrial arts in the negro high schools of the state and to make suggestions for improvement

that will be justified and indicated by the date, and current philosophies and practices in the total field of industrial education. It was the intentions of this study: (1) to determine the strength of industrial arts; (2) to determine and examine the similarities and differences of the schools' curriculums; (3) to determine the loads, duties and activities of the industrial arts teachers; (4) to determine the participation of each school in the annual state industrial arts exhibits; and (5) to determine the prospects for the future growth of industrial arts in the curriculums as revealed through the questionnaire studied.

Importance of the Study

A thorough survey of the industrial educational program in the state of Oklahoma, for the separate negro schools, is necessary so that the Oklahoma Association of Negro Teachers and The Industrial Arts Association for Negroes may understand how better to serve the schools that support them.

Scope and Limitation of the Study

The study is a survey of the industrial arts in the ninety-seven separate negro high schools of the state of Oklahoma. The practical objective of these schools is to impart knowledge as is expressed in the following statement:

In more specific terms, the negro youth must be helped to see the problem of democracy in its totality. The real issue is not the rights of the negroes but the

rights of persons. Human rights, not minority rights, is the goal, and the commitment to this large issue marks the difference in the self-seeking "race man" and the citizen of the world who is concerned with human needs and human welfare regardless of racial or national ties.¹

For the purpose of this problem, the following definition of industrial education will be accepted:

Industrial education is that part of the total program that contributes to the optimal development of the students through experiences related to tools, materials, processes, and products of industry. This optimal development involved two aspects of education: First, there are common learnings that all students should have regardless of the vocation they intend to follow. Second, there are special interest, talents, and needs which are unique.²

The schools considered are ninety-six high schools, and one junior high school for colored citizens (See Table I, page 10) of the state accredited by the Oklahoma's Accrediting Department.³ Most schools have in their curriculum the first through the twelfth grades. Forty-one of these accredited high schools are listed as having from one to four units in industrial arts. Eight of the forty-one schools are listed for units in industrial education for Trade and Industry, and Diversified Occupations.⁴ (See Table III, page 15). One junior high school, the only in the state, has been listed with

¹Ira Corrine Brown, "The Role of Education in Preparing Children and Youth for Multi-Racial Society", Journal of Negro Education, XIX (Winter, 1950), 386.

²Educational Policies Commission, Education for All American Youth, Washington, National Education Association. 1944, pp. 248-249.

³"Annual High School Bulletin", State of Oklahoma, Bulletin No. 112-Z, June 30, 1951, pp. 54-79.

⁴Ibid., p. 52.

the accredited high schools. This raised the total to ninety-seven schools to be considered in this study.

Methods of Gathering Data

The sources of data were obtained from the following means:

1. State of Oklahoma Department of Education,
Annual High School Bulletin, No. 112-Z, Oklahoma City,
Oklahoma, June 30, 1951.
2. Questionnaires from principal administrators
on their views of the industrial arts as to:
 - a. Administrative Set Up
 - b. Educational Program Offered in School
 - c. The future Outlook for Industrial Education.
3. Questionnaires from industrial arts teachers
on the following:
 - a. School Preparation
 - b. Community Relationship
 - c. School Duties
 - d. School Participation
 - e. Daily School Program
 - f. Building, Equipment and Library
 - g. Miscellaneous
4. Information and pictures received by school
visitation and interviews.

The data collected in the year 1951-52 are intended to develop a study of the industrial arts program from five viewpoints: First, to determine the strength of industrial arts; second, to test the similarity of the schools' curriculum; third, to determine the load of the industrial arts teacher;

fourth, to determine the participation by each school in the annual state exhibit, and fifth, to determine the possible future growth of industrial arts in the curriculum.

Such data were secured from principals and industrial arts teachers through questionnaires. The questionnaires were considered the best means of securing the required data, due to the distribution of schools over a wide area of the state, and the time allotted for the study. It is well understood that a questionnaire is limited as to its worth for research, and as a device for obtaining adequate information. Nevertheless, the questionnaires seemed the only practical way of securing the needed information.

Organization of the Study

To determine the activities, needs and desires of the negro schools of Oklahoma, it has been considered desirable to divide the study into the following five main parts for future consideration:

1. The Administrative organization of the ninety-six accredited high schools, and the one junior high school of Oklahoma.
2. The functions of the industrial educational curriculum in the high schools.
3. The participation of the industrial arts schools in the state industrial exhibits.
4. The loads, duties and activities of the industrial arts teachers.

5. Suggestions for the growth of industrial arts education in the negro schools.

These divisions were considered desirable because of great variety of programs, interests, needs and desires appearing in them. These differences will become more evident as this study progresses.

Definition of Terms

The following definitions are accepted in this problem:

Colored Races: The term "colored" as used in the preceding section, shall be construed to mean all persons of African decent who possess any quantum of negro blood, and the term "white" shall include all other persons. The term "public school" within the meaning of this article shall include all schools provided for and maintained, in whole or in part, at public expense. (70-45-2) Appendix A, page 79.

Composite General Shop: Offers a variety of activities cut-across several shop fields, and is usually confined to one room and taught by one teacher. A broad general exploratory shop commonly consists of woodwork, metal work, drafting, electricity and crafts.

Comprehensive Unit Shop: A shop confined to a single field of industry offering several units of a specific field. Thus a general woodwork shop might consist of hand woodwork, machine woodwork, upholstery, and finishing.

Industrial Education: The part of the total program that

contributes to optimal development of the students through experiences related to tools, materials, processes and products of industry.

Industrial Arts: A phase of the educational program concerned with orienting individuals through study and experience to the technical-industrial side of society for the purpose of enabling them to deal more intelligently with consumers goods, to be more effective producers, to use leisure time more effectively and enjoyably, to have a greater appreciation of material culture, and act more intelligently in regard to matters of health and safety, essentially as affected by industry.

Junior College: An educational institution, publicly controlled and operated under state law, or privately controlled and operated under authority and powers granted by articles of incorporation or charter; not granting baccalaureate degrees, but offering two years of work in standard college curricula, or two years of instruction in curricula terminal in character or post high school or collegiate grade and quality, or both such standards and curricula. The college may, by a two year unit offer only instruction on the level of grades XIII and XIV; a three year program of grades XII through XIV inclusive; or four years program having grades XI through XIV.

Manual Training: The use of exercises, sometimes consist of modeling, cutting, fixing, and inventing of paper patterns, the forming of geometrical solids in cardboards and the use of tools and instruments.

Negro: See "Colored Race" above.

Separate Schools: The county separate schools in each district is hereby declared to be that school in said school district of the race having the fewest number of children in said district. Provided the county superintendent of the schools of each county shall have authority to designate what school or schools in each school district shall be separate school or schools in said school district. Members of the district school board shall be the same race as the children who are entitled to attend the school of the district, not the separate school. (70-45-3) Appendix A, page 79.

Unit Shop: A shop confined to a single activity, i.e., hand woodwork or upholstery, or wood turning, etc., ordinarily offering a very high degree of specialization.

CHAPTER II

THE ADMINISTRATIVE SET UP OF THE NINETY-SEVEN HIGH SCHOOLS OF THE STATE OF OKLAHOMA

The administrative set up is being determined from sixty-nine administrator's questionnaires as reported by the principals of each school. Ninety-seven schools were mailed administrators questionnaires, of which sixty-nine were returned, a total of 71.0 per cent. From a total of seventy-two cards returned, fifty schools indicated that they have an industrial arts program, and these were mailed the industrial arts teachers questionnaires of which thirty-nine were returned, a total of 78.0 per cent. The Annual High School Bulletin of Oklahoma listed forty-one schools with unit credits from which thirty-one were returned, a total of 75.6 per cent. Eight of the schools listing industrial arts without unit credit, returned six questionnaires for a total of 75 per cent and the junior high school returned the questionnaire for 100 per cent. (See Table II, page 14)

Table I, page 10 indicates the number and the names of the ninety-seven schools to which questionnaires were mailed; the double asterick indicates the schools which are teaching industrial arts without state unit credit; and the single number sign indicates the return questionnaires of those teaching industrial arts with unit credit.

The location of the ninety-seven schools is indicated in Figure 1, page 13. This map has direct comparison to the series numbers of the schools listed in Table I, page 10.

TABLE I

LIST OF NEGRO HIGH SCHOOLS FOR THE STATE OF OKLAHOMA
TO WHICH QUESTIONNAIRES WERE MAILED

Town	Name of School	Units Offered	
		I.A.	T.I./Others
1. Ada **	Napier	##	Preflight
2. Altus **	Lincoln	2#	
3. Anadarko **	Lincoln	4#	
4. Antlers *	Carver	-	
5. Arcadia **	Dunbar	2#	
6. Ardmore	Douglass	4	
7. Atoka	Dunbar	-	
8. Bartlesville **	Douglass	4#	1 Preflight
9. Beggs **	Wheatley	2#	
10. Boswell *	Dungee	-	
11. Boynton	Wheatley	-	
12. Bristow **	Lincoln	3#	
13. Boley	Boley	2	
14. Broken Bow	Dunbar	-	
15. Chandler	Douglass	-	
16. Chickasha **	Lincoln	2#	
17. Choctaw **	Dungee	2	2
18. Claremore	Lincoln	-	
19. Clearview	Douglass	-	
20. Clinton **	Excelsior	2#	
21. Coalgate	Booker T. Washington	-	
22. Colbert *	Shoemaker	-	
23. Crescent	Douglass	-	
24. Cushing **	Booker T. Washington	2#	1 Leather-craft
25. Davis	Booker T. Washington	-	
26. Dover	Booker T. Washington	-	
27. Duncan **	Douglass	4#	
28. Elk City	Lincoln	-	
29. El Reno **	Booker T. Washington	2#	
30. Enid **	Booker T. Washington	2#	
31. Eufaula **	Booker T. Washington	##	
32. Fort Gibson	Lincoln	-	

* Administrator's Questionnaire Answered; ** Administrator's and Industrial Arts Teachers Questionnaires Answered; (N)# Number of Accredited Units in Industrial Arts; ## Industrial Arts on Elective Basis; I.A., Industrial Arts; T.I., Trade and Industry; (N)D.O. Units in Diversified Occupations.

TABLE I (Continued)

LIST OF NEGRO HIGH SCHOOLS FOR THE STATE OF OKLAHOMA
TO WHICH QUESTIONNAIRES WERE MAILED

Town	Name of School	Units Offered	
		I.A.	T.I./Others
33. Frederick	Boyd	-	
34. Geary *	Douglass	-	
35. Gene Autry	Lincoln	-	
36. Guthrie **	Favor	4#	
37. Hanna *	Vernon	-	
38. Hartshorne **	Wheatley	2	
39. Haskell	Booker T. Washington	-	
40. Hennessey *	Dunbar	-	
41. Henryetta	Rosenwald	-	
42. Hobart *	Dunbar	-	
43. Holdenville	Lincoln	-	
44. Hominy *	Carver	-	
45. Hugo	Booker T. Washington	-	
46. Idabel **	Booker T. Washington	1	
47. Idabel	Slater Rosenwald	-	
48. King fisher	Douglass	2	
49. Kinta	Lewisville	-	
50. Langston *	Langston University	-	
51. Lawton **	Douglass	2#	
52. Lenapah **	Douglass	2#	
53. Luther **	Washington	1#	
54. Mangum **	Booker T. Washington	##	
55. Marietta **	Douglass	1	
56. McAlester	L'Overture	-	
57. Meridian **	L'Overture	-	
58. Muskogee	Manual Training	2	12
59. Muskogee **	Wheatley	##	
60. Nowata **	Lincoln	2#	
61. Oklahoma City **	Douglass		16½
62. Okmulgee **	Dunbar	4#	
63. Okmulgee **	Grayson	1	
64. Pawhuska **	Booker T. Washington	2#	

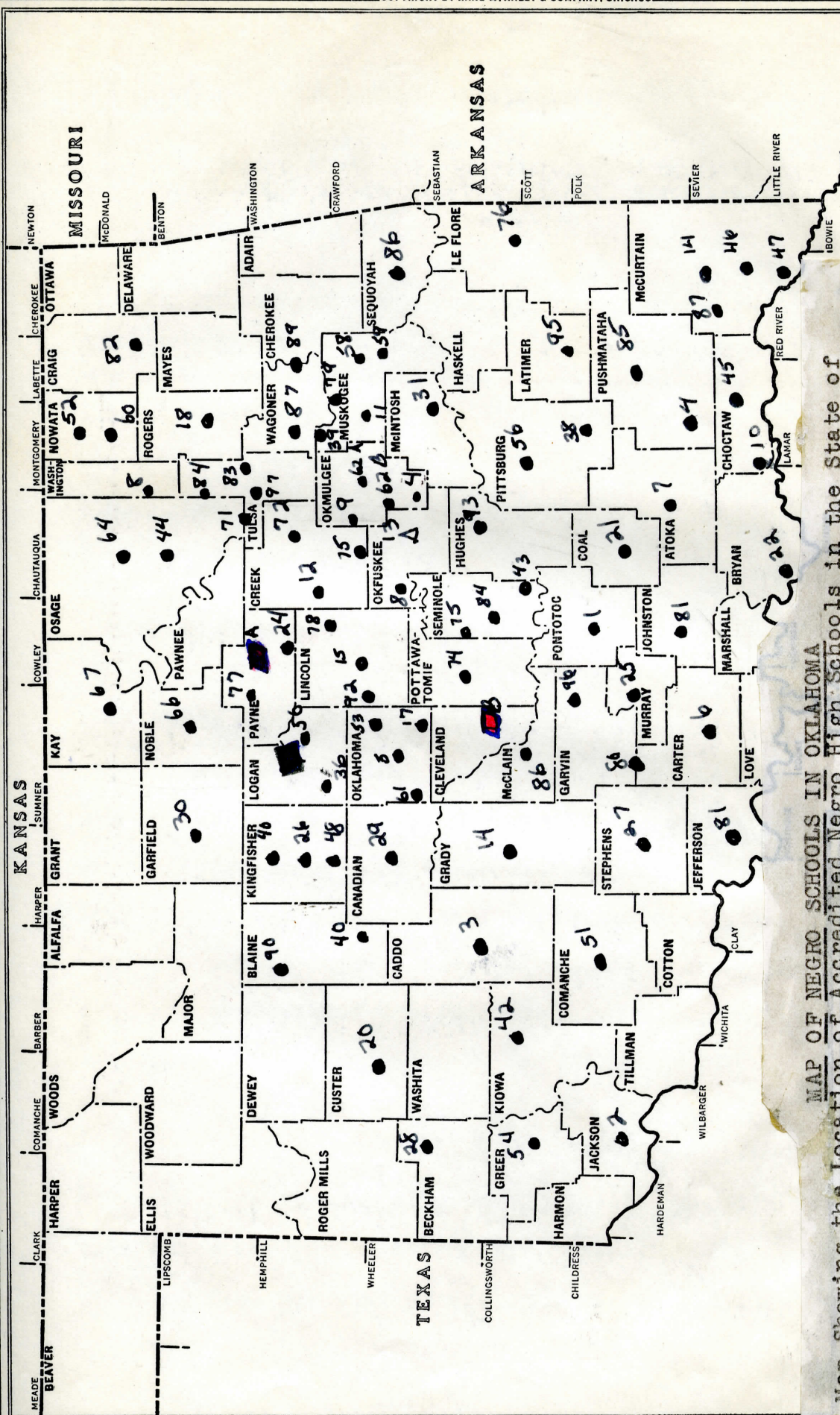
* Administrator's Questionnaire Answered; ** Administrator's and Industrial Arts Teachers Questionnaires Answered; (N)# Number of Accredited Units in Industrial Arts; ## Industrial Arts on Elective Basis; I.A., Industrial Arts; T.I., Trade and Industry; (N)D.O. Units in Diversified Occupations.

