## OKLAHOMA SECONDARY SCHOOL ADMINISTRATORS'

ATTITUDES TOWARD INDUSTRIAL ARTS

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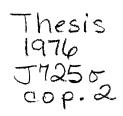
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#### PREFACE

This study is concerned with the attitudes secondary school administrators have toward industrial arts. The purpose is to provide a descriptive analysis of the attitudes and beliefs of a selected group of administrators in Oklahoma secondary schools toward industrial arts education as part of their educational program.

The author wishes to express his appreciation to his major advisor, Dr. Harold Polk, for his guidance and support. Appreciation is also expressed to other committee members, Dr. John Tate, and Dr. Richard Tinnell, for their assistance and helpful contributions leading to this manuscript. A special thanks to Dr. James Key for his guidance and encouragement during the early stages of research.

Also, indebtedness is expressed to the one hundred fourteen administrators who took the time and effort to complete the opinionnaires and send them back.

Finally, special gratitude is expressed to my wife, Margaret, for her patience and understanding during all stages of graduate study and to our children, Michelle, Monica, Danny and Mary, for the sacrifices they have encountered during this study.

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#### CHAPTER I

#### INTRODUCTION

#### Need for the Study

The industrial arts programs of the future are being formed today. The planning, testing and implementation of new forms of industrial arts programs are continuously evolving throughout the educational system. It is becoming increasingly important that those individuals responsible for these changes be continuously informed of new and changing needs of a vibrant industrial arts program. This concept of keeping others informed of the industrial arts programs is one method of guarding against irresponsibility of others to destroy the alternatives in the future for a positive change in education as Shane (1) expressed in his article.

Keeping administrators informed of activities in the area of industrial arts alone is not going to insure that irresponsible decisions will not be made. There must be a constant two-way flow of ideas between the teacher and the administrator in order to minimize the possibility of irresponsible planning. Ruley (2) suggested in his book that the industrial arts educator have a relationship with the school administrator that will allow suggestions to be made from either side.

It is obvious that there is a constant need for mutual participation on the part of the teacher and the part of the administrator in order to develop an effective industrial arts program for the future. Too often the teacher does not know what the administrator's feelings or beliefs are

toward industrial arts programs. A recent study conducted by Heichberger and Young (3) revealed that twenty-four percent of the teachers polled did not know how much time school administrators spent in actual supervision. How administrators feel or what they believe constitutes their attitudes and there is a definite need to know more about those attitudes.

#### Statement of the Problem

Because of the influence administrators have in developing industrial arts programs and the definite lack of information in regard to their attitudes toward industrial arts, this study was considered appropriate. The problem of this study was obtained through the reading and the interest of the author. In addition, the limited number of studies in this area indicated the need for further investigation. It was further felt that such a study may be of value for teachers wanting to know more of the general feelings and beliefs of administrators. This information will also be useful for developing better communications between administrators and teachers.

#### Purpose

This study was intended to be a descriptive analysis of the attitudes and beliefs of a selected group of administrators in Oklahoma secondary schools toward industrial arts education as part of their school educational program.

#### Questions

The purpose of this study was to adequately answer the following questions:

- 1. Who is responsible for determining the goals and subject matter of an industrial arts program?
- 2. Who should be held accountable for evaluation of industrial arts curriculum?
- 3. What subject matter areas of industrial arts should be taught at the secondary level?
- 4. Should industrial arts be a required or an elective subject in the school curriculum?
- 5. At what grade levels should industrial arts be offered?
- 6. Whay type of student should be allowed to take industrial arts classes?
- 7. Does state supervision agree with local supervision on the purpose of industrial arts?
- 8. How much concern is given industrial arts programs compared to other sucjects?

#### Assumptions

The design of this study is based upon the following assumptions:

- That those individuals selected for the study respond deliberately and sincerely to the opinionnaire.
- 2. That those individuals in the sample are representative of school administrators as a whole in Oklahoma.
- That the instrument used for this study be adequate in determining administrator attitudes toward industrial arts.

#### Limitations of the Study

For practical reasons, the following limitations were imposed:

- The opinionnaire showed the attitudes in terms of responses to a selected number of attitude statements.
- The individuals selected for the study represented only a part of the total population of administrators.
- The amount of time and area the study covered did not allow for personal interviews.

#### Definition of Terms

<u>Attitude</u> refers to a readiness to react toward or against some situation, person or thing in a particular manner.

<u>School administrators</u> are local superintendents and secondary school principals or the people who work with curriculum and the industrial arts programs.

Industrial arts curriculum refers to any subject taught in the secondary school which is called industrial arts. There is an effort to differentiate between vocational and industrial educations.

