A STUDY TO DETERMINE THE TYPE OF INDUSTRIAL ARTS
CURRICULUM DESIRED AND NEEDED IN THE
THOMAS A. EDISON SCHOOL OF
DALLAS, TEXAS

APPROVED:

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A STUDY TO DETERMINE THE TYPE OF INDUSTRIAL ARTS
CURRICULUM DESIRED AND NEEDED IN THE
THOMAS A. EDISON SCHOOL OF
DALLAS, TEXAS

THESIS

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North Texas State College in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

197071
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Dallas, Texas
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CHAPTER I

INTRODUCTION

The Thomas A. Edison School of Dallas, Texas, is located in the section designated as West Dallas. Having the largest student population in the Dallas Independent School District, it serves the children of approximately 2,500 White and Latin-American families residing in the district. The student population has tripled in the last seven years, climbing from 475 in 1943-1944 to 1,750 in 1950-1951. The average daily attendance has been approximately 80 per cent of the total enrollment.\(^1\)

Much of the student population is composed of children of Latin-American extraction. The economic status of the people as a whole in the area is at a "subsistence level,"\(^2\) and it is probably the lowest in Dallas.\(^3\) As a result of the low economic status of the people, the standards of living are low in comparison with those in other sections. Sanitation facilities are poor in the Thomas A. Edison

\(^1\)Records of School Census Office, Dallas Independent School District, Dallas, Texas.


\(^3\)Records of Visiting Teacher Department, Dallas Independent School District, Dallas, Texas.
School District. At the present time the school district is in the legal process of being annexed to the City of Dallas. When annexation is realized, the poor living conditions will probably improve. Included in the Appendix (see Appendix I) is a map showing the boundaries of the Thomas A. Edison Elementary School District at the present time.

Until a new course called "home arts" was added, this school had the same type of curriculum as was used in the other Dallas elementary schools. The curriculum included areas of learning in the social studies such as history, geography, civics, language arts, arithmetic, music, and supervised play. The course which was recently added consists of industrial arts for boys (involving the use of woodworking tools and some metal working tools) and home economics for girls.

The Problem

This is a study to determine the type of industrial arts curriculum that is desired and needed in the Thomas A. Edison School of Dallas, Texas, as evidenced by the data gathered by means of questionnaires submitted to the pupils, parents, and teachers.4

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4See sample questionnaires in Appendixes, pp. 46-50.
Definitions of Terms

"Latin-American" is the term used to denote children or adults of Mexican descent.

"Hobby" describes the favorite sport, craft, or exercise indulged in by a student in his leisure time.

"Leisure time" refers to the time a person is neither working at a hobby nor doing homework and is free from any employment.

"Industrial arts" means a phase of education which may include one or more of the following subjects: leathercraft, camp craft, woodwork, plastics, metal work, mechanical drawing, auto mechanics, photography, printing, and book binding.

The term "students," as used in this study, refers to pupils in the sixth, seventh, and eighth grades.

Purpose of Study

The study seeks to answer the following questions:

1. In what industrial arts subjects are the students interested?

2. What industrial arts courses do the teachers want in the Thomas A. Edison School curriculum?

3. What industrial arts courses do the parents want offered in the Thomas A. Edison School curriculum?

4. What benefits do the parents and teachers believe will come from an industrial arts program in the Thomas A. Edison School?
Limitations

The study is limited to a treatment of the needs and interests of the sixth, seventh, and eighth grade boys of the Thomas A. Edison Elementary School. The study includes data which present the opinions and interests of the students, their parents, the teachers, the school principal, and other interested citizens of the community and of the Dallas Independent School District.

Sources of Data

Data for the study were secured from questionnaires which were submitted to the students, teachers, and parents. Additional information concerning industrial arts and its relation to general education was obtained from numerous books.

Related Studies

Research revealed that there have been few studies made regarding the initiation of industrial arts into school curricula of Texas. A study was made in 1949 by Alvin C. Bishop which included a survey to determine the need of the community of Highland Park for the industrial arts. Interests of both the students and parents were considered.

Bishop's study showed that 86 per cent of the parents questioned indicated that they believed they could make some practical repairs had they had industrial arts courses in school. The survey also revealed that the senior high
school boys were interested in industrial arts courses, and that 95 per cent of the parents included in the study wanted their boys taught some type of craftwork or hobby.  

In 1941, Elmore Hayes made a study which was "An Evaluation of the Graduates of Technical High School of Dallas, Texas." In Hayes' study questionnaires were sent to the graduates of the 1938 class and to the succeeding graduating classes of that school each year for a period of seven years. Information was sought regarding the type of work the graduate was doing and the attitude of the graduate toward his work. Consideration was given to the length of employment of the graduate in his current position and what help he thought his secondary vocational training had been to him on the job and in life activities. The results of the study indicated that in a great many instances former students of Technical High School had been employed in industry without any training other than their high school training and that they had been reasonably successful in their work. Hayes concluded, "The school's program had met, fairly well, the aims for which it was established."  

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In 1948, Geraldine Voss made a study of the needs of youth to determine whether the curricula of the present schools are organized to meet these needs. One of the main conclusions of the study was that the needs of youth can be grouped into four areas of living. These are: (1) living in the home; (2) leisure or recreational living; (3) making a living; and (4) living in the community.\footnote{Geraldine Voss, "Fitting Needs of Youth to the Curriculum" (Unpublished Master's thesis, Department of Education, North Texas State College, 1948), p. 99.}

Organization of the Study

Chapter I is an introduction to the study and includes the problem, definitions of terms, purpose of study, limitations, sources of data, and related studies.

Chapter II will present lists of the objectives of industrial arts and the objectives of general education. The chapter will treat the relationship of the objectives of industrial arts to the "Ten Imperative Needs of Youth."\footnote{National Association of Secondary-School Principals, Planning for American Youth, p. 10.}

Chapter III will set forth the wants and needs of the students of the Thomas A. Edison School regarding the industrial arts curriculum. What type of industrial arts courses the students think should be included in the Thomas A. Edison School's curriculum will also be shown in this chapter.
Chapter IV will present the interests and opinions of parents and teachers and of the principal of the Thomas A. Edison School District. There will also be presented additional information obtained from other people interested in the children of the Thomas A. Edison School.