TABLE I (Continued)

LIST OF NEGRO HIGH SCHOOLS FOR THE STATE OF OKLAHOMA
TO WHICH QUESTIONNAIRES WERE MAILED

Town	Name of School	Units Offered		
		I.A.	T.I./Others	
65. Pawnee **	Lincoln	2#		
66. Perry **	Blaine	3#		
67. Ponca City **	Attucks	3#	2	
68. Purcell *	Booker T. Washington	-		
69. Red Bird	Miller Washington	-		
70. Rentiesville	Rentiesville	-		
71. Sand Springs	Booker T. Washington	4	2	
72. Sapulpa **	Booker T. Washington	3#	2	
73. Seminole **	Booker T. Washington	##		
74. Shawnee **	Dunbar	2#	2	
75. Slick *	L'Overture	-		
76. Spiro *	Douglass	-		
77. Stillwater **	Washington	1#	2	
78. Stroud *	Separate	-		
79. Taft	Moton	1		
80. Tatum **	Tatum	1#		
81. Tishomingo **	Booker T. Washington	2#		
82. Tullahassee **	Carter G. Woodson	2#		
83. Tulsa **	Booker T. Washington	2#	7	3 D.O.
84. Tulsa *	St. Monica	##		
85. Tuskahoma *	King Rosenwald	-		
86. Vian **	Douglass	1#		
87. Valliant *	Elliott	-		
88. Vinita *	Attucks	-		
89. Wagoner *	Lincoln	-		
90. Watonga *	Dunbar	-		
91. Waurika *	Lincoln	-		
92. Wellston *	Dunbar	-		
93. Wetunka	Douglass	-		
94. Wewoka **	Douglass	##		
95. Wilburton	Vernon	-		
96. Wynnewood **	Lincoln	3#		
97. Tulsa **	Carver Junior	1#		

* Administrator's Questionnaire Answered; ** Administrator's and Industrial Arts Teachers Questionnaires Answered; (N)# Number of Accredited Units in Industrial Arts; ## Industrial Arts on Elective Basis; I.A., Industrial Arts; T.I., Trade and Industry; (N)D.O. Units in Diversified Occupations.



MAP OF NEGRO SCHOOLS IN OKLAHOMA

Map Showing the Location of Accredited Negro High Schools in the State of Oklahoma for 1951-1952. The Numbers Listed on the Map Compare to the Series of Schools in Table I Illustrating the Definite Location and Counties Serving the School or Schools. The in Logan County Represents Langston University, the only Institution where Negroes May Pursue Undergraduate Study. The Red Squares A and B Represent the Two State Universities that offer Graduate Work to Negroes Since 1948.

TABLE II

RESPONSE TO THE QUESTIONNAIRES DISTRIBUTED
ACCORDING TO ADMINISTRATORS AND INDUSTRIAL ARTS
TEACHERS

Questionnaires	Mailed	Returned	Per Cent
Administrators	97	69	71.1
Industrial Arts Teachers	50	39	78.0
Industrial Arts Schools (Units)	41	31	75.6
Industrial Arts Schools (Non Units)	8	6	75.0
Junior High School	1	1	100.0

Table II shows the division of the organization from which information, data, and opinions will be used throughout this study in determining the status of industrial arts in the Negro schools of Oklahoma. Consideration is given to location of the school plant, organizational plan, faculty members, pupils' transportation, future view of industrial arts and suggestions for improving the industrial arts organization.

Community Types

The type of community indicates the spread of population from which the pupils attend the sixty-nine schools reported.

The 71.1 per cent of the communities represented by the

administrators questionnaires illustrates a factual picture of the 97 high school communities of the state. It is appropriate to recall here that the divisions of the city population over the state are divided into white and negro districts. Therefore, any school located in the urban community is also located in the negro district. The spread is indicated in Table III.

TABLE III

DIVISION OF SCHOOL COMMUNITIES REPRESENTING
THE SIXTY-NINE QUESTIONNAIRES

Community	Number of Schools	Percentage
Urban	39	57.2
Suburban	8	11.6
Rural	22	31.2
Total	69	100.0

The high schools in the urban community dominate with 57.2 per cent. The 11.6 per cent suburban community schools will indicate a scattered division of the negro homes. Such schools are located in the negro district and receive pupils from the rural areas. The 31.2 per cent of rural community schools will indicate a major portion of the pupils representing farm homes.

Regarding the three types of communities, it is evident that there is a need for a type of industrial education program that will serve them. In each community industrial arts must attempt:

to carry on a program of pioneering and leadership with a view to providing for industrial arts the expanded position and function which may be visioned for it in the immediate and distant future.⁵

Obviously the first thing essential to industrial arts is to serve the schools as they are organized and operated in whatever community. As Ericson states:

In the small rural school the subject matter for activity programs may be drawn from the life and activity of the community. The needs of the children and the home would be considered. Every small rural school should have shop equipment for informal mechanical work, and for working out projects in correlations. Girls and boys alike should be given a chance to have experience in certain types of mechanical and construction work.⁶

School Organization Plan

The organization plan is taken from the enrollment of the school, as elementary, junior or senior high school offerings within one administration. The value of the plan has indication only to the administrative choice and will have bearing later in this problem in determining the junior college establishment. The 8-4 plan is dominant with 41 schools. The

⁵Emanuel E. Ericson, "Two Fold Responsibility of Industrial and Teacher Education", Industrial Arts and Vocational Education, XLI (May, 1952), 147-48.

⁶Emanuel E. Ericson, Teaching the Industrial Arts. (Peoria, Illinois, The Manual Arts Press, 1946), p. 281.

6-3-3 plan follows with 19 schools. Five schools listed no plan. (See Table IV, page 17) From the 69 schools reporting only four listed programs having less than twelve years.

Pupil Enrollment

From the enrollment given it has been necessary to divide the schools into ten divisions whereby a suitable range can be used in determining a comparative size for each school. The range falls between 28 pupils as the minimum student body listed and 1511 pupils for the maximum. Group ten will represent all schools with more than 500 pupils enrolled.

TABLE IV

FREQUENCY OF SCHOOLS ORGANIZATIONAL PLAN

Plan of School	Number of Schools	Percentage
8-4	41	59.4
6-3-3	19	27.5
7-12	2	2.9
10-12	1	1.45
7-9	1	1.45
No plan indicated	5	8.3

Table V, page 18 will show the number of schools falling within the same frequency range. Groups one to nine are

represented in an interval of 50 each whereas group ten represents a spread from 500 to 1511 as listed by the questionnaire. This same table shows the predominant type of schools to be less than 249 pupils per enrollment. This includes 47 of the 63 questionnaires giving school enrollment.

TABLE V

FREQUENCY OF PUPILS ENROLLMENT
AND PER CENT FOR EACH GROUP

Pupils Enrollment	Frequency of Schools	Per Centage
1-50	2	2.9
51-100	13	18.84
101-150	13	18.84
151-200	9	13.1
201-250	10	14.55
251-300	7	10.14
301-350	0	- - -
351-400	1	1.45
401-450	1	1.45
500-Up	7	10.14
Gave no enrollment	6	8.59
Total	69	100.00

Number of Faculty Members

The 63 questionnaires answering the number of faculty members per school list from 3 teachers for the smaller system and 57 teachers for the larger system. However, it is possible to conclude from 28 pupils to three teachers and from 1151 pupils to fifty-seven teachers that there is both sufficient teachers for the smaller schools and up to a maximum of 26 pupils per teacher in the larger unit, as shown in Table VI indicates the frequency of schools as they employ an equivalent number of teachers.

TABLE VI

FREQUENCY OF SCHOOLS WHICH EMPLOY AN EQUIVALENT
NUMBER OF TEACHERS

Frequency of Schools	Teachers Employed	Frequency of Schools	Teachers Employed
1	3	3	14
4	4	2	16
7	5	2	18
8	6	1	19
8	7	1	25
5	8	1	26
1	0	1	28
8	10	1	36
4	11	1	57
2	12	6 (Schools gave no Answer)	
2	13		

Transportation for Pupils

The schools listing bus transportation are compared with the type of community, the questionnaires reveal the use of buses to be 77.7 per cent by the urban, 87.5 per cent by the suburban and 95.0 per cent by the rural.

Future View of Industrial Arts

From the 69 administrators answering the questionnaires, 39 are now offering industrial arts. Twenty-four of the 30 schools not offering industrial arts indicated plans of offering the course in the near future; whereas four schools were positive of not offering the course. Two schools gave no answer.

The 39 schools having industrial arts listed the following distribution of shops: fourteen-units, twenty-one-comprehensive units, nine-general composite and one-home mechanics.

From the 30 schools not offering industrial arts the administrators listed the following choices as their favorite future shops: three-units, six-comprehensive units, and twenty-one-general composite.

Ninety-two per cent of the administrators favored the addition of the junior college and indicated an average of 21 per cent of their graduates returning for industrial training.

Ninety-eight per cent of the industrial arts teachers

favor industrial arts being taught in the elementary schools.

Thirty-two per cent of the industrial arts teachers favored the junior college with commensurate extension of the industrial arts program.

Sixty-eight per cent of the 39 industrial arts teachers plan to continue their life career as teachers; whereas 32 per cent stated they have plans for entering other occupations.

In the field of industrial arts the need for planning becomes a job for the administrator and the industrial arts teachers alike, as thus stated by Newkirk:

The present program of industrial arts has evolved over a period of years through the work of the administrators, teachers, and teacher-trainers until carefully tested and practical plans are now available for teaching industrial arts from kindergarten to college.⁷

Whereas Ericson states for industrial arts in the elementary schools:

Opportunities are numerous for service in the smaller grammar schools where the junior-high school organization has not been introduced. In many cases such appointments involve the service of several schools in carrying out the program, and sometimes the teaching of the other subjects in addition to workshop becomes a part of the task.⁸

Suggestions for Improving the Industrial Arts Organizations

The administrators favored all high schools having industrial arts courses in their curriculums, coming to an

⁷Louis V. Newkirk and William H. Johnson, The Industrial Arts Program, The Macmillan Company, New York, 1948, pp. 14-15.

⁸Emanuel E. Ericson, Teaching the Industrial Arts, op. cit., p. 272.

agreement of fields that might prove suitable for contestants in the annual state industrial arts exhibits. They expressed the opinions that the training of industrial arts teachers in Oklahoma may be improved as follows:

(1) Two favored offering special training in organization and management courses;

(2) One expressed that it is essential to train teachers in integrating the activities of present day living as well as future living into industrial arts courses;

(3) Four believe that the teachers should have training as how to teach and demonstrate general shop courses as brick work, plumbing, electricity, auto-mechanics, etc. This would enhance the teaching of exploratory courses to the students in the small schools;

(4) Ten favored the University conducting four or five week's apprenticeship training each year to improve instructor's shop skills.

(5) Six would make state surveys to determine what the schools need in teacher-preparation and offer credit courses to meet these needs, also to apply the training of these needs with the educational trend;

(6) Two would strongly influence the industrial arts teacher to have pride and to feel and understand that industrial education is a worthy business;

(7) Five favored the University providing more adequate equipment for instructor training;

(8) Eight favored making industrial arts courses more practical;

(9) Nine believe the universities should establish a list of criteria as to what is to be expected of the industrial arts teacher in the state of Oklahoma;

(10) Two favor activating a program to awaken the public to the great possibilities and the need for industrial education.

The industrial arts teachers suggest the following changes which might enable the schools to participate in the industrial arts association more effectively:

(1) Three favor setting aside a special day that differs from the time of the Oklahoma Negro Teacher's Association for the industrial arts meeting which does not function well because other school curricular activities dominate the meeting;

(2) One would encourage all members to send in their choice of topics to be discussed;

(3) One states that, having more teachers from all parts of the state to appear on the program would increase attendance;

(4) Two would encourage industrial arts groups to visit some of the schools in the state where the better programs are offered in order to see how the programs function;

(5) One stressed more industrial arts education and the encouragement of schools offering industrial arts to take more active part in the state's program;

(6) Two would call meetings for which topics of current interest would be discussed and promoted;

(7) Two favored having the association urge each school district to hold local exhibits, from which the outstanding projects would be selected for display in the state exhibit;

(8) Two would have a state industrial arts supervisor coordinate the program of all schools;

(9) Three emphasized having the association send out periodical bulletins on its activities and program.

From the above given suggestions of the administrators and the industrial arts teachers it is evident that all recognize the subordinate status of present industrial arts programs. The greater number of administrators stressed skill training for the instructor in meeting the needs of the general composite shop, while the industrial arts teachers feel the need of a special day set aside from the Oklahoma Negro Teacher's Association for the industrial arts meeting. They recognize as Proffitt states:

It is a far cry from the day when practically the only offerings in what is now termed "industrial arts" were manipulative work in wood, to the present programs of various shop activities together with a rich offering in informational content.