Junior high schools are schools which have at least seventh and eighth grades. Ninth grades are usually included in this area, although in some schools these fall under the definition of high schools.

<u>High schools</u> are schools which have at least tenth, eleventh and twelfth grades. Ninth grades are sometimes included in this area, although usually these grades fall under the definition of junior high schools.

<u>Secondary schools</u> are schools which include all or any grades from seventh through twelfth.

#### CHAPTER II

#### **REVIEW OF LITERATURE**

#### Introduction

A search for studies directly related to administrators' attitudes toward industrial arts education programs revealed none had been written at the masters level and only a few at the doctoral level. It was necessary to broaden the search to include all studies indirectly related to administrators, attitudes and instructional programs. This produced a sufficient amount of literature upon which to base the following study. In order to control the direction of the review of literature, the search was broken down into four key areas. The areas of major emphasis are industrial education, school administrators, administrators' attitudes and the questionnaire.

#### Industrial Education

This area of the review was concerned with establishing the role of industrial arts within the public school system. It was decided that the best method to review literature on this subject was to divide it into three general categories: the general purpose of industrial arts, curriculum and the teacher.

An explanation of the general purpose of industrial arts education was best presented by Freirer (4, pp. 20, 29, 39) and is stated as follows:

For the elementary grades, industrial arts consists primarily of activities which involve constructive endeavor with material objects. These constructive activities, coupled with experiences or related nature, lend themselves to acquainting young people with the industrial world in which they live.

Industrial arts for junior high school boys and girls has as its primary function the provision of industrial experiences of an explorator or orientational nature. It differs from the elementary industrial program in its movement away from an emphasis upon enrichment units toward well-organized separate classes held in shops or laboratories and taught by competent instructors.

There is general agreement that the most appropriate function of industrial arts at the high school level is to provide opportunities for increasing competency and experience in industrial arts skills gained in the junior high school. It is of special value to those students with aspirations and abilities in the industrial-technical and scientific.

A more recent explanation of the purpose of industrial arts education suggests the program be more flexible allowing a variety of entry levels, as Tangman (5) explained in his writings.

The general purpose of industrial education has not encountered any need for change; however, the curriculum of industrial education has been in a constant state of change and reorientation as Cochram (6) pointed out in his study. This constant state of change is almost always opposed. McMahon (7) believed that the most important element affecting curriculum change is the attitudes of those people working with it. These curriculum attitudes have been expressed by the people in a recent Gallup poll (8) as being in the top ten problems facing public schools today.

One of the main responsibilities of a teacher is to select subject matter to be learned and to perform a series of operations whose purpose is to transmit this subject matter to students. As Ruley (2) expressed in his book, the teacher must work with the administrator to develop a

#### sound educational program.

#### School Administrators

The role of the school administrator was the area of concern for this part of the review of literature. The explanation Stanavage (9) stated for the administrator task was as follows:

His task now will be to work with teachers on the nuclear concerns of the entire school, to address himself to the quality of the education being experienced by each student. His strengths will lie wholly in the area of instruction and curriculum; his efforts will be devoted exclusively to improving the teachinglearning confrontation (pp. 20-21).

Ruley (2) stated that one of the responsibilities of the administrator is that of development of a program with the help of department heads. That process demands a constant upgrading of the administrator's knowledge on current developments in education. Part of the information used for upgrading this knowledge as suggested by Shane (1) comes directly from the teacher.

A study conducted by Heichberger (3) showed that only two percent of the teachers viewed the main role of the administrator as an instructional leader. Morphet (10), however, stated that the important duties of the administrator are to provide leadership in the planning and evaluation of all phases of the instructional program, to determine building needs and to administer building programs, i.e. construction, operation and maintenance.

A little different role of the administrator was that expressed by Annese (11). He felt that the professional leader is one who influences his staff to exceed the limits of minimum contractual requirement. As a professional leader, the role of the administrator is to design and energize interpersonal relationships which free the creative energies of the staff.

## Administrators' Attitudes

In reviewing literature on this topic, the researcher first sought to establish a meaning for "attitude". Despite the wide variety of interpretations of the meaning of attitude, there are some areas of substantial aggrement. These areas were stated by Lemon (12) and are as follows:

Attitude is a predisposition to respond to an object rather than the actual behavior toward such object. The readiness to behave is one of the qualities which is characteristic of attitude.

A second area of substantial agreement is that attitude is persistent over time. This is not to say that it is immutable. The rather large body of literature on attitude clearly indicates that while it is amenable to change, the alteration of attitude, especially that which is strongly held, requires substantial pressure (p. 47).

Attitude produces consistency in behavioral outcroppings. Attitude as a latent variable gives rise to consistency among its various manifestations whether they be in the form of verbalizations about the object, expressions of feeling about the object, or approach or avoidance of the object (p. 49).