Chapter V will include a summary and conclusions. Recommendations will be presented if the evidence produced by the data indicates a need for them.
CHAPTER II

INDUSTRIAL ARTS AND ITS RELATIONSHIP
TO GENERAL EDUCATION

Definitions of Industrial Arts

Industrial arts as it is known today has gone through a series of evolutionary changes since it was introduced into the United States in the late 1800's. It was first known as "mechanic arts," then as "manual arts," and finally, in about 1912, as "industrial arts." Industrial arts was originally placed in schools because of the theory that it trained the "hand and eye."1

One widely accepted definition of industrial arts is the one given by Gordon O. Wilber. He stated that industrial arts included:

Those phases of general education which deal with industry--its organizations, materials, occupations, processes and products--and with the problems resulting from the industrial and technological nature of society.2

According to Ashley, Frederick Bonser of Columbia University was the first man to use the term "industrial arts"

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2Ibid., p. 2.
as a phase of general education. He defined industrial arts as follows:

Industrial arts as a school subject is the distilled experience of man in his resolution of natural materials to his need for creative comfort to the end that he may richly live his spiritual life.

Later Bonser changed the definition as follows:

Industrial arts is a study of the changes made by man in the forms of materials to increase their values, and of the problems of life related to these changes.

Roy G. Fales defined industrial arts as "the broad study of the materials, organization, tools, processes, products, job, and human problems of industry."

Theodore Struck, who is considered an authority in the industrial arts field, stated that:

Industrial arts is fundamentally a part of the general, all-around development of the individual, as distinguished from vocational education; it helps to make persons intelligent consumers by giving them a limited contact with, and some information about, tools, processes, materials,

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6 Roy G. Fales, "Industrial Arts, Tentative Syllabus in Comprehensive General Shop" (mimeographed), University of the State of New York, 1940, p. 3.
design, and life problems, but it does not aim directly to impart vocational proficiency.  

Most of the writers who have defined the term have written similar definitions. In this study the term "industrial arts" refers to those subjects or courses which include hand woodwork, machine woodwork, metal work, leathercraft, electricity, plastics, mechanical drawing, auto mechanics, photography, printing and binding, and camp craft.

Definitions of General Education

What is general education? According to a report of the Harvard Committee, which met in 1945, the term "general education" was defined as "that part of a student's whole education which looks first of all to his life as a responsible human being and citizen." The report further stated that "general education is distinguished from special education, not by subject matter, but in terms of methods and outlook, no matter what the field." 

B. Lamar Johnson Stated:

In the past, general education has at times been used to refer to the common body of experience represented by the three Rs in the elementary school; at other times, general education has described a required body of study in any

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given high school. More recently, however, the term has been used to characterize a movement based upon the recognition that colleges are obligated to provide instruction planned in terms of the life needs of students and that these life needs include more than academic scholarship and preparation for the professions. . . .

What is general education: General education is general in at least three respects:

First, general education is intended for everyone—not merely for the select few who become scholars or who enter the professions. No longer will preparation for college entrance dominate the curriculum of the high school which is committed to the objectives of general education. The program of such a school will be planned to meet the varied needs of all young people of the community which it serves.

Second, general education is concerned with the total personality—not merely with the intellect, but with emotions, habits, attitudes. General education regards the student as a single unified being rather than a compartment of knowledge, one of feelings and another of beliefs. This means that specific general education programs must be defined in terms of what the learner is, or does, rather than in terms of course content or a body of knowledge.

Third, general education is concerned primarily with the individual's nonspecialized activities. It consists of preparation for efficient living, no matter what one's vocation. This does not at all imply a lack of concern for vocational training. Since two of the responsibilities of every person are a contribution to society and earning of his own living, general education should include the choosing of a vocation in relation to both one's own aptitudes and interests and to the needs of society.10

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Wilber, in summing up the characteristics of general education, stated:

... stripped of verbiage and special applications, the various statements may be summed up as implying three basic purposes: (1) to transmit a way of life, (2) to improve and reconstruct that way of life, and (3) to meet the needs of the individual.\textsuperscript{11}

The principles of general education resolve themselves into the theory that they should meet the needs of youth and should be for all youth. B. Lamar Johnson, Theodore Struck, Gordon O. Wilber, and Fredrick Bonser hold to the opinion that general education should also be concerned with educating the child for an occupation as well as educating him to be a good citizen. The opinions of the aforementioned authors are that general education should always prepare the child so that he can better meet real life situations successfully.

Objectives of General Education

All authors and committees do not hold the same opinion as to what should be the objectives of education. Attention was centered upon some of the more noted objectives of general education.

As early as 1861, Herbert Spencer revealed his classification of human activities as a basis for grouping educational objectives. The five major areas of human conduc-

\textsuperscript{11}Wilber, \textit{op. cit.}, p. 3.
were classified by Spencer as follows:

1. Self-preservation
2. Securing the necessities of life
3. Rearing and discipline of offspring
4. Maintenance of proper social and political relations
5. Activities which make the leisure part of life, devoted to the gratification of the tastes and feelings.\textsuperscript{12}

A report of a committee of educational leaders who met in 1890 outlined the aims and principles for education which were the basis for the formation of educational programs until 1911. Some of these principles were later used to formulate what is known as the "Seven Cardinal Principles of Education." They are as follows:

1. Worthy home membership
2. Command of fundamental processes
3. Health
4. Vocation
5. Citizenship
6. Worthy use of leisure time
7. Ethical character.\textsuperscript{13}

In 1933, the North Central Association of Colleges and Secondary Schools developed the following objectives of education:

1. To maintain health and physical fitness
2. Exploration of vocations and vocational efficiency

\textsuperscript{12}Herbert Spencer, \textit{Education}, p. 4.

3. Successful social relationships; civic, domestic, community
4. Right use of leisure

Harl Douglas formulated the following list of objectives of education for the American Youth Commission in 1937:

1. Citizenship in local, national, world-wide civic, recreational, economic, and religious groups
2. Home membership--domestic compatibility, rearing of children, purchasing and consumption of goods and services
3. Enjoyment of life--recreational and other leisure occupations, appreciations and enjoyment of environment in general
4. Physical and mental health--sound physical and mental conditions and healthy personality
5. Vocational effectiveness--ability to contribute to the economic assets of society and to market contributions
6. Continued learning, interests and abilities to read, to think, and to study most effectively.