For example, industrial arts from its beginning has sought to relate the work of the pupils in the shop to present day activities in the outside world.⁹

For the industrial arts teacher who is truly concerned with his teaching service as an occupation, Ericson states:

⁹ Moris M. Proffitt, U. S. Office of Education. "Trends in Industrial Arts", Pamphlet No. 93 (Washington U. S. Government Printing Office), 1940, p. 1.

The time is past when teaching as an occupation was open to any person with some college training who found himself preparing to do nothing else, or who failed to get a position in the work for which he was specially trained. Now specialized preparation is expected and demanded for this service as distinctly as for any other professional work.

It is well that it should be so, for with these new demands has come also a new and different evaluation of the teacher and his work. The public, on the one hand is realizing that the efficient teacher is worthy of rewards other than the personal satisfaction of having rendered sacrificial service. The teacher, on the other hand, is coming into the work with a background of special training and with the intention of making teaching his lifework. With this intention in mind he proceeds to improve himself further in the service, and to elevate the profession in which he is a definite member. He quits apologizing for being a teacher, and takes pride in belonging to this professional group.¹⁰

If such progress is to be made in the industrial arts field, it will require cooperation in implementing all of the suggestions from the industrial arts teachers and from administrators of all the schools in the state of Oklahoma.

The High School Studied with a View to Including
Appropriate Junior College Industrial Arts

From previous indications the administrators and the industrial arts teachers of Oklahoma recognized the severe need in improving the present realm of negro industrial education. They sense that under modern conditions the predomination of unrelated abstract studies have made the students restless and eager to do something which to their mind at least seems to employ all their activities.

¹⁰Ericson, Teaching the Industrial Arts, op. cit., p. 369.

The negro boys and girls have become aware that they too are citizens upon whom the nation depends for its skilled workmen. Their wages have been low because means were not at hand to turn their talents to higher account. Due to the rigid enforcement of the southern segregated school laws (See Appendix A, page 78) they have been allowed to drift into whatever occupation they may find. Often such occupations indicate lack of guidance and training compared to the degree of years spent in school in preparation of learning how to live. The secondary school have continued to discourage rather than to encourage them to remain in school.

The present day high school in offering secondary education has long served as the norm through which all pupils served by it have received the minimum of a general educational foundation, essential for living in a democracy. If the idea is accepted that the negro separate school is of equal responsibility to its youth, it must not remain a precipitous valley of incompetence. It must in this modern world be spanned with a bridge of preparation that demands the best of the worker; not as the right of a negro to work, but the right of persons to a livelihood.

In education for the negro, the high school in its present state must immediately concern itself with human needs and welfare regardless of racial or local ties.

It is with this idea in mind that the writer proposes the extension of the junior college program as a potentially

important factor in promoting the present realm of general education for negroes in the state of Oklahoma. It must be well understood the problem is not a new one, it has existed as a dilemma to secondary education for American youth. As Doctor William A. Black states:

The opportunity for extended secondary school or junior college education is badly needed by American youth. It is particularly needed in a local institution at home, where cost may be kept low. Much of the work should be technical, occupational, vocational or industrial arts. As long as our society is organized as it is (and we want to perpetuate this organization) much emphasis must be placed on making a living and on making a life. The industrial arts program can contribute to both.

Where there are segregated schools the extension of education for negroes is apt to be neglected. This is a problem that should be studied. At present the most economical extension of education for negroes in states with segregation is the extension of the high school.¹¹

Struck points out clearly that:

Industrial education then is essentially a part of general education that forms a necessary general foundation and background upon which specialized vocational education may be built. It is the connecting link between broad general education on the one hand and narrower specialized education on the other.¹²

The above statement indicates that the junior college is the institution that is needed for the expansion of general education.

The administrators and industrial arts teachers have agreed in their suggestions that the present status of

¹¹ Quoted by permission from a lecture in the class: "The Junior College", Kansas State Teachers College, Pittsburg, Kansas, Spring Term, 1952.

¹² F. T. Struck, Creative Teaching, John Wiley and Sons, Inc., New York, N. Y., 1938, p. 40.

industrial arts in the high school needs improvement and that a more specific training is needed for the pupils attending. Harberson and Sexson state that:

...the junior college is the fulfillment of the high school, not the step child of the university. It stands for further education preparedness for the greater number, for democratic continuity, and for completeness of educational opportunity. It stands for faith of the American people in education and their desire for further extension for as many as possible....The real value of the junior college, in my opinion, rests in its attempt to meet the needs of those students whose talents and interests are in further education. It is a notorious fact that those who seek or should seek semi-professional careers are not well trained by our public school system. They can and should be well trained in the junior college.¹³

With due consideration to locations, size of schools, present facilities, and condensely populated areas, the writer suggests several of the larger school systems to serve as the administration of the thirteenth and fourteenth grades to schools within a radius of fifty miles. The following districts are suggested as the Utopian centers for such junior college expansion:

1. Idabell
Broken Bow
Idabel
Valliant

2. Muskogee
Boswell
Boyton
Ft. Gibson
Haskell
Taft
Wagoner

3. Oklahoma City
Arcadia
Choctaw
El Reno
Luther

4. Oklmulgee
Beggs
Henryetta
Slick

5. Tulsa
Carver
Claremore
Sand Springs
Sapulpa
St. Monica

¹³ John A. Sexson and John W. Harberson, The New American College, Harper and Brothers, New York, 1946, p. 289.

CHAPTER III

THE FUNCTION OF THE INDUSTRIAL EDUCATION CURRICULUM IN THE HIGH SCHOOLS

The function of industrial arts to industrial education is to serve students in a definite phase of general education with emphasis placed upon exploration and participation, whereas, vocational education offers a specialized program for preparing students for remunerative employment based on skills which are to be developed when the student leaves the high school. Ericson explains:

Much of the confusion in connection with aims and goals, as well as in content and teaching methods, come from a lack of distinction between the fundamental purposes and position of industrial arts as contrasted with vocational education. While these two activities have common characteristics to the point that they may appear similar when viewed superficially, they are two distinct and independent areas in education. They must be so recognized if either is to be expected to render its maximum service in the educational program.¹⁴

Since these two phases of industrial education are very definitely related one to the other by their study of tools, materials, processes, products and the problem of the occupational life in industry, they have functioned together well in eight properly organized programs in selected high schools.

The growth of the industrial arts programs as they have been established in the high school system of Oklahoma are

¹⁴Ericson, Teaching the Industrial Arts, op. cit., pp. 247-248.

listed in Table VII. Indicated is the year and frequency of growth in the schools' curriculums of the state. The year 1949 shows the greatest increase of five schools. Four schools in 1935 were the second highest number of schools adding industrial arts.

TABLE VII

THE YEAR AND FREQUENCY IN WHICH INDUSTRIAL ARTS
COURSES WERE ORGANIZED

Year	Frequency of Schools	Year	Frequency of Schools	Year	Frequency of Schools
1901	1	1930	3	1943	1
1915	1	1931	3	1944	1
1916	1	1932	1	1945	1
1917	1	1934	1	1946	2
1920	1	1935	4	1947	1
1922	1	1938	1	1948	1
1924	2	1940	3	1949	5
1928	1	1941	1	1950	1

Schools Offering Industrial Arts

The writer feels that the sampling from the 39 industrial arts programs (See **, Table I) answering the industrial arts questionnaires actually is a representative

picture of the total state's program among negro schools. The frequency of subjects appearing in the 39 schools illustrates the evolutionary pace as to which schools are making changes in the state's program. Where once the Manual Training program consisted of woodworking and mechanical drawing, the present industrial arts has taken on many new materials, offering a variety of fields as: plastic, leather crafts, ceramic, upholstery and home-mechanics. Special exploratory trade fields are offered as industrial arts: (1) auto-mechanics, (2) tailoring as part of industrial arts for boys and home-economics for the girls. From the interview at the Booker T. Washington High School of Tulsa such courses are listed as part of the industrial arts program for students not attending for the required time of the Federal Program.

Industrial arts is directly affected by the enrollment as is shown by the smaller schools which cannot afford to offer industrial arts in a series of general unit shops as is commonly done in a larger shop that can be used to full capacity through the day. As previously stated, the small schools must offer some industrial arts experiences suitable to meet the present day demand of its environment.

TABLE VIII

FREQUENCY OF COURSES FOUND IN THE 39
INDUSTRIAL ARTS PROGRAMS RESPONDING TO QUESTIONNAIRE

Course	Frequency of Mention	Course	Frequency of Mention
Woodworking	37	Shoe Repair	3
Mechanical Drawing	21	Ceramic	3
Upholstery	17	Sheet Metal	3
Electricity	11	Tailoring	2
Leather Work	7	Art Metal Work	2
Home Mechanic	5	Brick Masonry	1
Auto Mechanic	4	Forging	1
Cement & Concrete	3	Washing and Lubrication	1
Plastic	3		

From Table VIII it is indicated that there is a slow adaptation to the new materials by the majority of schools. The top four listed courses remain the dominant subjects used in the comprehensive general shop which are the most used in the state programs.

Vocational Offering in the Industrial Department
of the High Schools

The vocational trades and industrial educational programs as approved and carried on in the negro high schools

of Oklahoma are listed in Table IX which follows with trade and unit credits per year for 1951-1952.

The trades are carried on under regulation of the Smith-Hughes and George-Barden Acts as Cooperative Part-Time vocational education program set up in the high school on the plan A, B, or C.¹⁵

The industrial arts and vocational education classes are held in the same institution and the equipment serves a dual purpose. Usually the teacher serves in an overlapping capacity as industrial arts and vocational instructor. In some schools, two instructors may share the same shop:

...these two phases of industrial education are much alike and are very definitely related one to the other. They both involve study of the tools, materials, processes, products and the problem of occupational life in industry. In a properly organized program the two supplement each other.

However, as it exists:

...in some school systems both types of work are offered as parts of a unified program of industrial education; in other systems they are offered under separate organizations; and in still other schools only one type is offered and the other neglected.¹⁶

¹⁵ Industrial Arts Handbook, Bulletin 7B, Revised 1945, Missouri State Department of Education, Jefferson City, Missouri, p. 31.

¹⁶ Ibid., p. 29.

TABLE IX

VOCATIONAL TRADE AND INDUSTRIAL EDUCATION

Schools, Subjects and Units Per Year in Each Trade
and Industrial Education Subjects

	C i t i e s	A t o k a	L a n g s t o n	M u s k o g e e	O k l a . C i t y	S a n d S p r i n g s	S a p u l p a	S h a w n e e	T u l s a
Trades & Industry									
Auto-Mechanic			2	2	2				2
Brick Masonry			2		2				
Cabinet Making			2						
Carpentry		2			2			2	2
Commercial Cookery				2	2				
Cosmetology			2	2	2				
Diversified Occupation									3
Household Services				2		2	2	2	
Shoe Repair			2	2		2			2
Upholstery					2				
Total		2	10	10	12	4	2	4	9

The table above indicates the Negro Program as listed
by the Annual High School Bulletin.¹⁷

¹⁷ Annual High School Bulletin, op. cit., p. 52.

Number of Students Per School. From Table V, page 18 the step intervals indicate the greatest four frequencies for school enrollment which falls: thirteen at 51 to 100, thirteen at 101 to 150, nine at 151 to 200, and ten at 201 to 250 pupils per school. Only seven schools of the 69 have enrollment greater than 500 pupils.

The industrial arts questionnaires reveal that some schools are offering the program to fewer than ten pupils as indicated in Table X. That is, three schools have less than ten pupils in their entire industrial arts program at any one time. Ten schools offer the program to classes whose combined totals are from 11 to 20 pupils. Only two schools have more than a sum total of 101 pupils enrolled in industrial arts.

In Table X attention is called to the first five intervals representing 31 of the 39 schools having up to 50 pupils in their programs.

TABLE X

THE PUPILS INTERVAL AS COMPARED TO THE FREQUENCY OF SCHOOLS

Pupil Interval	Frequency of Schools	Pupil Interval	Frequency of Schools
1-10	3	61-70	2
11-20	10	71-80	1
21-30	5	81-90	1
31-40	7	91-100	1
41-50	6	101-up	2
51-60	2		

These small enrollments in industrial arts determine to a large extent the type of shop which will exist in the school system. In other words, the community's needs have not determined the types of industrial arts programs the school will offer. The following statement makes the same point:

The small school or the school with a small enrollment usually cannot afford to offer industrial arts in a series of general unit shops as is commonly done in a large shop to full capacity through the day, giving a variety of experiences pertinent to the needs of the students and the community.¹⁸

Comparison of Industrial Arts Courses

Industrial arts courses are part of general education and do not have a distinctly bread and butter justification. They are assumed to generate sympathetic interest in the whole of industry. The courses are aimed at broad, rather unspecialized, and often rather remote values. It is important that the objective of these courses keep the pupils probable life-work in view. However, it is important to recall that up through the development of industrial arts the schools have had the responsibility of arranging a systematic course of instruction suitable for incorporating it into each present system of education. As indicated in Table VIII, page 32 the courses listed by the schools find the greatest frequency in woodwork. The 39 schools responding to the questionnaires list woodwork as the dominant course

¹⁸Ibid., p. 33.

in 37 of the schools, mechanical drawing in 21, upholstery in 17 and electricity in 11. Other courses range from seven to one as indicated.

Building and Equipment

The industrial arts buildings are given location in six distinct areas and serve as part of the total school's plant in carrying out the general educational program each prescribes. The equipment becomes a matter of choice for the community, industrial arts teachers or the local administrators, serving the listed programs prescribed by the questionnaires.

Industrial Arts Shops. The three types of industrial arts shops indicate the following distribution: fourteen unit shops, nineteen comprehensive unit shops and eleven general composite shops. See Table XI, page 38. Industrial arts taught in the 39 programs listed 44 shops as places for carrying on the industrial arts curricula. In study of the questionnaires the larger schools were able to carry on unit type class activities in separate buildings or wings of main buildings.

The pictures to be found in Appendix will illustrate the extent of some unit shops as classes were photographed in session.

In listing the 44 separate shops for the 39 schools, it is to be recalled that Tulsa's Booker T. Washington High

School program functions with three unit shops and the Carver Junior High School functions with four shops--three comprehensive and they list the fourth as a home-mechanic shop. In the home mechanics shop a program is offered to both girls and boys with experience over-lapping in home economics and the composite general shop.