Finally, attitude has a directional quality. Not only does it imply a routinization of behavior in the form of consistency in outcroppings, it has a motivational quality.

Another view of attitudes was that of Triandis (13). He felt that attitudes involve what people think about and how they would like to behave toward an attitude object.

Ruley (2) stated that an important factor to consider during educational evaluation is the attitudes of persons in educational policymaking positions; namely, school administrators. The attitudes or beliefs of these persons very often determine the types of programs offered in schools. Due to the position of these persons, their attitudes largely determine the success or failure of various school programs.

Mason (14) used a Likert-type attitude scale and a personal biographical background information form in attempting to determine counselors' and principals' attitudes toward their acceptance of industrial arts as a school subject, their views of industrial arts in relation to other subjects and relationships between attitudes and selected personal and biographical background factors. He found an overall favorable attitude among principals and counselors toward industrial arts, agreement with the objectives and a view of industrial arts as a part of a general education rather than a vocational education.

Miller (15) found that principals were seen as strong supporters of vocational education by their teachers. Furthermore, he made two generalizations regarding his findings: teacher-administrator teamwork is a critical element in the development of an effective program, and the degree of cooperation possible is affected by the appreciation each of these leadership figures has for the goals and processes of the subject area.

A need for more information about administrative attitudes toward industrial education was stated by Householder (16). He, also, believed that if the administrators see industrial arts as an important subject matter area in school, they will support the program both directly and indirectly.

#### Questionnaire

This part of the review of literature was concerned with establishing information for construction of an instrument used to collect data. The author felt the most effective instrument would be a mailed questionnaire. Van Dalen (17) emphasized this viewpoint, stating:

Some studies, or certain phases of them, presenting respondents with carefully selected and ordered questions is the only practical way to elicit the data required to confirm or disconfirm a hypothesis (p. 324).

Benson (18) stated that most definitions seem to agree that an attitude is a state of readiness, a tendency to act or react in a certain manner when confronted with certain stimuli. Thus, the individual's attitudes are present but dormant most of the time. They become expressed in other behavior only when the object of attitude is perceived.

Further information about measuring attitudes is given by Balfour (19):

It is often difficult to obtain a reliable and valid instrument for measuring attitudes; therefore, prior to any attempt made toward attitude measurement certain assumptions must be established. It must be conceded in the beginning that an attitude is a complex affair that cannot be wholly described by any single numerical index as indicated in Likert scaling. Further, it should be kept in mind that attitude scale will be used only in a situation in which the researcher can reasonably expect people to tell the truth about their convictions or opinions. Moreover, it must be remembered that opinions can only be used as indexes of attitudes. Finally, it should also be recognized that often discrepancy appears between overt action of a subject and his verbal opinion in regard to an idea (p. 15).

For the purposes of this study, a Likert-type attitude scale was employed. As Oppenheim (18) stated, the respondents in this type of questionnaire are asked to place themselves on an attitude continuum for each statement, running from strongly agree to agree, uncertain, disagree and strongly disagree.

#### Summary

The review of literature revealed sufficient information in the four areas to warrant further investigation into attitudes of school administrators toward industrial arts programs. The review of literature on questionnaires revealed the information that was used to construct the opinionnaire.

#### CHAPTER III

#### METHODOLOGY AND DESIGN

#### Development of Opinionnaire

The review of literature on questionnaires revealed that for the type of information needed in this study a Likert-type opinionnaire would be the most suitable.

After determining the type of instrument to be used in the study, the eight questions were separated for thorough investigation. For each of the questions several possible answers were written. Each of the answers were developed into a precise and clear statement that was neither too neutral nor too extreme. Then three or four of the statements for each question were selected at random and placed at different intervals throughout the opinionnaire.

The initial opinionnaire was administered to twelve educators in an effort to validate the instrument. This group of educators was briefed on how the statements were developed for the opinionnaire and how the statements were related to the eight questions. At that time the group was informed as to how the eight questions were related to the purpose of the study. The group was asked to read the opinionnaire and write on it any suggestions for improving the instrument. After reviewing their comments and giving careful consideration to them, a new opinionnaire was developed.

#### Definition of Population

The <u>Director of Industrial Arts Education in Oklahoma</u> (20) was used to list all those schools that had an industrial arts program. The <u>Oklahoma Educational Directory</u> (21) was used to complete the list of all the secondary schools in Oklahoma. From these two sources a list of 457 schools was compiled. This list represented the total population of this study.