In 1937, in a report of the Joint Committee on Curriculum, working in connection with the National Education Association, the purposes or objectives of education as used in the core curriculum were stated in the form of areas of living. These areas included:

1. Living in the home includes rearing children, the maintenance and repair of the home, the management of the home, and family relations.
2. Leisure includes physical exercise, outdoor activities, handicrafts, the arts and literature, and the dance and the theater.
3. Citizenship includes the relation of the individual to government, to civic enterprises, and to world affairs, sanitation, social welfare, social security, and the life.


15Douglass, op. cit., p. 31.
4. Organized social life includes the church, social organizations, cultural groups, fraternal organizations, study clubs, and professional groups.

5. Consumption includes the selection, purchases, and care of food, clothing, shelter, fuel, and household furnishings, household accounting, insurance, and certain social phases of consumption, such as housing.

6. Production includes earning a living, choosing vocations, the organizations of business, banking, agriculture, organized labor, distribution of income, and corporate business.

7. Communication includes the motion picture, the radio, the press, the postal system, and the telephone.

8. Transportation includes all of the means in which passengers and goods are transported from place to place.16

The "Ten Imperative Needs of Youth"

In 1944, the National Association of Secondary-School Principals formulated and published the "Ten Imperative Needs of Youth." These needs of youth appear to be an acceptable basis for the formulation of educational programs at the present time because they were formulated by the National Association of Secondary-School Principals, and are widely accepted by people employed in the educational field. The "Ten Imperative Needs of Youth" are:

1. All youth need to develop salable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life. To this end, most youth need supervised work experience as well as education in the skills and knowledge of their occupations.

2. All youth need to develop and maintain good health and physical fitness.

16 Henry Harap, et. al., The Changing Curriculum, p. 97.
3. All youth need to understand the rights and duties of the citizen of a democratic society, and to be diligent and competent in the performance of their obligations as members of the community and citizens of the state and nation.
4. All youth need to understand the significance of the family for the individual and society and the conditions conducive to successful family life.
5. All youth need to know how to purchase and use goods and services intelligently, understanding both the values received by the consumer and the economic consequences of their acts.
6. All youth need to understand the methods of science, the influence of science on human life, and the main scientific facts concerning the nature of the world and of men.
7. All youth need opportunities to develop their capacities to appreciate beauty in literature, art, music, and nature.
8. All youth need to be able to use their leisure time well and to budget it wisely, balancing activities that yield satisfactions to the individual with those that are socially useful.
9. All youth need to develop respect for other persons, to grow in their insight into ethical values and principles, and to be able to live and work cooperatively with others.
10. All youth need to grow in their ability to think rationally, to express their thoughts clearly, and to read and to listen with understanding.17

The following objectives of general education have been developed by the Joint Committee on Curriculum to comply with the requirements set forth in the areas of living:

1. Physical and mental health
2. Use of leisure time
3. Vocational training
4. Social relationships
5. Consumer knowledge
6. Civic responsibilities.18


18 Harap, op. cit., p. 98.
These six requirements as listed above are the same as the "Ten Imperative Needs of Youth" as formulated by the National Association of Secondary-School Principals.

Objectives of Industrial Arts

All industrial arts teaching situations are not the same, consequently the teacher must develop his own objectives to fit his need. Likewise, no standard rule can be made concerning the objectives of industrial arts. In any industrial arts program there are certain fundamental and basic objectives.

In 1937, the United States Commissioner of Education appointed a committee of eleven men who were highly respected in the field of industrial arts and industrial education for the purpose of interpreting industrial arts in the American schools. Four general objectives of industrial arts were developed by the committee. These objectives were stated in the form of values gained by a child from an industrial arts program. The report of the committee stated that through an industrial arts program the pupil benefits as follows:

1. Gains knowledge of the changes made in materials to meet the needs of society, of tools and industrial processes used to effect these changes, of the constant adaptation of materials, tools, and processes to meet changing needs and conditions, and of industrial workers and working conditions.

2. Grows in appreciation of the value of information regarding occupations as a background
for a modern life of tools and industrial processes, of the artistry of the designer and the skill of the artisan, and of the dignity of productive labor.

3. **Increases in ability** to plan constructive projects, to select and use sources of industrial and related information, to handle tools and materials, to express with material things his individual interests, to use effectively his recreational time, to work and share as a member of the group, and to evaluate work and its products.

4. **Develops attitudes** of concern for safety practices, of consideration for workers in all fields, of regard for cooperation among the members of a group, and of respect for property.19

The report of the committee also indicated that changes should be made by our schools in order to keep up with the constant changes of our complex society. Further suggestions made in the report were as follows:

The school of today needs to interpret the ever-increasing number of significant changes which press for consideration on every hand. The school shop, for example, can no longer justify its program if youngsters only make traditional objects out of wood and then take them home as they did a generation ago. Functions of the modern program require a much more significant contribution. Such programs now provide for:

1. Activities in as many industries as school shops and laboratories will permit
2. Use of typical and important industrial tools
3. Experience in production methods
4. Experience in handicrafts
5. Acquaintance with the organization and operation of industrial and commercial enterprises
6. Study of safe and hygienic ways of doing all types of work
7. Practice in identifying the more important methods employed by industry
8. Selection and use of some of the common products of industry

9. Utilization of salvaged materials or products for project work
10. Interpretation of the sources, principles, and applications of power, such as steam, water, internal combustion, and electricity
11. Study of the origins and effects of significant inventions
12. Study of materials from source to completed object
13. Study of vocational opportunities, living conditions, remuneration of workers, controversial questions pertaining to capital, labor, and technology.

All of these provide not only objective bases for developing industrial arts programs but also bases for criteria for judging their functions.20

Hippke, Richardson, Starrak, Newkirk, and Wilber are some of the writers who have formulated their own objectives of industrial arts. In this study Wilber's objectives of industrial arts as a phase of general education are considered. Wilber formulated eight objectives which are as follows:

1. To explore industry and American industrial civilization in terms of its organization, raw material, processes, and operations, products and occupations
2. To develop recreational and avocational activities in the area of construction work
3. To increase an appreciation for good craftsmanship and design, both in the products of modern industry and in the artifacts from the material cultures of the past
4. To increase consumers' knowledge to the point where students can select, buy, use, and maintain the products of industry intelligently
5. To provide information about, and insofar as possible, experience in, the basic processes of many industries, in order that students may be more competent to choose a future vocation
6. To encourage creative expressions in terms of industrial materials

20Ibid., pp. 9-10.
7. To develop desirable social relationships, such as cooperation, tolerance, leadership and followship, and tact.
8. To develop a certain amount of skill in a number of basic industrial processes. ²¹

The objectives formulated by Wilber are similar to the objectives set forth by other authors in the field of industrial arts. For the purpose of this study Wilber's stated objectives seem to be the best.