Location of Shops. The 39 industrial arts shops were found in the following locations:

TABLE XI

LOCATIONS AND FREQUENCY OF SCHOOL SHOPS

Location	Frequency
Part of main building	19
Wing of building	5
Separate building	14
Basement of building	3
Others	2
a. Classrooms	
b. Jointly in building with cafeteria and home economics	1
Total	39

Areas and Types of Floors. The area of the floor plans presents one of the most common problems of all schools and can best be compared to the frequency of students in

industrial arts courses.

By dividing the floor area by the enrollment of the largest class in each school, it was found that industrial art shop areas for 58 per cent of the smaller schools provide a 50 square feet of floor space per pupil as recommended by Ericson.¹⁹ In the larger schools there is not enough floor space for even the smaller classes. The schools holding industrial arts classes in rooms jointly with home economics and the cafeteria gave no dimension of area and an enrollment of 7 pupils. Most shops, being of the light type have between 400 square feet to 2400 square feet. In this problem only the full length and width of the building were considered. It must be kept in mind that there will be future growth in negro schools. Thus the situation will probably get more severe. Furthermore, Ralph O.

Gallington says:

It is generally accepted that the working area of a heavy shop should be from 75 to 125 square feet per student; light shop working area from 40 to 60 square feet per student. These figures do not include extra room which is needed for storage, lockers, and washroom facilities, finishing room facilities, and the like. Many planners have taken minimum figures suggested for these shops with the result that there were no provisions for anything but a minimum program from the start. This is unwise indeed. It would seem much wiser to provide the maximum for the ultimate program as it is likely to develop in the future.²⁰

¹⁹E. E. Ericson, Teaching the Industrial Arts, op. cit., p. 108.

²⁰Ralph O. Gallington, "Improving Shop Layouts for the Industrial Arts Program", School Shop, VIII. (April, 1949), 37.

The types of floors as reported in the industrial arts teachers' questionnaires (VI A-3) reveal that: in the 14 unit shops nine have concrete, three have hardwood and two have combinations of wood and concrete; the 21 comprehensive unit shops have listed eighteen concrete and three hardwood; the composite general shops have listed five concrete, two combination of wood and concrete and two asphalt tile.

TABLE XII

TYPES OF FLOORS USED IN THE FORTY-FOUR
INDUSTRIAL ARTS SHOPS

Shops	<u>Floors</u>			
	Concrete	Wood	Combination	Asphalt Tile
Unit	9	3	2	0
Comprehensive	18	3	0	0
Composite General	5	2	0	2
Total	32	8	2	2

Table XII reveals that concrete floors are most used among the 44 shops of the 39 schools. The two asphalt tile floors indicate that new materials are entering the shop as accepted floors by the industrial arts teachers.

Suitable Hand Tools. In reply to question VI C, it is revealed that 92 per cent of the high school shops have

sufficient hand tools for carrying on hand work. Through examination of the questionnaires the shortage of tools is found only among the smaller shops.

Machinery in Shops. The industrial arts instructors checked question VI D for the distribution of machines as listed in Table XIII.

TABLE XIII

MACHINES AS FOUND IN THE 39 INDUSTRIAL ARTS PROGRAMS

Machines in School Shops	Frequency	Machines in School Shops	Frequency
Circular Saws	34	Sanders	20
Wood Turning Lathes	32	Drill Presses	19
Grinders	31	Planers	13
Jointers	28	Shapers	12
Band Saws	27	Cut Off Saw	7
Jig Saws	22	Paint Spray Gun	7
Hand Drills	20	Metal Lathes	6

Every school has some of the above machines in a relative frequency as indicated. However, Table XIII does not indicate the distribution of these machines among the schools. Naturally the school's facilities vary and the number of each of the above machines which they are fortunate to have. However, in the case of the two Tulsa schools, there exist two or more

of some of the machines in the school program.

Maintenance Work Done. The matter of school maintenance always receives both favorable and unfavorable comments from the industrial arts teachers. Questionnaire results indicate school maintenance work was a part of their school job in 16 cases. Twenty-three schools indicated they did not do school maintenance.

The Shop Library. This has reference to the location of industrial arts publications in the shop. Question VI B reveals that 77 per cent of the schools have shop libraries of some kind. There is listed an average of 22 industrial arts publications and 11 periodicals per school according to the industrial arts teachers' questionnaire returns from the 39 schools. Only nine schools listed having an annual average of \$36.22 each for library materials. The budget range for publications in the nine schools was from \$5.00 to \$200.00.

From the nine schools stating budgets for such printed material it is assumed that this area is being overlooked by the teacher and administration as playing an important part in the modern industrial arts. However, the real acceptance to present day secondary education is to give equal consideration to every department. This would greatly enhance the shop library for industrial education as well as all other activities. This is briefly stated from "School Shop" Magazine:

The use of printed materials has increased by leaps and bounds in the school shop. Shop libraries should be provided in conjunction with planning areas. Facilities for filing materials and shelving books and magazines are a must.²¹

²¹"Planning the General Shop", School Shop, XI (April, 1949), 35.

CHAPTER IV

THE PARTICIPATION OF THE INDUSTRIAL ARTS SCHOOLS IN THE STATE INDUSTRIAL EXHIBITS

In January of 1948, a group of industrial arts teachers, which included Mr. E. A. Miller, Head of the Industrial Arts Department of Langston University and Mr. O. G. Rogers, President of the Industrial Arts Association for Negroes, met in an industrial arts call meeting at Langston University. Letters had been addressed to every Negro High School in the state asking that the industrial arts teachers attend the meeting, which was called for the purpose of organizing an effective program to increase the utility of industrial education in the Negro high schools.

The writer attended the meeting described. Of the Negro industrial arts teachers in Oklahoma, only nine attended the meeting.²² (The writer does not appear in the illustration). Such a small percentage immediately gave rise to many questions. Why were not more schools represented at the meeting? Had they been properly notified by the administrators who had received the letters? What should we plan? What kind of appropriate activity would be effective in getting the members to become active? What can be done to encourage the industrial arts teachers to participate in the organizations? What program should we undertake in order to stimulate interest among the state's schools? These questions and many more were discussed,

²²See Illustration "D", page 49.

and most of them were still unanswered when the meeting was over.

This group planned an exhibit and attempted to devise means to insure the support and attendance of a majority of the state's industrial arts teachers. A committee was formed to contact all schools and ask their representation. However, when the time came for the exhibit, only the group that had initiated the plan were present. It immediately became the problem of these men to act in behalf of the Industrial Arts Association for Negroes.

The State Industrial Association

The nine men present decided that the association should become of dynamic character, forceful, energetic, and with changing motion sufficient to uplift the falling status of industrial education among the negro schools of Oklahoma. The Association re-organized its weaknesses and uncertainties and were confronted with the problem of being a minority group within a minority group. They were aware of customs perpetuating southern tradition, even to the degree of imposing fines on those whites who dare to teach a Negro any phase of secondary education. They realized that the Atomic Age with its unlimited possibilities had brought no change in the harsh laws (See Appendix A, page) and customs which prohibited equal education for Negroes in Oklahoma. This group had become aware of the struggle democracy was facing and the need for every American citizen's support.

They were further aware that it was not a right of a Negro but the right of a person and if the Negro youth were to take his place in the struggle for democracy he must be educated.

Tradition must be overturned and democracy extended to the Negro. These are hardly the times to fumble about with abstractions. We are in a titanic life and death struggle with ruthless and efficient foes. Negroes as well as colored peoples elsewhere, must be galvanized into decisive action on the side of democracy.²³

Industrial education everywhere has come to recognise the facts stated by Dick:

We are living in an age of changing concepts; changes of various sorts are usually necessary to progress. What have been some of the significant industrial changes which affect industrial education? There has been a change from unorganized industrial research to organized research on a large scale. The Atomic Age has come into being with almost unlimited possibilities of warfare and living. This Atomic technology has already resulted in the need for more education and training. We are living in a period of invention as exemplified through atomic energy, television, and electronics. There has been a growth in industrial production through scientific applications. We are living in a shrinking world as a result of developments in transportation and communication. Concepts in industrial education are changing as a result of these unprecedented technological advancements.²⁴

The above quoted statement relates directly to the real service that must be rendered to the State Industrial Association. Education is by no means static. To do today what

²³Ira Corriner Brown, ibid., p. 384.

²⁴Arthur A. Dick, "Promoting Industrial Education", Industrial Arts and Vocational Education, XLI (April, 1952), 116.

was effective yesterday may be a gross waste of time and effort. To do today what was suitable five years ago is certainly in part inadequate. The association is faced with the consideration of the negro youth and how they will fit into the present age. It is concerned with the teachers and the supply.

Frykland verifies this problem in saying:

At the present time leadership in industrial arts is worrying a good many capable and respected men in the field to a point where it interferes with a sound development of industrial arts as a service to the youth of our country. It has almost come to be a question of who utters what rather than whether there is a functional service to be rendered our youth.²⁵

To compensate for the lack of cooperation on the part of high schools and the industrial arts education, it was recommended that a study group be formed that might undertake research to determine the weaknesses in industrial arts education in negro schools in Oklahoma.

In presenting question IV the writer wished to find the number and scope of the industrial arts activities participated in by the Negro schools. The 39 schools which returned the questionnaires replied as indicated in Table XIV.

²⁵ Verne C. Frykland, "Accreditation of Industrial Arts Teachers Education", Industrial Arts & Vocational Education, XLI (February, 1952), 36.

TABLE XIV

THE PARTICIPATION OF INDUSTRIAL ARTS SCHOOLS
IN THE STATE, DISTRICT AND COMMUNITY MEETINGS

State Industrial Arts Association	36
Local Industrial Arts Association (District)	4
State Industrial Arts Exhibit at Langston Univ.	24
Local Industrial Arts Exhibits in the Community	24
Non-participants	6

The above table indicates that 33 of the 39 schools are taking part in some organized program. Thirty-six teachers indicated membership in the state industrial arts association. Four indicated membership in a local district association. Twenty-four indicated participation in the industrial arts exhibits held at Langston University annually. Twenty-four indicated holding local community programs and six stated that they didn't participate in any cooperative activity.

Thirty-six of the 44 industrial arts instructors stated that they held membership in the industrial arts association held jointly each year with the Oklahoma Association of Negro Teachers.

From the 24 answering that they participated in the State Industrial arts exhibits and won the awards in the related years (1946-51); five schools indicated continuous participation, having won awards in such activities as

mechanical drawing, woodwork, metal work, shoe repairing, upholstery and leather work. (See Table XV)

TABLE XV

FREQUENCY OF SCHOOLS ATTENDING THE INDUSTRIAL
ARTS EXHIBITS HELD AT LONGSTON UNIVERSITY
FROM 1946 TO 1951

School Year	Frequency of Schools
1946-47	6
1947-48	6
1948-49	8
1949-50	9
1950-51	13

The above table gives an indication of the program made in persuading the schools to take part in the annual exhibit. Illustrations "B" and "C", page 49 expresses the enthusiasm of the El Reno students preparing for a 1950 industrial arts exhibit to be held both locally and in the state. The courses here included are woodwork and upholstery projects.

Plans for Participation

From the question IV D asking whether the industrial arts organization is effectively serving the negro schools, 22 answered yes, while 16 believe it is not effective.

LIST OF ILLUSTRATIONS

PLATE

- A. New School, Shop not Complete (Cushing)
- B. Ninth and Tenth Grades Upholstery
1950 (El Reno)
- C. School Preparing Exhibits; Local and State
(El Reno)
- D. Group--Met Negro Industrial Arts
Association (Langston)

A



B



C



D



Thirty-eight per cent answered that they favored the industrial arts organization continuing its meeting at Langston University each year but 48 per cent would favor meeting each year in a different town where adequate accommodations are available. As previously stated in Chapter II, a majority of the industrial arts teachers felt that a special day set aside from the Oklahoma Negro Teacher's Association would greatly increase the industrial arts teachers' participation.

Schools Visited

The schools listed in Table XVI, page 53 were visited and pictures were taken showing a few of the actual activities within the shops. These pictures also indicate to a degree whether the shop is lacking in facilities or well-equipped. It should be noted that the best equipped shops have been built within the last five years. In the Booker T. Washington High School, Tulsa, Oklahoma the equipment is entirely new and facilities are now made available for the promotion of industrial education for negroes in trade and industry and distributive occupations.

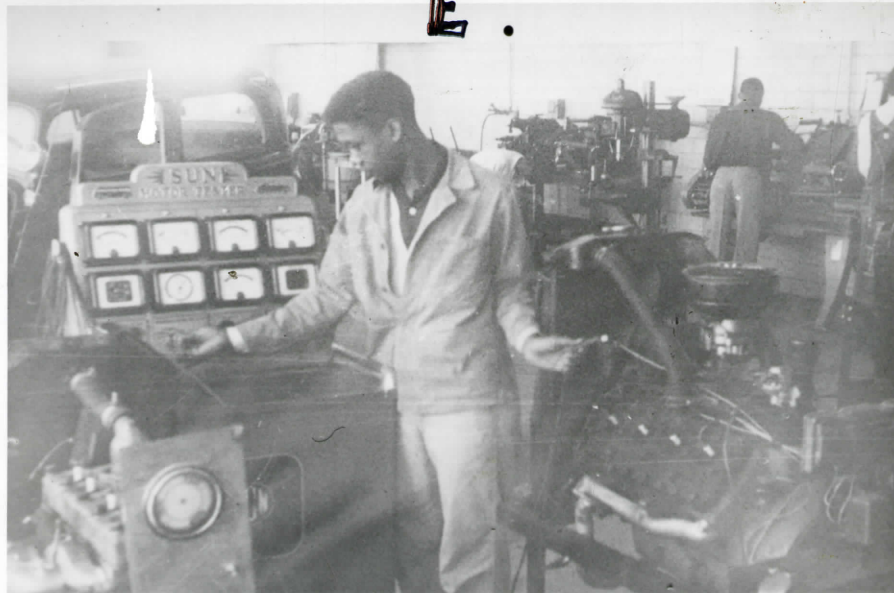
Table XVI, page 53 indicates that the schools are receiving state or county assistance in providing better facilities for general industrial education. Industrial arts, an integral part of the total program, is being given equal consideration with regular academic subjects as indicated in the following illustrations, pages 51 and 52.