### Definition of Sample

After determining the population, a list of each school's average daily attendance (ADA) was compiled from the 1972-73 <u>Annual Report</u> of the Oklahoma State Department of Education. In order to get a more representative sample, stratified random sampling was used. The total population was then divided into three groups according to the following average daily attendance: Group A from 1,400 to 6,300 students; Group B from 400 to 1,399 students, and Group C from those with less than 400 students. From each of the groups a thirty-three percent random sample was taken for this study.

#### Methods of Obtaining Data

The instrument used to obtain data for this study was the mailed opinionnaire. The opinionnaire was coded in order to identify the group it represented. The opinionnaire along with the letter explaining the purpose of the study was sent to each of the administrators selected as a representative of the population. With each opinionnaire a selfaddressed, stamped envelope was enclosed for returning the response.

#### CHAPTER IV

#### PRESENTATION AND ANALYSIS OF DATA

#### Introduction

In order to determine the attitudes of Oklahoma secondary school administrators toward industrial arts, an analysis of the responses to an opinionnaire made by a selected sample of administrators was made. This analysis was done to determine their attitudes toward selected aspects of the overall industrial arts program. The analysis of the data in this chapter shows general tendencies and support for responses on the opinionnaire.

Of the one hundred fifty-three opinionnaires mailed out, there were seventeen Group A respondents, forty-three Group B respondents and fiftyfour Group C respondents as shown in Table I. This gave a total of one hundred-fourteen returned opinionnaires or seventy-five percent of the one hundred-fifty-three mailed to administrators from a thirty-three-pointthree percent random sample of each group which was returned. All the percentages presented in this chapter represent the nearest whole percent.

Percentages of responses to each statement were figured, and these percentages were compared among the three groups of schools. In analyzing these responses a scale was used to score each statement. A high score on the scale represented a favorable attitude, which meant that favorable statements were scored, scaled from 5 indicating "strongly agree" down to 1 for "strongly disagree" and unfavorable statements were scored from 1

for "strongly agree" up to 5 for "strongly disagree". The total number of responses to each statement were added, then divided by the total possible to give the percentage of each statement. This method is explained further in Table II.

### TABLE I

Group	Number in Sample	Number Returned	Percentage
A	20	17	85
В	64	43	58
C	69	54	75
TOTALS	153	114	

### NUMBER OF ADMINISTRATORS IN EACH GROUP RESPONDING TO OPINIONNAIRE

The purpose of this study was centered around one general objective which was to determine the attitudes of secondary school administrators in Oklahoma concerning industrial arts as part of the school curriculum. In order to accomplish this objective eight questions were presented and the remainder of this chapter is devoted to presenting those opinions expressed by the school administrators on these questions.

#### Goals and Subject Matter

Five statements in the opinionnaire were developed primarily for measuring the attitudes of administrators toward responsibility for determining the goals and subject matter of an industrial arts program. Statements two and eight were unfavorably written. Statements fourteen, nineteen and twenty-three were favorably written.

Statements one through twenty-five on the opinionnaire were labeled either favorable or unfavorable. A scale of 5 to 1 was used to score each response to a statement. Favorable statements were scored from 5 points for "strongly agree" down to 1 point for "strongly disagree". For unfavorable statements, 5 points were scored for a "strongly disagree" down to 1 point for a "strongly agree" response. The total number of responses were multiplied by their score and added to acquire a point total. Then the total number of responses were multiplied by five to establish the total possible points for each statement. The percentage of each statement was figured by dividing the points of a statement by the total possible points of that statement.

Administrators did not feel that they should have the total responsibility for setting the goals of industrial arts curriculum according to their responses to statement two in Table II. This attitude was shown to be universal regardless of school size, as statement two of Table II shows: Group A had eighty-seven percent, Group B had eighty-four percent and Group C had eighty-six percent of the responses unfavorable.

A majority of the administrators did not feel that the teachers should be solely responsible for setting goals, as Table II, statement eight shows. Group B schools were more noticeably against teacher

## TABLE II

•

			Far	vorable	Unfavorable		
Number	Statement	Group	points	percentage	points	percentage	
2	Administrators should have the	A	11	13	74	87	
	sole responsibility for setting the goals of the industrial arts	В	28	16	157	84	
	curriculum.	C	34	14	221	86	
		MEAN P	ERCENT	14		86	
8	Teachers of industrial arts	A	33	39	52	61	
	should be solely responsible for setting objectives of their	В	46	25	139	75	
	program.	С	105	41	150	59	
		MEAN P	ERCENT	35		65	
14	The school administrator should	A	73	. 86	12	14	
	work with the teacher in all aspects of the industrial arts	В	159	86	26	14	
	program.	C	213	82	47	18	

## ADMINISTRATIVE ATTITUDES TOWARD RESPONSIBILITIES FOR DETERMINING THE GOALS AND SUBJECT MATTER OF THE INDUSTRIAL ARTS PROGRAM