The Relationship of Objectives of Industrial Arts to the "Ten Imperative Needs of Youth"

A relationship of the objectives of industrial arts to the "Ten Imperative Needs of Youth" is presented. Each need is condensed and brief. The objective or objectives of industrial arts that appear to be designed to contain learning situations which help the pupil gain some knowledge or skill relative to his particular need or needs are also given.

The first imperative need of youth, as listed in Planning for American Youth and published by the National Association of Secondary-School Principals, implies that there is a need to develop some skills in order to become an intelligent and productive participant in economic life. One of the objectives of industrial arts as stated by Wilber is "to develop a certain amount of skill in a number of basic industrial processes." ²² Another objective of industrial

arts stresses the development of appreciation of good workmanship and design, which objective is also related to the first imperative need of youth which has been identified.

To develop and maintain good health and physical fitness has also been stated as an imperative need of youth. Industrial arts proposes to provide recreational and avocational activities, health, and safety education which are contributory to meeting this particular need of youth.

Another need of youth emphasizes the importance of consumer education. One objective of industrial arts, as has been stated, aims "to increase the consumer's knowledge to the point where students can select, buy, use, and maintain the products of industry intelligently."

An understanding of the methods of science and their influence on human life has been identified as a need of youth. Relative to this need, an industrial arts program can help provide the pupil with information about the basic processes of many industries.

Opportunities to develop the capacities of youth to appreciate beauty was another stated imperative need of youth. To increase an appreciation for good craftsmanship and design is an objective of industrial arts which is designed to aid the pupil in meeting this imperative need.

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Ibid., pp. 42-43.
The eighth imperative need of youth emphasizes the importance of the proper use of leisure time. Industrial arts strives to develop recreational and avocational activities which will help the student to make worthy use of his leisure time. The eighth imperative need also states that social relationships are important. One objective of industrial arts strives to aid the student in developing desirable social relationships, such as cooperation, tolerance, leadership and followship, and tact. This objective of industrial arts could be compared to the ninth imperative need of youth which states that "youth needs to develop respect for others as well as to learn to work and live with others."\textsuperscript{24}

The last or tenth imperative need of youth indicates that youth must learn to read with understanding and develop his ability to think for himself. The industrial arts program emphasizes the development of creative expression by the students in terms of industrial materials.

There seems to be a close relationship between the "Ten Imperative Needs of Youth," as developed by the National Association of Secondary-School Principals, and the objectives of industrial arts. There is also a similarity between the objectives of industrial arts and the objectives of general education as shown in this chapter.

\textsuperscript{24}National Association of Secondary-School Principles, \textit{op. cit.}, p. 10.
CHAPTER III

THE INTERESTS AND NEEDS OF THE STUDENTS OF THE THOMAS A. EDISON SCHOOL FOR AN INDUSTRIAL ARTS PROGRAM IN THE SCHOOL'S CURRICULUM

Data concerning the interest in and need for industrial arts are presented in Chapter III. A questionnaire was designed and used to obtain the needed information from the students who attend the Thomas A. Edison School. Some of the questions included in the questionnaire are as follows:

1. Do you work part time?
2. Do you have a hobby?
3. What is your leisure time activity?
4. Do you think industrial arts should be included in the curriculum of the Thomas A. Edison School?
5. What industrial arts subjects do you think you would like to take in school?
6. What industrial arts subjects do you think should be taught in Thomas A. Edison?
7. Do you think an industrial arts program or shop work would be of interest to the students?
8. Do you believe you would like school better if there were an industrial arts program?
9. Do you like to do repair work around the home?
10. What type of repair work do you like to do?
11. Do you have any tools with which to work around the home?
12. Do you like to watch carpenters and mechanics work?
13. Do you plan to go to high school, college, or trade school?
14. What kind of job do you want when you finish your schooling or training?

A study of the data indicates that the 108 students who filled in the questionnaires definitely would like an industrial arts program in the school. The number of students indicating their preference for courses in industrial arts in the curriculum is presented in Table 1.

The questionnaires were submitted to the 108 students before they had had much experience with any type of industrial arts courses. Questions asked the students on the questionnaire were thoroughly explained and each student was given an opportunity to ask about any term or question which he did not understand.

The data presented in Table 1 indicate that a large percentage of students of the Thomas A. Edison School want an industrial arts program; that a large number believe that industrial arts courses in the school's curriculum would cause them to like school better; and that such a program is needed to provide activities for the students which would
### TABLE 1

DATA CONCERNING WHETHER OR NOT 108 STUDENTS OF THOMAS A. EDISON SCHOOL WANT AN INDUSTRIAL ARTS PROGRAM

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<th>Questions asked by students</th>
<th>Responses of Students by Number</th>
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<td></td>
<td>Yes</td>
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<td>Do you think industrial arts should be included in the curriculum of the Thomas A. Edison School?</td>
<td>104</td>
</tr>
<tr>
<td>Do you think you would like industrial arts or shop subjects?</td>
<td>104</td>
</tr>
<tr>
<td>Do you think an industrial arts program or shop work would be of interest to the students?</td>
<td>105</td>
</tr>
<tr>
<td>Do you believe you would like school better if there was an industrial arts program?</td>
<td>99</td>
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enable them to make more worthy use of their leisure time.

The results of the questionnaires submitted to the students not only showed a desire for an industrial arts program but also indicated that they had little to occupy their leisure time. Some questions asked the students were:

1. Do you work part-time?
2. Do you have a hobby?
3. What do you do in your leisure time?

Thirty-seven students replied that they had a part-time job; seventy-one answered "no." The second question revealed that
fifty-two students did have a hobby; fifty-six did not have a hobby.