LISTO OF ILLUSTRATIONS

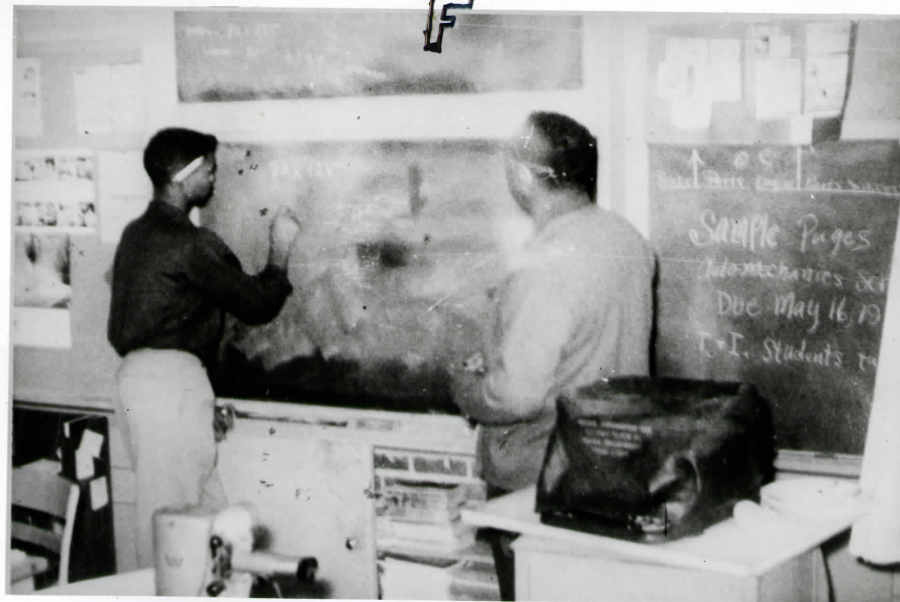
PLATE

- E. Industrial Arts Class in Auto Mechanics
(Tulsa-- B.T.W.)
- F. Industrial Arts in Relative Mechanics for
Individual Instruction (Tulsa-- B.T.W.)
- G. Visual Aids Used in Auto Mechanics (Tulsa--B.T.W.)
- H. Group Projects for Students in Auto Mechanics
(Tulsa--B.T.W.)

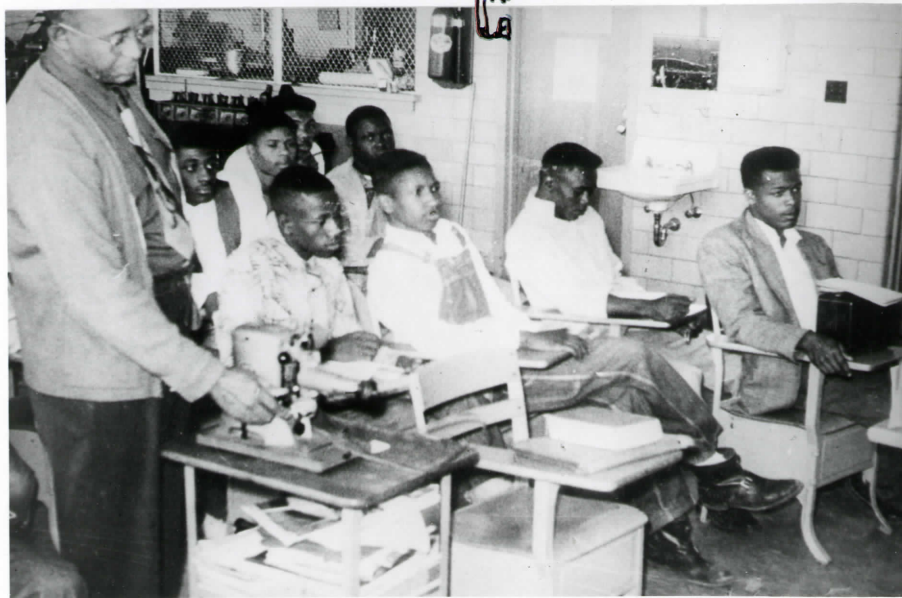
E.



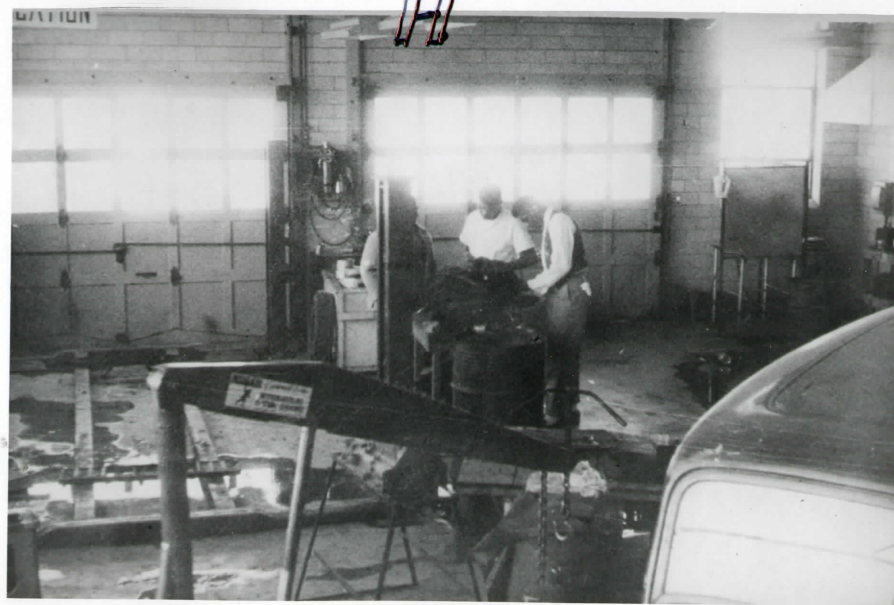
F



G



H



LIST OF ILLUSTRATIONS

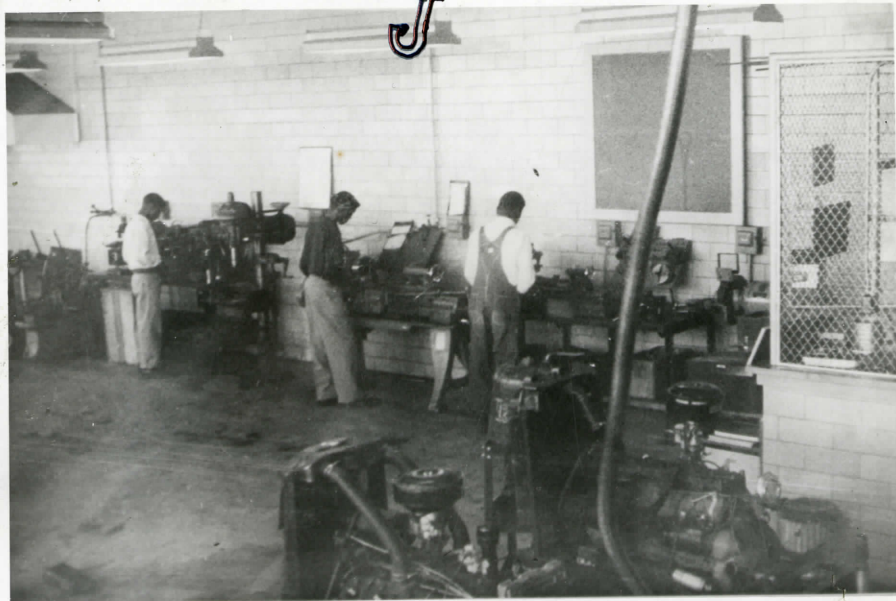
PLATE

- I. Mechanical Drawing Class (Tulsa--B.T.W.)
- J. Class in Metal Lathe (Tulsa--B.T.W.)
- K. Relative Class in Industrial Mathematics
(Tulsa--B.T.W.)
- L. Preparing for Visual Aids (Tulsa--B.T.W.)

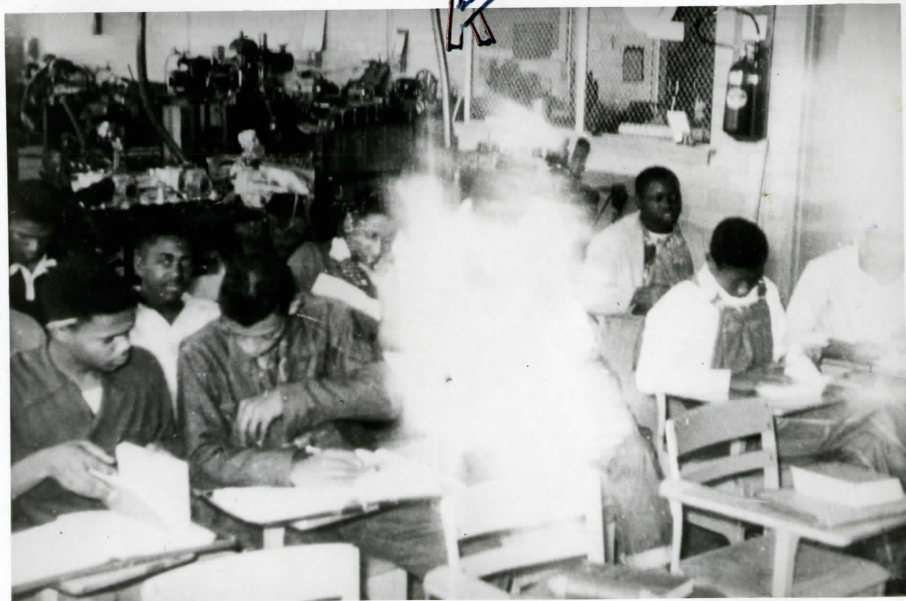
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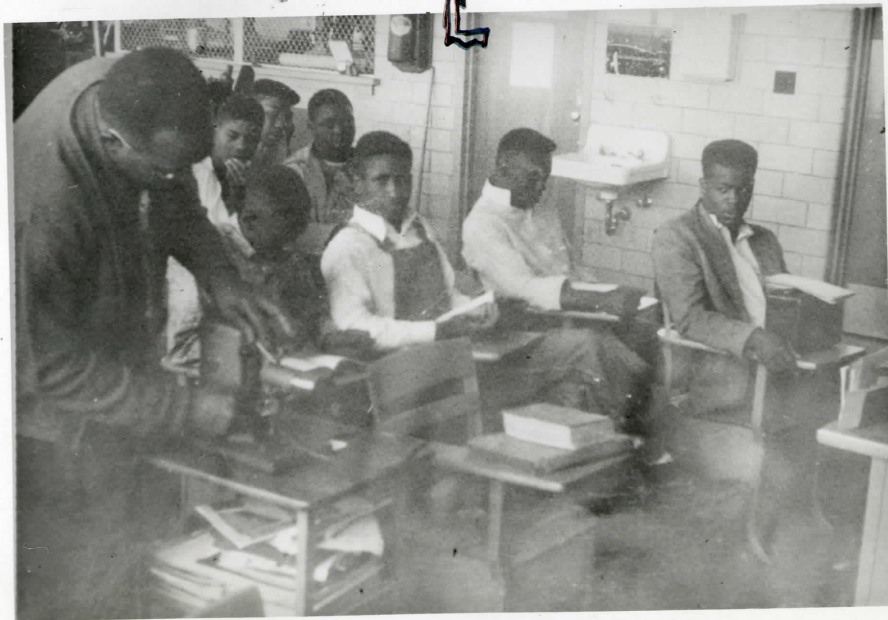


TABLE XVI

SCHOOLS VISITED IN OKLAHOMA

School	Industrial Art Shop Status	Location
Bartlesville	(1949) New Comprehensive General Shop	Wing
Chickasha	(1939) 14 years old-Composite-General	Separate
Cushing	(1951) New Composite-General Unfinished	Wing
El Reno	(1950) New Composite-General	Separate
Lenapah	(Old) Former kitchen unit	Basement
Nowata	(Old) Former classroom comprehensive	Classroom
Stillwater	(1952) Being Completed	Wing
Tulsa (B.T.W.)	(1950) Three Unit & Comprehensive Unit Shop	Wing
Tulsa-Carver Jr Hi	(1945) Remodel (1951) Three Comprehensive and Nine Home Mechanic Shops	Wing

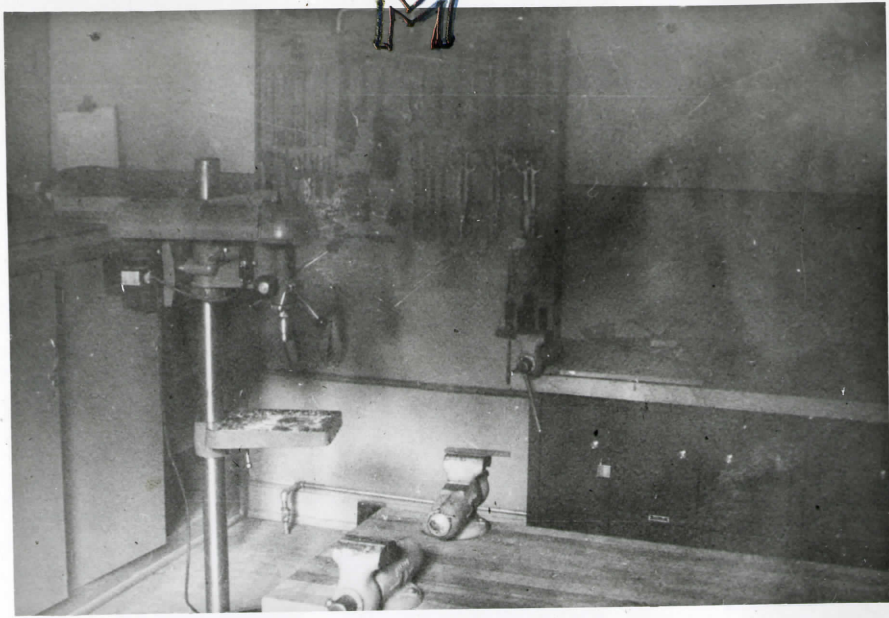
It is important to call attention to the well-organized program carried on in the Carver Junior High School of Tulsa. See illustrations I, J, K and L, page 52. Of the four shops within the school these are limited general shops, while the one considered as composite is being converted into a new type of shop which will provide a full home-mechanic training unit for both girls and boys of 13-15 years of age. It represents a cross-section of many activities which the principal and instructor expressed feelings that it activates