			Fav	vorable	Unfavorable		
Number	Statement	Group	points	percentage	points	percentage	
19	Most administrators appreciate	A	59	69	26	31	
	the opportunity to help plan the industrial arts curriculum	В	135	75	45	25	
		С	168	66	87	34	
		MEAN PE	RCENT	70		30	
23	The goals of the industrial	A	70	82	15	18	
	arts curriculum should be cooperatively determined by	В	160	86	25	14	
	the administrators and the industrial arts teachers.	С	212	82	48	18	
	· · · · · · · · · · · · · · · · · · ·	MEAN PE	RCENT	83	·····	17	

responsibility, having seventy-five percent unfavorable response, than Group A with sixty-one percent or Group C with fifty-nine percent response. The rest of the responses to statements on goals and subject matter showed little difference in attitude among the three groups.

Statements fourteen, nineteen and twenty-three showed favorable attitudes on the part of administrators. They all expressed the idea of a joint effort on the part of both administrators and teachers in developing the goals and subject matter for an industrial arts program.

#### Evaluation of the Curriculum

Statements one, seven, thirteen and eighteen were constructed to measure administrators' attitudes toward evaluation of the curriculum. Administrators as shown in Table III did not believe that curriculum evaluation should be solely the responsibility of the teacher or the principal. While there was somewhat less pronounced feeling on the part of administrators toward counselors and administrators being held responsible, statement eighteen (Table III) indicates they did not favor it.

There was a strong indication on the part of administrators to view the responsibility of evaluation as a joint effort on the parts of both teacher and administrator. Statement thirteen (Table III) shows that all three groups were over eighty percent in favor of this type of evaluation process for industrial arts programs.

#### Subject Matter Areas

In order to determine the attitudes administrators had toward the subject matter areas that industrial arts should offer, four traditional areas were selected and space for any other was incorporated into one

## TABLE III

## ADMINISTRATIVE ATTITUDES TOWARD RESPONSIBILITIES OF EVALUATION OF THE CURRICULUM

		Far	vorable	Unfavorable	
Statement	Group	points	percentage	points	percentage
Industrial arts teachers should	A	19	22	66	78
be solely responsible for	В	41	22	144	78
evaluating their curriculum.	С	75	29	180	71
	MEAN P	ERCENT	26		74
Principals should be solely responsible for evaluating	А	15	18	70	82
	В	25	14	160	86
mustral arts curriculum.	C	39	16	206	84
	MEAN P	ERCENT	15		85
Evaluating industrial arts	A	73	86	12	14
program should be a joint	В	164	89	21	11
administrator.	С	219	84	41	16
	MEAN P	ERCENT	86		14
	be solely responsible for evaluating their curriculum. Principals should be solely responsible for evaluating industrial arts curriculum. Evaluating industrial arts program should be a joint effort of teacher and	Industrial arts teachers should A be solely responsible for B evaluating their curriculum. C MEAN P Principals should be solely A responsible for evaluating B industrial arts curriculum. C MEAN P Evaluating industrial arts A program should be a joint B effort of teacher and administrator. C	StatementGrouppointsIndustrial arts teachers should be solely responsible for evaluating their curriculum.A19B41C75MEAN PERCENTPrincipals should be solely responsible for evaluating industrial arts curriculum.A15C39MEAN PERCENTEvaluating industrial arts effort of teacher andA73B164	Industrial arts teachers should be solely responsible for evaluating their curriculum.A1922C7529MEAN PERCENT26Principals should be solely industrial arts curriculum.A1518B2514C3916MEAN PERCENT15Evaluating industrial arts program should be a joint effort of teacher and administrator.A7386B16489C21984	StatementGrouppointspercentagepointsIndustrial arts teachers should be solely responsible for evaluating their curriculum.A192266B4122144C7529180MEAN PERCENT26Principals should be solely industrial arts curriculum.A151870C3916206MEAN PERCENT15206Evaluating industrial arts effort of teacher and administrator.A738612B1648921C2198441

TABLE III (Continued)	

			Far	vorable	Unfavorable		
Number	Statement	Group	points	percentage	points	percentage	
18	18 Counselors and administrators should be held accountable for evaluating subjects	A	29	34	56	66	
		В	56	30	129	70	
	content.	С	97	37	163	63	
			RCENT	34		66	

question on the opinionnaire. This part of the opinionnaire (see Appendix A) was not in statement form, but rather, allowed the respondent to check his feelings for each area according to the seventh, eighth, ninth, tenth, eleventh and twelfth grade levels. The percentages presented indicate positive attitudes toward the inclusion of these areas in the industrial arts curriculum for a given year.