Only twenty-eight of the students indicated that they had any leisure time activity. Eighty students replied that they had no leisure time activity, but the data revealed that these students want an industrial arts program which will include courses which will help to develop leisure time interests and activities.

The data also showed that the students want an industrial arts program so that they can learn to do practical repair jobs. The students indicated that they like to do repair jobs on the house. Some of the students stated that they often worked with their fathers doing repair jobs. A study of the data revealed that only five out of 108 did not like to do any type of repair work. Data in Table 2 show that three students indicated a preference for work not

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPES OF REPAIR WORK FOR WHICH 108 STUDENTS OF THOMAS A. EDISON SCHOOL INDICATED A LIKING</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Repair Work Preferred</th>
<th>Number Replying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>House repair</td>
<td>103</td>
</tr>
<tr>
<td>Furniture repair</td>
<td>58</td>
</tr>
<tr>
<td>Bicycle repair</td>
<td>89</td>
</tr>
<tr>
<td>Car repair</td>
<td>58</td>
</tr>
<tr>
<td>Electrical appliance repair</td>
<td>28</td>
</tr>
<tr>
<td>Other repair jobs</td>
<td>3</td>
</tr>
</tbody>
</table>
stated in the table. A number of the boys have bicycles, which is probably the reason the large number, eighty-nine, indicated a preference for bicycle repair work.

The students were asked to set forth their preferences for industrial arts subjects which they believed would be useful in helping them to make worthy use of their leisure time. Pupils questioned were also asked to list which industrial arts subjects they believed they would prefer to take. Data concerning their choices are presented in Table 3.

**TABLE 3**

**PHASES OF INDUSTRIAL ARTS WHICH 108 STUDENTS OF THOMAS A. EDISON INDICATED THEY WOULD LIKE TO TAKE IN SCHOOL AND THOUGHT SHOULD BE INCLUDED IN AN INDUSTRIAL ARTS PROGRAM**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Number of Students Who Want to Take the Course</th>
<th>Number of Students Who Thought the Course Should be Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine woodworking</td>
<td>66</td>
<td>58</td>
</tr>
<tr>
<td>Hand woodworking</td>
<td>60</td>
<td>52</td>
</tr>
<tr>
<td>Leathercrafts</td>
<td>56</td>
<td>57</td>
</tr>
<tr>
<td>Wood carving</td>
<td>49</td>
<td>36</td>
</tr>
<tr>
<td>Auto mechanics</td>
<td>47</td>
<td>36</td>
</tr>
<tr>
<td>Metal work</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>Camp crafts</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>Art metal</td>
<td>31</td>
<td>17</td>
</tr>
<tr>
<td>Electricity</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>Plastics</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>Photography</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Mechanical drawing</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>Ceramics</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Printing and bookbinding</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Forging</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>
A number of industrial arts subjects were listed on the questionnaire and the students were asked to name the courses they thought should be taught at the Thomas A. Edison School. Each subject was briefly described to the students. The courses the students indicated they wanted and those which they thought should be taught were not always the same. This shows that perhaps they were thinking of the needs of the group when suggesting the courses to be taught. Data in Table 3 illustrates this point.

Data in Table 3 indicate that the courses most students believed should be taught are the ones which are usually taught in general industrial arts programs. It is to be noted that the woodworking courses are more in demand, which might be explained by the fact that the school's "home arts" includes mostly woodwork.

The data obtained from the questionnaires indicate that eighty-two students had tools at home to work with, and twenty-six did not. Both of these groups should be benefited by instruction in the use and care of tools. An industrial arts program proposes to help the student to develop an appreciation of tools and craftsmanship.

Data presented in this chapter revealed that 104 students out of the 108 questioned were interested in an industrial arts program. The data also showed that more than forty students would like to take the following industrial arts courses: auto mechanics, wood carving, leathercrafts,
hand woodwork, and machine woodwork. The types of repair work that the students liked to do was revealed by the data in Table 2, which indicated that 103 students liked to do house repair jobs. Eighty-nine liked to make repairs on bicycles. Fifty-eight students indicated that they preferred to do furniture repair. The data indicated that fifty-two students had hobbies, that thirty-seven students had part-time jobs, and that twenty-eight students had some leisure time activity.
CHAPTER IV

INTERESTS AND OPINIONS OF PARENTS, TEACHERS, PRINCIPAL, AND OTHERS OF THE THOMAS A. EDISON SCHOOL DISTRICT CONCERNING INDUSTRIAL ARTS

This chapter sets forth the data which indicate the interests of parents of children in the sixth, seventh, and eighth grades of the Thomas A. Edison School regarding industrial arts. The interests and opinions of the teachers and principal regarding an industrial arts program in the Thomas A. Edison School are also presented. Results are set forth in table and discussion form.

All of the 130 parents who live in the Thomas A. Edison School District who were questioned indicated that an industrial arts program should be included in the curriculum of the school. The data indicate their choices regarding the type of industrial arts program they want.

Only 70 of the 130 parents questioned indicated that they had any hand tools with which to work. All of the parents who had hand tools stated that their children were allowed to work with the tools.

Interest in their children learning subjects which an industrial arts program offers was further shown by the
number of parents who thought that various industrial arts subjects should be taught. Industrial arts subjects which the parents indicated they thought should be included in the program at the Thomas A. Edison School are presented in Table 4.

**TABLE 4**

**PHASES OF INDUSTRIAL ARTS WHICH 130 PARENTS OF THE THOMAS A. EDISON SCHOOL DISTRICT THOUGHT SHOULD BE INCLUDED IN AN INDUSTRIAL ARTS PROGRAM**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number Who Thought it Should be Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand woodworking</td>
<td>104</td>
</tr>
<tr>
<td>Machine woodworking</td>
<td>78</td>
</tr>
<tr>
<td>Wood carving</td>
<td>41</td>
</tr>
<tr>
<td>Metal work</td>
<td>66</td>
</tr>
<tr>
<td>Plastics</td>
<td>59</td>
</tr>
<tr>
<td>Camp crafts</td>
<td>39</td>
</tr>
<tr>
<td>Leathercrafts</td>
<td>55</td>
</tr>
<tr>
<td>Auto mechanics</td>
<td>67</td>
</tr>
<tr>
<td>Ceramics</td>
<td>5</td>
</tr>
<tr>
<td>Forging</td>
<td>5</td>
</tr>
<tr>
<td>Electricity</td>
<td>66</td>
</tr>
<tr>
<td>Mechanical drawing</td>
<td>54</td>
</tr>
<tr>
<td>Art metal</td>
<td>20</td>
</tr>
<tr>
<td>Photography</td>
<td>35</td>
</tr>
<tr>
<td>Printing and bookbinding</td>
<td>14</td>
</tr>
</tbody>
</table>

It was interesting to note from the data presented in Table 4 that nearly all of the parents want a hand woodworking course to be taught. The parents probably desire this type of industrial arts course because they are more familiar with the "home arts" course that is being taught at the present time. The data show that only two subjects, ceramics
and forging, were in little demand. Hand woodworking, machine woodworking, metal work, plastics, leathercrafts, electricity, mechanical drawing, and auto mechanics were requested by fifty or more parents.