LIST OF ILLUSTRATIONS

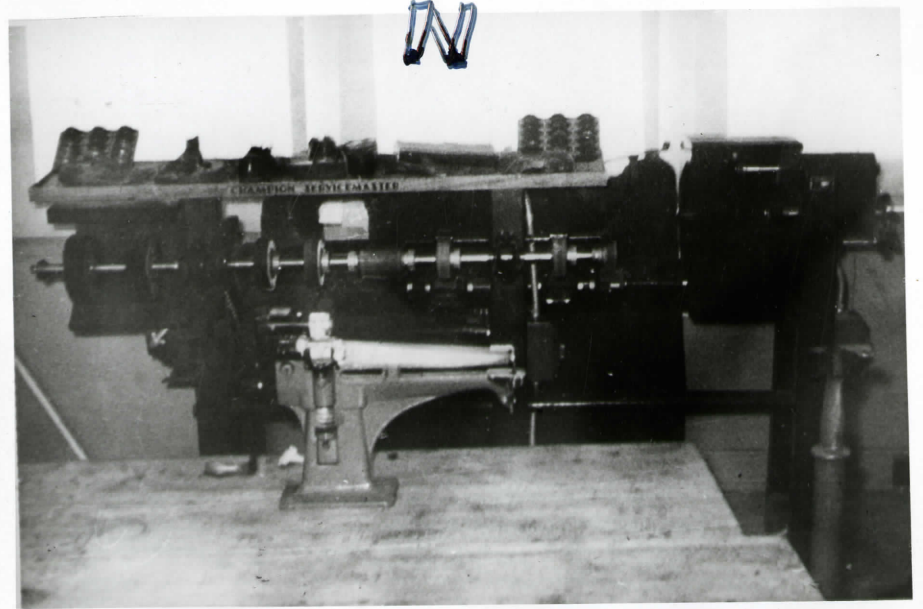
PLATE

- M. Metal Work (Carver--Tulsa)
- N. Shoe Repair in Home Mechanic Shop (Carver--Tulsa)
- O. Sheet Metal Work (Carver--Tulsa)
- P. Ceramics and Art Metal work (Carver--Tulsa)

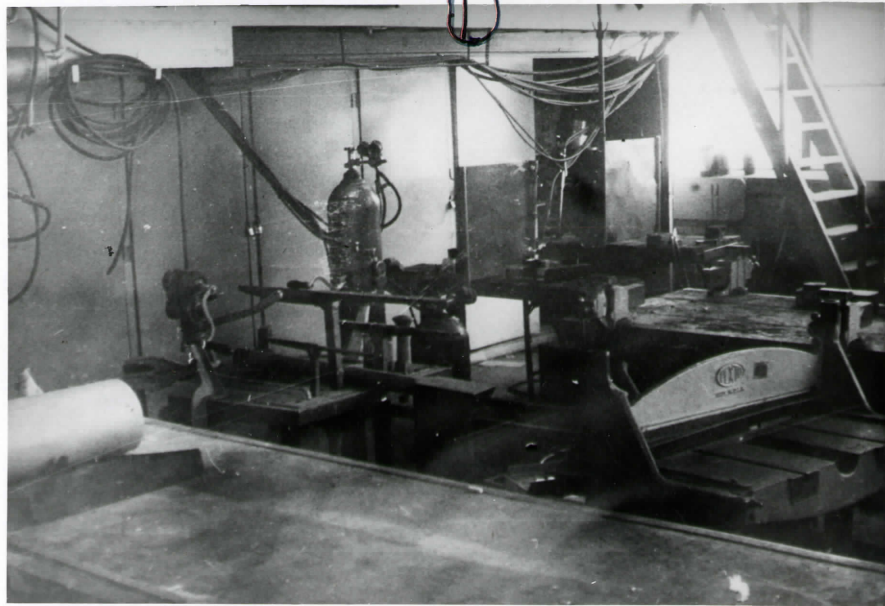
M



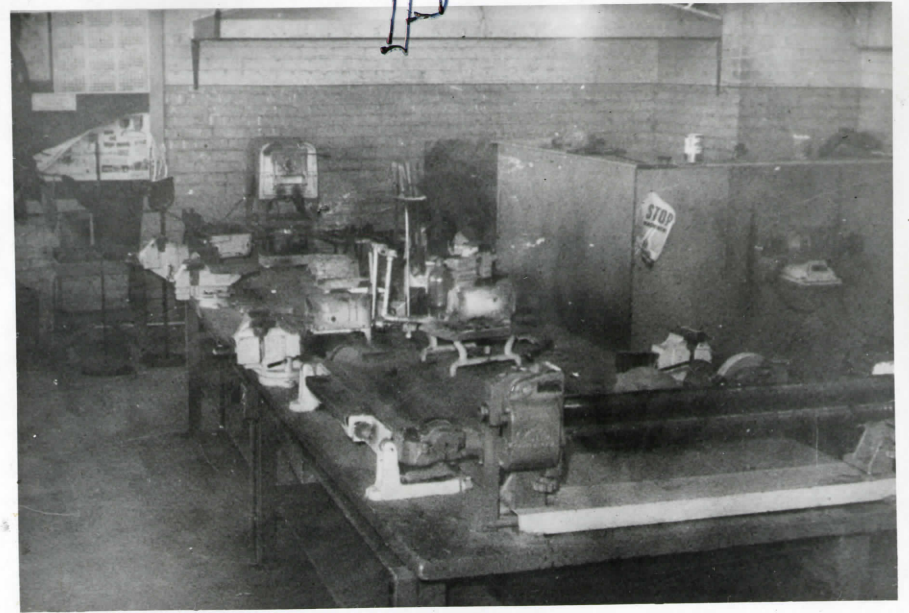
N



O



P



work for reaching their composite shop. Many activities are the same as carried on in the other two shops.

However, with due consideration to their calling it a type of home mechanic shop, it gives exploratory experiences to both boys and girls in home economics and general family life.

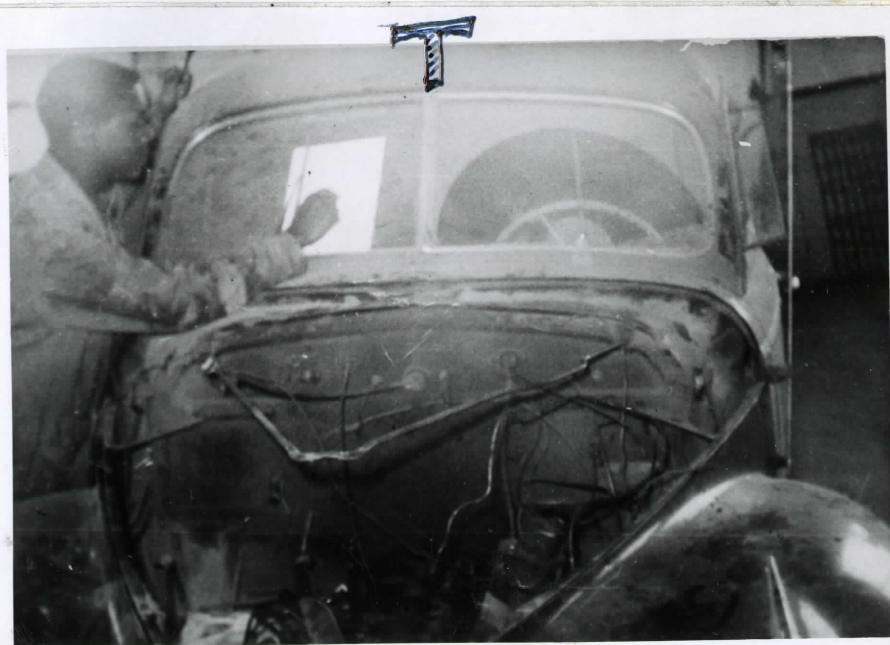
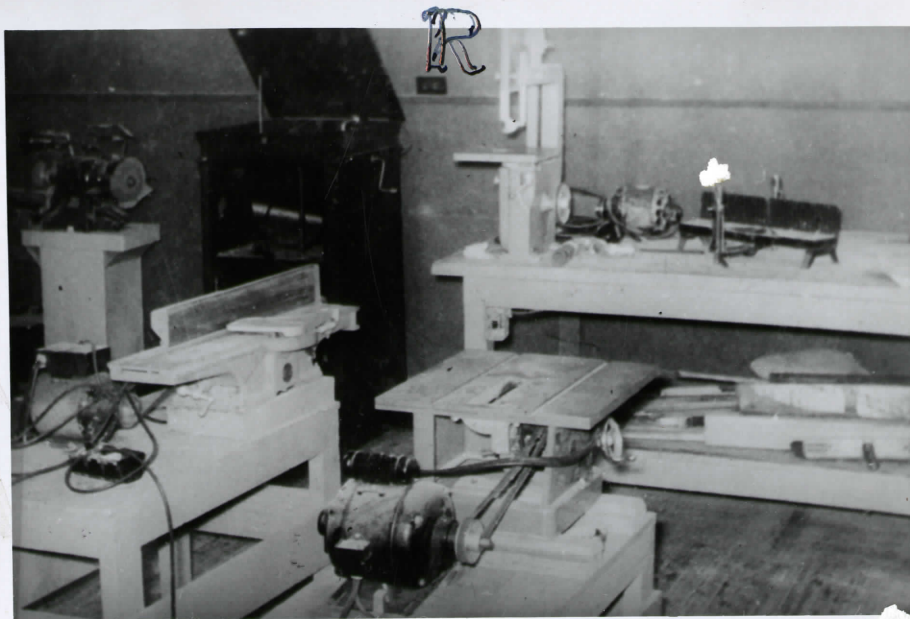
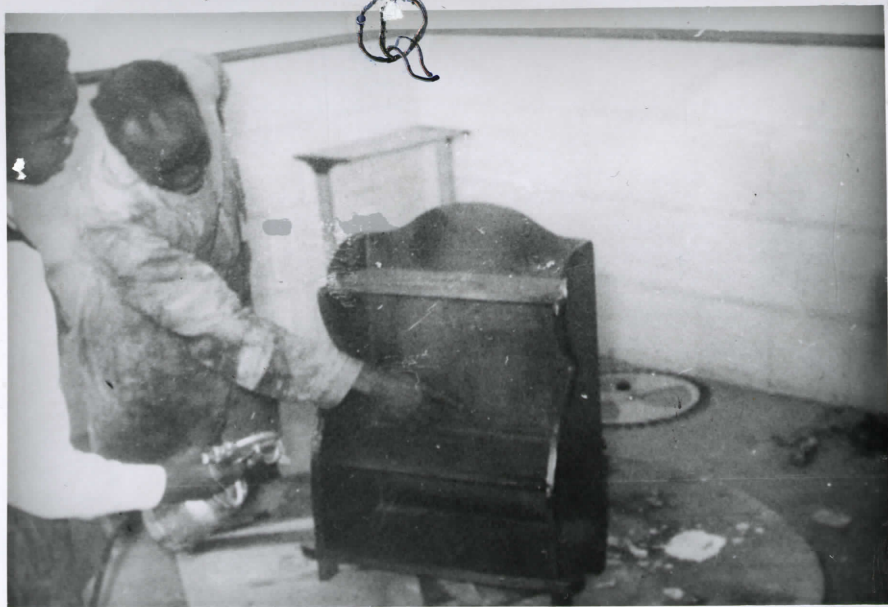
Illustrations M, O and P, page 56 will indicate the comprehensive general shop of Bartlesville, Oklahoma where auto-mechanics and wood working are combined fields within the one shop and supervised by one teacher.

Illustration N, page 56 indicates industrial arts as it is carried on in one of the smaller schools: Lenapah, Oklahoma.

LIST OF ILLUSTRATIONS

PLATE

- Q. Finishing Woodwork Project(Bartlesville)
- R. Basement Shop--Former Kitchen (Lenapah)
- S. Auto Mechanics (Bartlesville)
- T. Auto Mechanic Job Sheet (Bartlesville)



CHAPTER V

THE LOADS, DUTIES AND ACTIVITIES OF THE INDUSTRIAL ARTS TEACHERS

In determining the teaching loads, consideration is given to the following components: The number of different preparations, the total experiences of the teachers, the total experience in the same system, the extra curricular activities and the total number of classes taught daily.

Present Qualifications

Teachers of shopwork in public schools have generally come from teacher-training institutions. Each has brought into his work valuable contributions toward the development of industrial education in his own place of service. They have also lacked certain desirable abilities and characteristics possessed, perhaps by the other teacher. Many have received preparation from the same institution therefore possessing similar characteristics and general objectives in education alike. For in the words of Harrison:

The Negro teachers of industrial education should have at least a college education. They should show evidence of possessing the desires for continuous professional growth by participating in professional affairs, by maintaining a professional library, and by engaging in graduate study.²⁶

Table XVII, page 58 indicates the combinations of fields

²⁶E. C. Harrison, "Evaluation of Industrial Education Programs in Secondary Schools for Negroes in Louisiana," Journal of Negro Education, XIX 1950, p. 49.

of preparation by the 44 teachers answering the questionnaires. It should also be noted that five teachers from other fields have indicated that they are teaching industrial arts.

TABLE XVII

COMBINATION OF MAJOR FIELDS AND FREQUENCY
OF TEACHERS IN INDUSTRIAL EDUCATION

Major	<u>Fields</u>	Minor	Frequency of Teachers
Industrial Arts		Education	20
Industrial Arts		Science	4
Industrial Arts		Mathematics	3
Industrial Arts		History	2
Industrial Arts		Biology	1
Industrial Arts		Chemistry	1
Industrial Arts		Drawing	1
Industrial Arts		Social Science	1
Industrial Arts		Physical Education	1
Industrial Education		Physical Science	1
Auto Mechanics		Woodwork	1
Science		Industrial Arts	1
Social Science		Tailoring	1
Social Science		Education	1
B.S.A.		Science	1
Social Science		Biology	1
Education		Social Science	1
Teachers listing no qualifications			2
Total			44

College Attended. The forty-two teachers answering the questionnaires listed the following colleges as contributors to teacher-training preparation for baccalaureate and master degrees as shown in Table XVIII. Four teachers indicated holding certificates in Drivers Education, Industrial Arts, Aircraft Engines or Upholstery. Credit is also extended to the schools issuing the trade certificate.