A study of the responses in Table IV indicates that the majority of administrators in all groups desired a broad study of all the areas on the eleventh and twelfth grade levels. The areas of woodworking and crafts apparently had greater appeal for the seventh, eighth and ninth grade levels than did drafting and metalwork. On the upper three levels the reverse seemed to hold true.

### Required or Elective Subject

There were four statements that were constructed in order to determine the administrators' attitudes toward industrial arts as a required or an elective subject. S atements three, fifteen and twenty showed that the majority of administrators felt that industrial arts should be an elective, while statement nine (Table V) showed that fifty-seven percent favored it as a required subject.

## Grade Levels at Which Industrial Arts

#### Should Be Taught

Statement twenty-six on the opinionnaire was designed to give administrators the opportunity to express their opinions toward the grade levels at which industrial arts should be taught. This statement (see Appendix A) gave administrators six grade levels from which they were to

## TABLE IV

Area of Study	Gr A	ade B	7 C	Mean Percent	Gr A	ade B	8 C	Mean Percent	Gra A	ade B	9 C	Mean Percent
Woodworking	47	51	56	51	71	65	65	67	88	95	79	87
Drafting	17	22	10	16	17	27	17	20	47	62	37	49
Metalworking	35	14	2	17	35	19	12	22	41	38	31	37
Crafts	53	59	50	54	47	70	67	61	71	73	62	69
Other	12	0	6	6	12	3	6	7	24	5	6	12
Area of Study	Gr	ade	10									
	A	B	<u>C</u>	Mean Percent	$\frac{\text{Gr}}{\text{A}}$	ade B	11 C	Mean Percent	- Gi A	<u>rade</u> B	<u>12</u> C	Mean Percent
Woodworking			C							В		
		В	C	Percent	A	В	C 73	Percent	A	B 81	C 73	Percent
Woodworking	88	B 92	C 85	Percent 88	A 76	B 86 92	C 73	Percent 78	A 76	B 81	C 73 73	Percent 77
Woodworking Drafting	88 71	B 92 68	C 85 54	Percent 88 64	A 76 88	B 86 92	C 73 83	Percent 78 88	A 76 82	B 81 86	C 73 73 75	Percent 77 80

ADMINISTRATIVE ATTITUDES TOWARD SUBJECT MATTER AREAS

## TABLE V

			Far	vorable	Unfa	avorable	
Number	Statement	Group	points	percentage	points	percentage	
3	Industrial arts should be an	A	66	78	19	22	
	elective for boys in high school.	В	159	86	26	14	
school.	501001.	С	217	83	43	17	
		MEAN P	ERCENT	83		17	
9	Boys should be required to take	A	47	55	38	45	
	industrial arts classes in junior high school.	В	104	56	81	44	
	Junior night school.	С	150	58	110	42	
		MEAN P	ERCENT	57		43	
15	High school girls should be	A	34	45	41	55	
	required to take one semester of industrial arts classes.	В	78	43	102	57	
	or industrial arts classes.	С	119	46	141	54	
		MEAN P	ERCENT	45		55	

## INDUSTRIAL ARTS AS A REQUIRED OR ELECTIVE SUBJECT

Number	Statement	Group	Favorable		Unfavorable	
			points	percentage	points	percentage
20	Junior high industrial arts should be an elective subject for girls.	A	62	73	17	21
		В	143	77	42	23
		С	194	75	66	25
		MEAN PI	ERCENT	76		24

### TABLE VI

Grade Level	G A	roup B	С	 Mean Percent
INDUSTRIAL ARTS PROGRAM AT THE SECONDARY LEVEL SHOULD BE OFFERED AT THE:				
Seventh Grade	65	70	69	69
Eighth Grade	76	81	87	83
Ninth Grade	94	95	94	94
Tenth Grade	94	97	96	96
Eleventh Grade	94	97	92	94
Twelfth Grade	94	97	92	94

### ADMINISTRATIVE ATTITUDES TOWARD GRADE LEVELS AT WHICH INDUSTRIAL ARTS SHOULD BE TAUGHT

select those they felt most industrial arts programs would best serve. As shown in Table VI, the upper four levels were much more conducive to the majority of the administrators as suitable for an industrial arts program than were the seventh and eighth grade levels. There appeared to be little difference among the three groups of school administrators' attitudes on this subject.

#### Type of Students

Five statements were constructed to measure administrators' attitudes toward the type of students that should enroll in industrial arts classes. Statements five, eleven, sixteen, twenty-one and twenty-four, as shown in Table VII, represent these attitudes.

Statement twenty-four was the only one that showed a measurable amount of difference between the attitudes expressed by the different groups of administrators. Group A administrators favored students with superior ability being placed in the industrial arts classes, while Group B and Group C did not favor it. The rest of the statements showed that all of the groups held common attitudes.