The data in Table 5 indicate hand woodworking, machine woodworking, and auto mechanics to be the first choice of a large number of parents. Forging, ceramics, art metal, printing and binding, and mechanical drawing seem to be the least in demand. Those subjects, which the data indicate the parents do not prefer, are probably those subjects about which the parents know very little.

The data indicate fifty-one parents made hand woodworking their first choice, while only six parents made it second choice, and eight chose it as a third choice. Unlike hand woodworking, the auto mechanics course was chosen as a first choice nineteen times, as a second choice twenty-two times, and as a third choice thirteen times.

The woodworking courses are the ones which most parents want their children to take. The reason for this is because the parents are probably more familiar with carpentry than with other skills. As has been stated before, more than half of the parents have some type of hand tools which they allow their children to use. Of the seventy parents who have hand tools, forty have carpentry tools, twenty-nine have mechanical tools, one has plumbing tools, while three have both carpentry and mechanical tools.
TABLE 5

PHASES OF INDUSTRIAL ARTS WHICH 130 PARENTS OF
THE THOMAS A. EDISON SCHOOL DISTRICT WANTED
THEIR CHILDREN TO TAKE

<table>
<thead>
<tr>
<th>Subject</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand woodworking</td>
<td>51</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Machine woodworking</td>
<td>20</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Wood carving</td>
<td>6</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Metal work</td>
<td>7</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Camp crafts</td>
<td>4</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Plastics</td>
<td>7</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Leathercrafts</td>
<td>4</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Auto mechanics</td>
<td>19</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Ceramics</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Forging</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Electricity</td>
<td>5</td>
<td>11</td>
<td>31</td>
</tr>
<tr>
<td>Mechanical drawing</td>
<td>1</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Art metal</td>
<td>0</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Photography</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Printing and bookbinding</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

The data presented in Table 6 indicate that the 130 parents questioned believed an industrial arts program is needed in the Thomas A. Edison School. The data also show that the parents believe an industrial arts program can
<table>
<thead>
<tr>
<th>Questions Asked the Parents</th>
<th>Number Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think an industrial arts program would help the Thomas A. Edison School?</td>
<td>127 97.7 3 2.3</td>
</tr>
<tr>
<td>Do you believe an industrial arts program would help the community?</td>
<td>127 97.7 3 2.3</td>
</tr>
<tr>
<td>Do you believe an industrial arts program would help solve the truancy problem?</td>
<td>122 93.8 8 6.2</td>
</tr>
<tr>
<td>Do you believe an industrial arts program would help students choose a vocation?</td>
<td>126 96.9 4 3.1</td>
</tr>
<tr>
<td>Do you believe an industrial arts program would help students make worthy use of their leisure time?</td>
<td>126 96.9 4 3.1</td>
</tr>
<tr>
<td>Do you believe an industrial arts program would help students appreciate good workmanship?</td>
<td>128 98.4 2 1.6</td>
</tr>
<tr>
<td>Do you believe an industrial arts program would help students learn to work with one another?</td>
<td>129 99.2 1 0.8</td>
</tr>
</tbody>
</table>

contribute certain benefits to the Thomas A. Edison School. The data reveal that 97.7 per cent of the parents thought an industrial arts program would help the school; 97.7 per cent
of the parents indicated they believed an industrial arts program would benefit the community; 126, or 96.9 per cent, of the parents believed an industrial arts program would help the students in choosing a vocation and also help students to make worthy use of their leisure time. Table 6 shows what benefits they believed would be derived from an industrial arts program.

Questions on the questionnaires submitted to the parents were similar to those questions submitted to the teachers and principal. The response of the parents and teachers to questions such as those in Table 6 indicated that they strongly believed many advantages would come from an industrial arts program in the curriculum of the Thomas A. Edison School.

Data obtained from questions submitted to the teachers of the Thomas A. Edison School reveal that the teachers have an average of eleven years of teaching experience. This indicates that they have had an opportunity to become familiar with some of the problems of students.

All of the thirty-eight teachers questioned indicated that an industrial arts program was needed in the school and all of them wanted to see such a program included in the curriculum of the Thomas A. Edison School. The data in Table 7 indicate that the faculty believed a broad range of subjects should be included in an industrial arts program for the Thomas A. Edison School.
TABLE 7
PHASES OF INDUSTRIAL ARTS WHICH THIRTY-EIGHT TEACHERS OF THOMAS A. EDISON SCHOOL BELIEVED SHOULD BE INCLUDED IN THE INDUSTRIAL ARTS PROGRAM OF THE SCHOOL'S CURRICULUM

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number Wanting It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand woodwork</td>
<td>31</td>
</tr>
<tr>
<td>Machine woodwork</td>
<td>20</td>
</tr>
<tr>
<td>Wood carving</td>
<td>20</td>
</tr>
<tr>
<td>Machine shop</td>
<td>15</td>
</tr>
<tr>
<td>Metal work</td>
<td>17</td>
</tr>
<tr>
<td>Art metal</td>
<td>10</td>
</tr>
<tr>
<td>Camp crafts</td>
<td>18</td>
</tr>
<tr>
<td>Plastics</td>
<td>21</td>
</tr>
<tr>
<td>Leathercraft</td>
<td>20</td>
</tr>
<tr>
<td>Auto mechanics</td>
<td>24</td>
</tr>
<tr>
<td>Ceramics</td>
<td>18</td>
</tr>
<tr>
<td>Forging</td>
<td>4</td>
</tr>
<tr>
<td>Electricity</td>
<td>14</td>
</tr>
<tr>
<td>Mechanical drawing</td>
<td>17</td>
</tr>
<tr>
<td>Photography</td>
<td>11</td>
</tr>
</tbody>
</table>