TABLE XVIII

SCHOOLS AND FREQUENCY OF GRADUATES FOR B.S. AND
M.A. DEGREES, AND TRADE CERTIFICATES

Professional School	B.S.	M.A.	Certificate
Langston University	29	0	1
Kansas State Teachers College Pittsburg, Kansas	4	0	1
Oklahoma A. and M. College Stillwater, Oklahoma	0	0	0
Lincoln University Jefferson City, Missouri	2	0	0
Tuskegee Institute	3	0	1
C.S.C.E. Greeley, Colorado	0	3	1
Iowa State	0	1	0
Wilberforce	1	0	0
Hampton Institute	1	0	0
Bradley Tech.	1	2	0
Xavier	1	0	0
Total	42	6	4

There is indication that some industrial arts programs are being taught by teachers having no particular training in the field or there is no way of knowing by what means he may master the field. McKinney says:

A shop teacher or teacher-trainer should be a master of his particular skills and of the related knowledge of the craft which he teaches in exactly the same way that a good English teacher should be a master of grammar, rhetoric, and literature. A shop teacher will soon lose his distinctive quality and his reason for being in the shop if he does not have the skills that his students can admire and reverence. When ever there is evidence of a shop degenerating into an uncontrolled playroom, the main value of industrial arts has gone out the window.²⁷

To be compared with Table XIX, six teachers among the 44 teachers indicated masters degrees with major and minor fields as indicated.

TABLE XIX

TEACHERS WITH MASTER DEGREES IN
INDUSTRIAL EDUCATION

Major	<u>Fields</u>	Minor	Frequency of Teachers
Industrial Arts		Education	3
Industrial Arts		Physical Science	1
Industrial Education		Social Science	1
Educational Administration		Social Science	1

²⁷ James McKinney, "An Outsider Looks In," Industrial Arts and Vocational Education, XLI (February, 1952), 39.

Among the 42 teachers, three gave indication that they were now attending Oklahoma A. and M. College, Stillwater, Oklahoma in pursuit of their master degrees.

Teacher Experience. The total years of teaching service listed by the 42 industrial arts teachers ranges as indicated in Table XX.

TABLE XX

FREQUENCY OF TOTAL TEACHING EXPERIENCE OF THE
FORTY-TWO TEACHERS

Years Experience	Frequency of Teachers	Years Experience	Frequency of Teachers
1	1	13	1
2	6	15	4
3	3	17	3
4	4	18	1
5	1	19	2
6	3	20	2
7	1	21	2
8	3	23	1
10	2	27	1
11	1		

Table XX indicates the years of teaching experience of teachers in the industrial arts field up to 1952. It may be

compared to the years in the present system as indicated in Table XXI.

Years in Present System. The forty-two teachers indicated the years served in the position they now hold.

TABLE XXI

TEACHING EXPERIENCE IN THE PRESENT SYSTEM OF WORK

Years Experience	Frequency of Teachers	Years Experience	Frequency of Teachers
1	3	10	2
2	8	11	1
3	8	12	2
4	3	15	2
5	3	17	2
6	3	18	1
7	3	27	1

There is evidence to believe that the turnover of teachers is slow and the opportunities for new teachers coming into the service are few. In the comparison of Table XX with Table XXI for one year teaching experience there was, for the year 1951, only one new teacher to enter the field. Whereas two others having two years experience made changes from other jobs.

Relative Information

From the questionnaires was determined the load of the industrial arts teacher and the time devoted to activities as: teaching industrial arts subjects, teaching academic subjects, sponsoring of the extra curricular activities as part of the teaching service, teacher's salaries, the months of school service per year, and the comparison of major fields.

Time Devoted to Teaching Industrial Arts. This is taken from twenty-two teachers who stated they teach the industrial arts field without having to overlap into other academic fields. The same teachers reported that they spend an average of 6.6 hours per week in preparation for teaching. Two teachers of the above group indicated teaching the industrial arts on a one-half day schedule and the other half as vocational education teachers occupying the same shop. The industrial arts subjects listed in Table XVII, page 58, will indicate the variety of industrial arts courses taught by the teachers.

Time Devoted to Teaching Academic Subjects. Twenty-two teachers stated that they taught a combination of subjects combined with their service in industrial arts. The same teachers reported that they spent an average of 7.6 hours per week in preparation for teaching. However:

The time is past when teaching as an occupation was open to any person with some college training who found himself prepared to do nothing else, or who failed to get a position in the work for which he was specially trained. Now specialized preparation is expected and demanded for this service as distinctly as for any other professional work.²⁸

²⁸E. E. Ericson, Teaching the Industrial Arts, op. cit., p. 369.

TABLE XXII

TEACHING COMBINATION WITH INDUSTRIAL ARTS
SUBJECTS

Teaching Combination with Industrial Arts Subjects	Frequency of Teachers
Core for 7th grade	2
High School Mathematics and Physical Education	1
Core for the 6th Grade	2
Arithmetic, Spelling and Physical Education	1
Physical Education and History	1
History and Government	1
Mathematics and English	1
Core for 3rd and 4th Grades	2
Science and Health	1
Social Study for 8th Grade	2
Mathematics	3
History, Spelling and Drivers Education	1
Mathematics and Science	1
Health	1
Mathematics and Physical Education	1
Physical Education	1

Time Devoted to Extra Curricular Activities. Seventeen teachers listed extra curricular activities as a major factor in their teaching assignment. They indicated spending an

average of 13.3 hours per week in sponsoring them. Seventy-four per cent indicated that the activities were not conducted on school time.

TABLE XXIII

EXTRA CURRICULAR ACTIVITIES

School Activities	Frequency of Teachers
Coaching Athletics	6
Homeroom Teacher and Class Sponsor	3
Supervisor of Social Activities	3
Club Sponsor	5

Nine of the industrial arts teachers serve as supervisors of summer activities, and indicate that they receive extra pay for the service. Many teachers serve a variety of duties as Ericson indicates:

A teacher who considers that all his duties are to be performed in the shop or classroom is falling short of giving maximum service to the school or community in which he works. He who expects to render maximum service will seek opportunities to do more than to teach so many periods each day. In fact, practically all modern schools demand of their teachers some type of service outside of their regular teaching program. And while it may be true that the majority of instructors carry a heavy load in connection with their regular teaching, it is also true that anyone who expects to be thought of as a valuable member of the teaching staff must of necessity give thought to making contributions aside from the regular assignments. To be a member of the working force in an educational institution involved a greater challenge than to be simply a shop teacher.²⁹

²⁹Ibid., p. 326.

Table XXIV indicates the extent of extra curricular activities and includes summer maintenance, supervisory and voluntary works of the teachers over the summer.

TABLE XXIV

SUMMER ACTIVITY PROGRAM OF THE
INDUSTRIAL ARTS TEACHERS

Summer Activities	Frequency of Teachers
Twelve Months Teaching Service	21
Supervisors of City Playgrounds and Parks	6
Boy Scout Masters	3
Swimming Pool Supervisors	2
Placing Students on Jobs (Voluntary)	1
Total	33

Teachers Salaries and Months of Service. The most frequent range of salary for teachers serving nine months falls between \$2400 and \$3000. The salaries for the twelve months teachers fall mostly between \$3001 and \$3600.

TABLE XXV

TEACHERS SALARIES AND MONTHS SERVICE PER YEAR

Range of Salary	Instructors Service for:		Total Teachers
	9 Months	12 Months	
\$1800 to 2400	1	0	1
2400 to 3000	13	3	16
3001 to 3600	4	12	16
3601 to 4000	3	3	6
4001 and up	0	3	3

From a study of questionnaires the range of salaries does not compare favorably to the teaching experience nor to the teaching load. The listed years of experience range from three years to thirteen years and the experience in the same system range from three to eleven years. For the twelve months teachers the rate of monthly pay for the number of months employed is the same and the manner of pay per teacher is not determined by the time in the system.

Community Relationship

In this day and age industrial arts teachers must sell the idea of the course and its worth to pupils, parents and the administrators and to the community at large. To do a superior job, the teacher must undertake to create good public relationship within the community served. Through this

organized plan he must work with all comers. This is indicated by Dick when he states:

Industrial education should be sold to all concerned; to the pupil, the parent, the community, industry, the faculty, to business and to the school administrators. This can best be done through adequate programs and superior teaching. In addition there is topics such as--objectives, concepts, group dynamics, flexible offering, and good public relation. Change is necessary to progress.³⁰

It is with this idea that the writer wishes to determine the relationship of the industrial arts teacher to the community. It is found that only 12 per cent of the teachers are required by contract to remain in the community on week-ends.

Adult Educational Programs Offered: From question II-B asking the industrial arts teachers to list the adult classes conducted, such courses as: Veteran Training, Home Mechanics, Veteran Carpentry, Crafts and Evening School were cited for eight schools over the period 1945-1951.

³⁰Dick, op. cit., p. 364.

CHAPTER VI

SUMMARY AND RECOMMENDATIONS

Summary

This survey was made in an effort to determine the present status of industrial arts education in the negro high schools in the state of Oklahoma. Following is the summary of the findings:

1. This study was based on a return of sixty-nine, or 71.1 per cent of the ninety-seven administrators questionnaires and from thirty-nine, or 78.0 per cent of the fifty industrial arts teachers questionnaires sent out to the accredited negro high schools of the state.
2. The sixty-nine schools represent a factual picture for the ninety-seven schools in proportion to the percentage. The grade levels of the various schools are forty-one for the 8-4 plan, nineteen for the 6-3-3 plan, two for the seventh through twelfth grades, one for the tenth, eleventh and twelfth grades and one for the seventh, eighth and ninth grades. Five schools indicated no plan. The communities are represented by 57.2 per cent urban, 31.2 per cent rural and 11.6 per cent suburban. The schools are divided into ten divisions for comparative sizes. The pupil enrollment ranges from twenty-eight to 1511.

Forty-seven schools had twenty-eight to 249 pupils each. In this number is the seventh through twelfth grades. Seven schools have enrollments larger than 500 pupils. The teaching staffs range from three to fifty-seven teachers per school. The schools have employed adequate teachers. In the large units there is an average of twenty-six pupils per teacher. Bus transportation is used among the three types of communities. The first high school was organized in 1898 and began manual training in 1901.

3. The present strength of industrial arts is fourteen unit shops, twenty-one comprehensive unit shops and nine composite general shops. There has been a gradual establishment of the thirty-nine industrial arts programs over the past fifty years. The courses found are woodwork, mechanical drawing, upholstery, electricity, leather work, home mechanics, cement and concrete, plastic, shoe repair, ceramics, sheet metal, tailoring, art metal work, brick masonry, forging, and washing and lubrication.
4. The administrators advocate for the future the establishment of twenty-one composite general shops, three unit shops and six comprehensive unit shops. The administrators favor for industrial arts teachers improvements in teaching methods, further

school preparation, personal evaluation of himself and his profession, and his cooperation in the state program. The industrial arts teachers feel that they could better serve the organization if a special day was set aside, if all members took part in the topics of discussion and the programs. The industrial arts teachers also favor local and state exhibits, a state supervisor and the receiving of periodical bulletins. Forty-eight per cent of the industrial arts teachers favor meeting in a different town where accommodations are available. The principals and industrial arts teachers accept the idea that the negro separate school is of equal responsibility to its youth. They favor the addition of the junior college in meeting this responsibility.

5. In the thirty-nine industrial arts programs are found forty-four shop units. The shop buildings are located as follows: nineteen in part of main buildings, five in wing of buildings, fourteen in separate buildings, three in basement of buildings, two in classrooms of building, and one jointly with cafeteria and home-economics. There are eight vocational education programs offered. The floor areas are from 400 square feet to 2400 square feet in fifty-eight per cent of the light shops. The smaller shops have sufficient floor space per class. The larger schools have inadequate floor space for their smaller

classes. The machines found in most of the shops are circular saws, wood turning lathes, grinders, jointers, band saws, hand drills, sanders, drill presses, planers, shapers, cut off saws, paint spray guns and metal lathes.

6. Seventy-two per cent of the school shops have libraries with an average of 22 industrial arts publications and 11 periodicals per school. School participation in the industrial arts exhibits have increased from 1946 where six attended to thirteen in 1951. Twenty-two industrial arts instructors feel that the present industrial arts association is effectively serving the present schools; sixteen feel that it is not. The nine schools visited reveal that the school plants are being improved and in the program consideration is being given to the industrial arts.
7. There are forty-four industrial arts teachers considered in the questionnaires. Forty-two hold Bachelor degrees and six have Master degrees. Teaching experiences vary from one year to twenty-seven years. The industrial arts instructors have served from one year to twenty-seven years in their present system. Twenty-two teach industrial arts only. Twenty-two others teach the combination of industrial arts and academic subjects. Twenty-one teachers serve twelve months on the job. Twelve per cent are required to remain in

the community on week-ends. The most frequent range of salaries for nine months service is \$2400 to \$3000. The most frequent range for twelve months salaries is \$3001 to \$3600. The industrial arts teachers conduct the following adult classes: Veterans training, home mechanics, general shop and upholstery.

Recommendations

In view of the findings of this survey it is recommended that:

1. The need for upgrading the industrial arts teachers in service is urgent.
2. Workshops provide opportunities for teachers to work on problems growing out of their working situations.
3. District conferences cooperatively sponsored by the teacher education program be established throughout the local districts.
4. There be a consultative service to furnish expert advice to school systems, individuals, teachers, and study groups as they try to improve their programs.
5. A college study group exemplifying the principles and policies formulated by modern industrial education be formed and propose plans for use and improvement in the state.

6. State association meetings cooperatively sponsored by the industrial arts teachers and educators of first hand experiences be promoted.
7. Annual state exhibits exemplifying the degree of work done by youth throughout the state be held.
8. Junior colleges be established in central localities equipped to take care of the needs of terminal and preparatory youth.
9. Research and study by college, association, teacher group and industrial arts experts be immediately begun to determine what should be the nature of the industrial education program for negroes in the state of Oklahoma.
10. The industrial arts teachers have opportunity to participate in the training programs set up for the purpose of keeping informed on the latest developments in the industrial educational field of a technical and professional character.
11. Teacher-training institutions provide two and three weeks summer courses in professional and technical fields.
12. Local school boards and state principals cooperate in making plans for teachers of industrial education to attend these meetings for professional improvement.
13. Industrial arts teachers take advantage of special summer sessions and summer conferences.