According to Table VII, the majority of administrators favored recommending industrial arts to potential high school drop-outs. Administrators favored by sixty-six percent encouraging college preparatory students to enroll in industrial arts classes. The most pronounced attitude was expressed by administrators favoring students with average ability to take industrial arts courses (Table VII).

Statement eleven (Table VII) was the only one that expressed an unfavorable attitude on the part of the administrators. It stated that slow learners should be placed in the industrial arts classes.

#### State Supervision

Question seven was aimed at determining administrators' attitudes toward state supervision in industrial arts. Although state supervision is usually only given to those schools which are federally reimbursed, the writer felt administrators of all schools, whether vocational or general, would have some attitude toward this supervision. The responses

## TABLE VII

## ADMINISTRATIVE ATTITUDES TOWARD STUDENTS WHO SHOULD TAKE INDUSTRIAL ARTS

Number	Statement	Group	Favorable		Unfavorable	
			points	percentage	points	percentage
5	Industrial arts should be	A	68	80	17	20
,	recommended to potential high school drop-outs.	В	134	74	46	26
	high school drop outs.	C	183	70	77	30
		MEAN P	ERCENT	73		27
11	Counselors should place slow learners in industrial arts classes.	A	27	34	53	66
		В	47	25	138	75
		In industrial B 47 25 C 62 24	24	193	76	
		MEAN PERCENT		26		74
16	Students in college preparatory courses should be encouraged to take industrial arts.	A	55	65	30	35
		В	113	61	72	39
		C	177	69	78	31
		MEAN PERCENT		66	· · ·	34

Number	Statement	Group	Favorable		Unfavorable	
			points	percentage	points	percentage
21	Students with average ability should be encouraged to take industrial arts.	A	63	79	17	21
		В	132	73	48	27
		С	188	75	62	25
		MEAN PI	ERCENT	75		25
24	Counselors should place those students with superior ability in industrial arts classes.	A	46	54	39	46
		В	70	38	115	62 -
		С	91	35	169	65
		MEAN PERCENT		39		61

of the administrators toward state supervision are shown in statements four and ten (Table VII).

Statement four (Table VIII) showed that all three groups had the same attitude toward state supervision. According to administrators' responses to statement four, the majority had a favorable attitude toward state supervision of industrial arts programs.

State ten (Table VIII) showed the majority of school administrators did not feel that state requirements met the needs of local communities.

## Relationship of Industrial Arts

## to Other Subjects

The last of the questions was aimed at determining the attitudes of administrators toward the relationship of industrial arts to other subjects. Statements six, twelve, seventeen, twenty-two and twenty-five of the opinionnaire were constructed to measure administrators' attitudes on this question.

There were no significant amounts of difference in attitudes among the three groups of administrators on this question (Table IX).

A majority of administrators indicated they did not feel the scheduling of industrial arts classes is sometimes given more consideration than the scheduling of other classes. The only other unfavorable attitude expressed by administrators was the one related to statement twenty-five (Table IX). That statement posed the question of whether industrial arts programs were the least important subject in their school, and seventy-seven percent of the administrators disagreed with that question.

## TABLE VIII

## ADMINISTRATIVE ATTITUDES TOWARD STATE SUPERVISION IN INDUSTRIAL ARTS

Number			Far	vorable	Unfavorable			
	Statement	Group	points	percentage	points	percentage		
4	Do you, as an administrator, appreciate the state super- vision of the industrial arts programs?	A	57	71	23	29		
		В	133	72	52	28		
		С	186	72	74	28		
		MEAN PERCENT		72	28			
10	Requirements of the state department of vocational and technical education, division of industrial arts, sometimes hinder administra- tors in providing programs that meet the needs of the community.	A	30	35	55	65		
		В	69	37	116	63		
		С	110	44	140	56		
		MEAN PI	ERCENT	40	· · · · · · · · · · · · · · · · · · ·	60		

## TABLE IX

Number		2	Far	vorable	Unfavorable			
	Statement	Group	points	percentage	points	percentage		
6	Scheduling of industrial arts classes is sometimes given more consideration than the scheduling of other subjects.	А	19	22	66	78		
		В	43	23	142	77		
		С	51	20	204	80		
		MEAN PI	ERCENT	22		78		
12	All high school classes should be given equal consideration when the overall schedule is determined.	A	65	76	20	24		
		В	137	74	48	26		
		С	214	82	46	18		
		MEAN PERCENT		78		22		
17	Industrial arts facilities usually	A	57	67	28	33		
	require a larger percentage of the overall budget than do most other areas of study.	В	111	60	74	40		
		C	173	67	87	34		
		MEAN PI	ERCENT	64		36		