Nineteen of the teachers made comments on the questionnaires. One teacher made the comment that only subjects for which adequate equipment and supplies could be secured should be taught.
The principal of the Thomas A. Edison School, who has long been interested in the needs and problems of both the school and the community, was highly in favor of an industrial arts program. He stated he believed an industrial arts program would be of interest to the students, and in turn, would cause the students to be more eager to attend school. This could help to improve the attendance record and help solve the truancy problem, the principal said.\footnote{Statement by Joe L. Harrell, personal interview.}

He also expressed the opinion that if the students were given a chance to express themselves in industrial arts courses, they would probably use a lot of their excess energy in a constructive manner, thus creating less of a discipline problem in classes. He emphasized the fact that the program would help the participants choose a vocation.

The teachers were not so enthusiastic as the parents in their ideas about what benefits would be derived from an industrial arts program. Table 8 indicates which problems they thought the program would help to solve.

Like the teachers questioned, the school secretary, who has also had a number of years experience at the Thomas A. Edison School, wanted an industrial arts program. She indicated that she believed hand woodworking, camp crafts, plastics, leathercrafts, ceramics, and mechanical drawing
TABLE 8

PROBLEMS WHICH THE TEACHERS OF THOMAS A. EDISON BELIEVE AN INDUSTRIAL ARTS PROGRAM WOULD HELP SOLVE

<table>
<thead>
<tr>
<th>Question</th>
<th>Number Answering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think an industrial arts program or shop work would be of interest to students?</td>
<td>36 94.8 2 5.2</td>
</tr>
<tr>
<td>Do you think an industrial arts program or shop work would help solve the truancy problem?</td>
<td>30 78.9 8 21.1</td>
</tr>
<tr>
<td>Do you think an industrial arts program or shop work would help the school's discipline problem?</td>
<td>25 65.8 13 34.2</td>
</tr>
<tr>
<td>Do you think an industrial arts program or shop work would help students choose a vocation?</td>
<td>36 94.8 2 5.2</td>
</tr>
<tr>
<td>Do you think an industrial arts program or shop work would help students make worthy use of their leisure time?</td>
<td>37 97.4 1 2.6</td>
</tr>
<tr>
<td>Do you think an industrial arts program or shop work would help students appreciate good workmanship?</td>
<td>35 92.1 3 7.9</td>
</tr>
</tbody>
</table>

should be taught. She thought the program would help solve all the problems mentioned in the questionnaire.2

The consensus of opinion among the members of the Thomas A. Edison School staff and the parents of the district was that an industrial arts program would benefit the school,

2Statement by Minnye W. Scott, personal interview.
the students, and the community. Data presented indicate that the parents in the Thomas A. Edison School District want industrial arts included in the school's curriculum. They indicated that they believed it would benefit the students, the school, and the community. The data reveal that the type of industrial arts program that teachers and the principal want in the Thomas A. Edison School should include phases of industrial arts such as hand woodwork, machine woodwork, auto mechanics, electricity, wood carving, leathercrafts, and plastics.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The Thomas A. Edison Elementary School District is located in the western section of Dallas, Texas. The student population of the school during the 1950-1951 school year was approximately 1,750, and the average daily attendance was approximately 80 per cent of the enrollment. The present curriculum of this school is similar to that of the other elementary schools in Dallas.

In the study data were gathered to determine the type of industrial arts program that is wanted and needed in the curriculum of the Thomas A. Edison School of Dallas, Texas. Questionnaires were submitted to the students, parents, teachers, and others, in order to obtain the data.

The purpose of the study was to seek answers to such questions as:

1. What industrial arts subjects are the students interested in?

2. What industrial arts subjects do the teachers want in the school's curriculum?
3. What industrial arts subjects do the parents want in the school's program and what subjects do they want their children to take?

4. What benefits do the teachers, parents, and others believe will be derived from an industrial arts program in the school's curriculum?

In Chapter II definitions of industrial arts were presented. There are numerous definitions of industrial arts, but one widely accepted definition appears to be the one given by Gordon O. Wilber. He stated that industrial arts includes:

Those phases of general education which deal with industry—its organizations, materials, occupations, processes and products—and with the problems resulting from the industrial and technological nature of society.¹

The objectives of general education are given and may be stated as needs of youth. These needs are:

1. Youth need to develop salable skills.
2. Youth need to develop and maintain good health.
3. Youth need to understand the rights and duties of the citizen.
4. Youth need to know the significance of the family.
5. Youth need to know how to be good consumers.
6. Youth need to understand the methods of science.
7. Youth need opportunities to appreciate beauty in art, literature, and nature.
8. Youth need to have a leisure time activity.

9. Youth need to develop respect for other people.
10. Youth need to grow in their ability to think rationally.²

The "Ten Imperative Needs of Youth" listed above in condensed form are often used as a basis for the formulation of educational programs. These needs or objectives are similar to the objectives of industrial arts. Their relationships are shown in the second chapter.

Chapter III treats the data regarding the interests and opinions of 108 boys who attend Thomas A. Edison School concerning industrial arts. Some of the questions asked the students were as follows:

Do you have a hobby?

What is your leisure time activity?

Do you think industrial arts should be included in the curriculum of the Thomas A. Edison School?

Do you think you would like industrial arts or shop subjects?

What industrial arts subjects do you think you would like to take in school?

What industrial arts subjects do you think should be taught in Thomas A. Edison School?

Do you think an industrial arts program or shop work would be of interest to the students?

Do you like to do repair work around the house?
Do you have any tools with which to work around the house?

Do you like to watch carpenters and mechanics work?

Chapter IV presents data that show the interests and opinions of the parents, teachers, and principal regarding the industrial arts. The parents were asked if they thought an industrial arts program should be included in the curriculum of the Edison School. All of the 130 parents of the Edison School District who were questioned indicated they believed an industrial arts program should be included in the school's curriculum. All thirty-eight teachers questioned indicated they were in favor of an industrial arts program. The teachers thought it should be considered a part of the general education program of the Edison School.