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BIBLIOGRAPHY

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APPENDIX A

APPENDIX A

SCHOOL LAWS OF OKLAHOMA 1951

Oliver Hodge, State Superintendent of Public Instruction

Section 78. Separation of Races: The public schools of the State of Oklahoma shall be organized and maintained upon a complete plan of separation between the white and colored races with impartial facilities for both races. (70-45-1).

Section 79. Colored Races--Definition--Public School--Definition: The term "colored," as used in the preceding section, shall be construed to mean all persons of African descent who possess any quantum of negro blood, and the term "white" shall include all other persons. The term "public school" within the meaning of this article shall include all schools proved for and maintained, in whole or in part, at public expense. (70-45-2).

Section 80. Separate School--Definition: The county separate schools in each district is hereby declared to be that school in said school district of the race having the fewest number of children in said district. Provided the county superintendent of schools of each county shall have authority to designate what school or schools in each school district shall be the separate school and which class or children either white or colored shall have the privilege of attending such separate school or schools in said school district. Members of the district school board shall be of the same race as the children who are entitled to attend the school of the district, not the separate school. (70-A5-3).

Section 81. Teachers--Violating Act: Any teacher in this state who shall willfully and knowingly allow any child of the colored race to attend the school maintained for the white race or allow any white child to attend the school maintained for the colored race shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not less than ten dollars (\$10.00) nor more than fifty dollars (\$50.00), and his certificate shall be cancelled and he shall not have another issued to him for a term of one (1) year. (70-5-4).

Section 82. Maintaining Colleges or Schools Teaching Both White and Colored Races: It shall be unlawful for any person, corporation or association of persons to maintain or operate any college, and school, or institution of this State where persons of both white and colored races are received as pupils for instruction, and any person or corporation who shall operate or maintain any such college, school or institution in violation hereof shall be fined not less than one hundred (\$100.00) nor more than five hundred dollars (\$500.00), and each day such school, college or institution shall be open and maintained shall be deemed a separate offense.

Section 83. Instructors--Teaching Where White and Colored Pupils are Enrolled: Any instructor who shall teach in any school, college or institution where members of the white and colored race are received and enrolled as pupils for instruction shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in any sum not less than ten dollars (\$10.00) nor more than fifty dollars (\$50.00) for each offense, and each day any instructor shall continue to teach in any such college, school or institution shall be considered a separate offense. (70-5-6).

Section 85. It shall be the duty of the county excise board in such counties to levy a tax on all taxable property in their respective counties sufficient to pay the cost of superintending, supervising, administering, supporting and maintaining such separate schools, and purchasing sites and erecting school buildings for such separate schools as shown by such budget so prepared by the board of education. Said tax shall be published, levied, and collected in the same manner as other taxes for county purposes, and when collected shall be paid over to the treasurer of the board of education in such district to be expended upon the order of such board of education for the purpose for which the same was levied and collected. (70-5-8).

Section 91. Teachers--County Superintendent--Contracts: It shall hereafter be the duty of all county superintendents of schools to contract with and employ all teachers for the county separate schools, except those in independent school districts, now maintained or hereafter to be established in their respective counties: Provided, the board of education in all independent districts. Teachers so employed shall possess all the qualifications which are now required by law, and the county superintendent of schools shall have the power to prescribe rules and regulations for the government of all county separate schools in his county except independent districts. (70-5-14).

Section 93. Warrants--Salary of Teachers: Warrants for the salary of teachers employed in separate schools, excepting those in independent districts, and all orders or warrants for the expense of such schools shall be issued upon the treasurer by the county clerk and countersigned by the county superintendent.

APPENDIX B

QUESTIONNAIRE FOR ADMINISTRATORS
ON
THE STATUS OF INDUSTRIAL ARTS IN THE NEGRO SCHOOLS
OF THE STATE OF OKLAHOMA

School under consideration: _____

City: _____ District No: _____ Oklahoma

I. Administrative set up of your school:

A. Please check the grade level of your school:

- ☐ Elementary, Junior and Senior High School
☐ Junior High School (Grades 7-8-9)
☐ Senior High School (Grades 10-11-12) or (8-9-10-11) _____
 or (8-9-10-11-12) _____, or (7-8-9-10-11-12) _____.
☐ Junior College (Two years)
☐ Any other system not listed _____

B. Enrollment of your school:

- ☐ Elementary School
☐ Junior High School
☐ Senior High School
☐ Junior College
☐ Others; Name: _____

C. Number of faculty members in your school:

- ☐ Women
☐ Men

D. Is your community predominantly? (Check)

- ☐ Urban
☐ Suburban
☐ Rural

E. Is bus transportation used to transport your pupils from other areas? ____ Yes, ____ No.

F. What year did your school become a high school? _____

II. Industrial educational program now offered within your school:

A. Does your school now offer an industrial arts program?

- ____ Yes, ____ No.

B. Please check the type of your industrial program:

- ☐ Industrial Arts
☐ Adult Education
☐ Vocational (Trade and Industry)
☐ Veteran Program (Give title) _____

C. (Approximately) What year was industrial arts first offered in your school? _____

D. What changes, if any, have been made in your industrial arts program during the last six years?

(1) Courses added: _____

(2) Courses dropped: _____

E. Have instructors with 15 or more semester hours of college work always been available to you? ____ Yes, ____ No.

III. The future outlook for industrial education:

A. Do you have plans for offering industrial arts as part of your curriculum in the near future? ____ Yes, ____ No.

B. What would be your choice of a newly organized shop in your school?

* ____ Unit Shop

** ____ Comprehensive Unit Shop

*** ____ General Composite Shop

C. Would you favor the addition of a two year junior college to your high school? ____ Yes, ____ No.

D. What per cent of your graduating students do you believe would attend such a junior college for industrial arts training? ____ Per cent; or, for liberal arts only ____ per cent.

E. Would you as an administrator favor all high schools having industrial arts courses in their curriculum, coming to an agreement of fields that might prove suitable for contestants in the annual state industrial arts exhibits? ____ Yes, ____ No.

* The unit shop is confined to a single activity: i.e., hand woodwork, or upholstery, or wood turning, etc. (Ordinarily offers a very high degree of specialization).

** The comprehensive unit shop is confined to a single field of industry offering several units of a specific field. Thus, a general wood shop might consist of hand wood work, machine wood work, upholstery and finishing.

*** The general composite shop offers a variety of activities cutting across several shop fields, and is usually confined to one room and taught by one teacher. A broad general exploratory shop commonly consists of wood work, metal work, drafting, electricity and crafts.

III. (Continued)

F. How, in your opinion, can teacher training institutions in the state of Oklahoma, improve the training given prospective industrial arts teachers? _____

IV. Personal:

A. Do you desire a summary of the findings of this study? _____ Yes,
_____ No.

B. Name _____ Official title _____

C. Date _____

D. Return this questionnaire to:

Henry W. McCary
206 West 1st. Street
Pittsburg, Kansas

APPENDIX C

QUESTIONNAIRE FOR INDUSTRIAL ARTS TEACHER
ON
THE STATUS OF INDUSTRIAL ARTS IN THE NEGRO SCHOOLS
OF THE STATE OF OKLAHOMA

School under consideration: _____

City _____ District No: _____, Oklahoma

I. Please state your College preparation:

A. (Degree)	(College)	(Major)	(Minor)	(Year)
Bachelor				
(M.S) Master (M.A)				
Doctor				
Trade Certificate				

B. Total teaching experience: _____ years.

C. Teaching experience in present school system: _____ years.

D. Your range of salary: _____ (\$1800.00 to \$2400), _____ (\$2401 to \$3000), _____ (\$3001 to 3600), _____ (\$3601 to \$4000), or above _____ (\$4000), for _____ Months.

II. Community relationship:

A. Are you required to remain in the community on week-ends? ____ Yes, ____ No.

B. Have you conducted any adult education classes in your present position? ____ Yes, ____ No. If "yes" what year/s were such classes conducted: _____

C. Approximately, what per cent of the students finished the course? _____ per cent.

III. School duties:

A. Do you make your own course outline in all courses? ____ Yes, ____ No.

B. Do you serve under an industrial arts supervisor? ____ Yes, ____ No.

C. Number of hours per-week expended in making preparation to teach? _____ Hours.

D. Is maintenance work a part of your school job? ____ Yes, ____ No.

III. (Continued)

E. How many hours per-week do you give to extra-curricular activities which you sponsor? _____ Hours.

F. Are the activities conducted on school time? _____ Yes, _____ No.

G. Are you a member of the Industrial Arts Association of the state of Oklahoma? _____ Yes, _____ No.

H. What summer activities, if any, do you supervise for students?

I. Are you paid extra for such supervision? _____ Yes, _____ No.

IV. School participation:

A. In which industrial arts activity does your school participate? (Check)

- _____ State Industrial Arts Association
- _____ Local Industrial Arts Association (District)
- _____ State Industrial Arts Exhibit at Langston University.
- _____ Local Industrial Arts Exhibit in the community
- _____ Any national association (Name) _____

B. Have any of your pupils won awards from participation in any of the above activities? _____ Yes, _____ No. Describe: _____

C. What year did your school attend the annual state exhibit? _____

D. Do you feel that the state industrial arts organization is effectively serving the Negro schools having industrial arts in their curriculum? _____ Yes, _____ No.

E. Do you feel that the meeting of the state industrial arts organization should be held at Langston University each year? _____ Yes, _____ No.

F. Would you favor meeting in a different town each year (wherever suitable accommodations are available) _____ Yes, _____ No.

G. What changes, would you suggest, could be made in the present Industrial Arts Association which might enable you to participate in its activities more fully? _____

V. Daily program of your school:

A. What subjects are you teaching in addition to industrial arts? _____
 _____, _____, _____, _____, _____

B. Please check the units you are teaching in industrial arts:

_____ Mechanical drawing	_____ Woodworking
_____ Home mechanics	_____ Auto mechanics
_____ Cement and Concrete	_____ Ceramics
_____ Art metal work	_____ Electric work
_____ Printing	_____ Sheet metal work
_____ Tailoring	_____ Radio
_____ Plastic	_____ Leather work
_____ Shoe repair	_____ Upholstery
_____ Brick masonry	_____ Forging
_____ Others: _____	_____

C. Number of students in each grade taking industrial arts:

_____ Grade 7	_____ Grade 10
_____ Grade 8	_____ Grade 11
_____ Grade 9	_____ Grade 12

D. How many students persue industrial arts as their major field of interest in high school? _____

E. How are the individual shop projects financed?

_____ By individual student
 _____ By Board of Education
 _____ By other means (Explain) _____

VI. Building, equipment and library:

A. (1) Location of shop:

_____ Part of main building
 _____ Wing of building
 _____ Seperate building
 _____ Basement of building
 _____ Other

(2) What is the area of your shop?

_____ length, _____ width, _____ Height.

(3) Of what material is the floor constructed? _____

B. Do you have a shop library? (This also refers to a section of the school library reserved for publications order by your department)

_____ Yes, _____ No.

(1) Number of industrial arts publications in your shop library?

_____ Books, and _____ Periodicals.

(2) How much money are you allowed in your annual budget for shop library books, magazines, etc? \$ _____

(3) Are limitations placed on the budget which you submit for industrial arts? _____ Yes, _____ No.

C. Do you have sufficient hand tools to supply your pupils in the work area? _____ Yes, _____ No.

D. Please check the machine equipment which you have in your shop:

_____ Circular saw	_____ Drill press
_____ Band Saw	_____ Sander
_____ Wood lathe	_____ Planer
_____ Metal lathe	_____ Paint spray gun
_____ Jointer	_____ Cut off saw
_____ Hand drill (electric)	_____ Jig saw
_____	_____

VII. Miscellaneous

A. Do you favor industrial arts being taught in the elementary school? _____ Yes, _____ No.

B. Do you believe there should be a combined state organization between the Trades and Industrial Program and the Industrial Arts? _____ Yes, _____ No.

C. What courses not offered at Langston University at present do you feel would most greatly enrich your training as an industrial arts teacher? _____

D. Would you favor adding a two year junior college to your school with commensurate extension of your industrial arts program? _____ Yes, _____ No.

E. Do you ever plan on leaving the industrial arts teaching field? _____ Yes, _____ No. If so, what occupation will you enter? _____

VIII. Personal:

A. Name: (If you desire to sign) _____ Age _____

B. Return this questionnaire to:

Henry W. McCary
206 West 1st. Street
Pittsburg, Kansas

206 West 1st Street
Pittsburg, Kansas
February 14, 1952

Dear Principal:

It is with the utmost sincerity that I appeal to you as a leading Negro citizen of the state of Oklahoma to help me in this project.

The nation is aware of the needs of its youth and is trying to meet them; we too must become cognizant of our local youths' future and what part industrial education will play in equipping them to meet the changes in citizenship that they will encounter in the future.

In summing up the opinions of many higher educators, who have analyzed the trend of terminal education, I would say that the man who has not been helped by education to a high degree of efficiency will lag and fall behind in the new era. This is a direct challenge to the system of separate education for our people. So it seems to me that it is no time for leaders to delay. Therefore, I sincerely hope you will answer the enclosed questionnaires and return them to me in the stamped envelope.

Our youth must not be denied an industrial arts education of first rate quality which has an acknowledged status in the nation, and which will make for them a better future.

Very truly yours,

Henry W. McCary

HWM/jk

Encl.

206 West First Street,
Pittsburg, Kansas,
January 4, 1952.

Principal

School

Oklahoma

Dear Sir:

I am undertaking a quantitative analysis of industrial arts programs in the Negro schools of the State of Oklahoma. My study is to be entitled The Status of Industrial Arts in the Negro Schools of the State of Oklahoma, and is being done in the graduate school of the Kansas State Teachers College at Pittsburg, Kansas.

As a native of the State of Oklahoma and an industrial arts teacher, I wish to explore the possibilities of extending and strengthening the state-wide industrial arts program in the Negro schools.

Inasmuch as your co-operation will be invaluable to me, I should like to know if I may send you and your industrial arts teacher a brief questionnaire to be filled out and returned to me. In the event your school has no industrial arts program, I should still want you to answer several of the items included in the questionnaire.

If you are willing to aid me in the proposed survey, please fill out and mail the enclosed post card at your earliest convenience. Upon its receipt I shall mail you the two questionnaires.

Mr. Ira D. Hall, Assistant Director of Secondary Education, has given me permission to accompany him on some of his visits throughout the state and I shall be looking forward to meeting you.

Very truly yours,

Henry W. McCary

HWMcC:cmd
Enc.