Both parents and teachers indicated that the industrial arts program they wanted at the Thomas A. Edison School should include hand woodwork, machine woodwork, metal work, plastics, leathercrafts, electricity, mechanical drawing, and auto mechanics. Parents were given an opportunity to name the type of industrial arts courses they preferred their children to take. Data showing the benefits which the parents and teachers believed would result from an industrial arts program in the Thomas A. Edison School curriculum are presented in Chapter IV.
The principal indicated that he believed a program of industrial arts would be beneficial to the students, the school, and the community. He also indicated that he was enthusiastic for the industrial arts to be included in the curriculum of the Thomas A. Edison School.

Conclusions

The following conclusions are advanced, based upon the data secured and interpreted in the study:

1. The students are interested in an industrial arts program.

2. The students believe an industrial arts program should be included in the curriculum of their school, and they want it included.

3. The parents of the students believe an industrial arts program should be included in the Thomas A. Edison School's curriculum.

4. The teachers and the principal believe an industrial arts program is needed in the curriculum of the school.

5. Both the teachers of the school and the parents of the students want an industrial arts program to be included in the curriculum of the Thomas A. Edison School.

Recommendations

The following recommendations are made:

1. That an industrial arts program be included in the curriculum of the Thomas A. Edison School;
2. That the industrial arts program, when started in the school, should include courses in hand woodwork, machine woodwork, and crafts. The crafts should be general and include some leathercrafts, camp crafts, and plastics.
Fig. 1.—Map of the Thomas A. Edison School District.
APPENDIX II

QUESTIONNAIRE SUBMITTED TO THE STUDENTS

I. Name________________________ Age________ Grade______________ Boy____ Girl____

2. Address____________________ Father's occupation______________

3. Do you work part time? Yes____ No____ If so, where?________
   Kind of work______________________________________________

4. Do you have a hobby? Yes____ No____ Leisure time activity
   __________________________________________________________

5. Do you think industrial arts should be included in the
   curriculum of the Thomas A. Edison school? Yes____ No____
   (Industrial arts is implied to mean those subjects which
   are taught in the shop, such as crafts, woodwork, metal-
   work, mechanical drawing.)

6. Do you think you would like industrial arts or shop
   subjects? Yes____ No____

7. Check the following industrial arts subjects you think
   you would like to take in school. Circle those you
   think should be and need to be taught in Thomas A.
   Edison school.

   Hand woodworking___ Machine woodworking___ Wood carving___
   Metal work___ Camp crafts___ Plastics___ Leathercrafts___
   Auto mechanics___ Ceramics___ Forging___ Electricity___
   Mechanical drawing___ Photography___ Printing and bookbind-
   ing___ Art metal___

8. Do you think an industrial arts program or shop work
   would be of interest to the students? Yes____ No____

9. Do you believe you would like school better if there
   were an industrial arts program? Yes____ No____

10. Do you like to do repair work around the house? Yes____
    No____ On furniture?____ On bicycles?____ On cars?____
    Electrical appliances?____ Others?_______________________

11. Do you have any tools to work with around the house?
    Yes____ No____
12. Do you plan your work before beginning a job, for example, making a sketch? Yes____ No____

13. Do you like to watch carpenters and mechanics work? Yes____ No____

14. Do you plan to go to high school? Yes____ No____
College? Yes____ No____ Trade school? Yes____ No____

15. What kind of job do you want when you finish your schooling or training? 1.__________________________
2.______________________ 3.______________________
APPENDIX III

QUESTIONNAIRE SUBMITTED TO TEACHERS

1. Name________________________ Address________________________

2. Subject taught________________________ Years experience________________________

3. Do you think industrial arts should be considered a part of general education in the Thomas A. Edison school? (Industrial arts is implied to mean a course of study that concerns itself with the teaching of crafts, woodwork, mechanical drawing, metalwork, etc.) Yes____ No____

4. Do you like to do shop work? Yes____ No____

5. Do you think industrial arts should be included in the curriculum of Thomas A. Edison school? Yes____ No____

6. If your answer to No. 5 is "yes," which of the following subjects do you think should be included in the curriculum of Thomas A. Edison school?

Hand woodworking____ Machine woodworking____ Wood carving____
Machine shop____ Metal work____ Art Metal____ Camp crafts____
Plastics____ Leathercrafts____ Auto mechanics____ Ceramics____
Forging____ Electricity____ Mechanical drawing____ Photog-

7. Do you have a hobby? Yes____ No____ What is it?____________

8. Do you think an industrial arts program or shop work would be of interest to students? Yes____ No____ Help solve the truancy problems? Yes____ No____ The school's discipline problems? Yes____ No____ Help students choose a vocation? Yes____ No____ Help students make worthy use of their leisure time? Yes____ No____ Help students appreciate good workmanship? Yes____ No____

9. Remarks:___

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APPENDIX IV

QUESTIONNAIRE SUBMITTED TO THE PARENTS

Mr.
1. Name: Mrs.________________________ Address_____________________________

2. Occupation_________ Last grade completed in school____

3. How many children do you have?_____ In school?_______

4. Do you think the Thomas A. Edison school should have shop work or industrial arts included in its program? (Industrial arts is implied to mean those subjects which are taught in the shop, such as crafts, woodwork, metalwork, mechanical drawing.) Yes____ No____

5. What subjects do you believe should be included in the industrial arts program of Thomas A. Edison school? (Check your answers on the following list as to the subjects you think should be included in the program)

Hand woodworking____ Machine woodworking____ Wood carving____
Metal work____ Camp crafts____ Plastics____ Leathercrafts____
Auto mechanics____ Ceramics____ Forging____ Electricity____
Mechanical drawing____ Art metal____ Photography____ Printing and bookbinding____

6. Which of the above subjects would you like for your child to take? List in order of preference: 1.________________________

7. Do you think an industrial arts program would help the Thomas A. Edison school? Yes____ No____ The community?

8. Do you think an industrial arts program would help the Truancy problems? Yes____ No____ Help students choose a vocation? Yes____ No____ Help students learn to work with one another? Yes____ No____

9. Do you have any hand tools with which to work? Yes____ No____

10. What type of tools (general)?____________________________

11. Do you have a hobby? Yes____ No____

12. Do you let your boys use your hand tools? Yes____ No____

13. Do you encourage them to use these tools? Yes____ No____

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