## ADMINISTRATIVE ATTITUDES TOWARD THE RELATIONSHIP OF INDUSTRIAL ARTS TO OTHER SUBJECTS IN THE OVERALL HIGH SCHOOL CURRICULUM

# TABLE IX (Continued)

1			Far	vorable	Unfavorable			
Number	Statement	Group	points	percentage	points	percentag		
22	Industrial arts facilities are a source of pride for most school administrators.	A	60	71	25	29		
		В	133	72	52	28		
		С	185	71	75	29		
		MEAN PI	ERCENT	71		29		
25	Most administrators feel	A	17	20	68	80		
	industrial arts is one of the least important subjects	В	40	22	145	78		
	in their school.	С	64	25	196	75		
		MEAN PI	ERCENT	23		77		

According to Table IX the majority of administrators felt industrial arts should be given equal consideration when the overall schedule is determined, and said the program usually requires a larger percentage of the overall budget. Statement twenty-two of Table IX shows the majority of administrators are proud of the industrial arts programs in their schools.

#### Summary

Chapter IV included the presentation and analysis of the data for determining the attitudes of secondary school administrators toward industrial arts. It presented the total number and the percentage of opinionnaires returned. The eight questions presented in Chapter I of this study were restated in this chapter along with the information received from the opinionnaire.

## CHAPTER V

#### SUMMARY AND RECOMMENDATIONS

### Summary

This study was undertaken in an attempt to examine the attitudes of secondary school administrators in Oklahoma toward industrial arts. The general objective was to determine these attitudes by examining those attitudes administrators have toward specific questions. Those questions selected to measure the attitudes of administrators were:

- Who is responsible for determining the goals and subject matter of an industrial arts program?
- 2. Who should be held accountable for evaluation of industrial arts curriculum?
- 3. What subject matter areas of industrial arts should be taught at the secondary level?
- 4. Should industrial arts be a required or an elective subject in the school curriculum?
- 5. At what grade levels should industrial arts be offered?
- 6. What type of student should be allowed to take industrial arts classes?
- 7. Does state supervision agree with local supervision on the purpose of industrial arts?
- 8. How much concern is given industrial arts programs compared to other subjects?

The review of literature emphasized the areas of industrial education, school administrators, administrators' attitudes and the questionnaire.

After construction of the insturment, it was pretested with a mixed group of teachers and administrators. There were additions and corrections made to the opinionnaire before it was mailed out. All of the schools of Oklahoma were listed, then divided into three groups according to average daily attendance. There was a thirty-three-point-three percent stratified random sample of administrators who received the opinionnaire. Of the one hundred fifty-three mailed out, one hundred fourteen were returned for a seventy-five percent return.

Analysis of the responses was done by scoring each response to a statement and then figuring the total scores and their percentages. After figuring the mean percentages, these percentages were then analyzed and compared so that conclusions could be made concerning the atitudes of secondary school administrators.

The only significant difference among the responses of the three different groups of administrators occurred in the subject matter area. Administrators in Group A showed a much higher percentage of favorable response toward offering other subjects than did those in Group B or Group C.

Administrators did not feel that they or the teacher should have the sole responsibility for determining the goals and subject matter of the industrial arts program. They believed that there should be a cooperative effort by the teacher and the administrator to determine goals and subject matter. The majority of administrators appreciated the opportunity to help plan the industrial arts program.

The evaluation of the industrial arts curriculum was perceived by the majority of administrators as a joint effort between themselves and the teacher. Administrators felt curriculum evaluating should not be solely accomplished by the teacher or the principal. They believed counselors and administrators should not be held accountable for evaluating as a team.

Administrators expressed the greatest interest in such subjects as woodworking and crafts at the seventh, eighth, ninth and tenth grade levels. The majority of administrators favored subjects such as drafting and metalworking at the eleventh and twelfth grade levels. Other subjects offered at the eleventh grade level received the majority of administrators' interest.

According to the majority of administrators, industrial arts should be an elective subject for boys and girls in high school. Administrators felt industrial arts should be an elective for girls and a required subject for boys at the junior high level.

The greatest percentage of administrators believed industrial arts should be taught at grades nine through twelve. There was a definite decrease in the percentage of administrators responses at the seventh and eighth grade levels.

Administrators felt students who are potential high school drop-outs, students in college preparatory courses and students with average ability should be encouraged to enroll in industrial arts classes.

The majority of administrators did not consider slow learners and those with superior abilities the types of students who should be in an industrial arts class.

The majority of administrators appreciated the state supervision of

the industrial arts programs. A little over half of the administrators felt state requirements do not hinder them from providing programs that meet the needs of the community.

Administrators felt industrial arts classes are a source of pride in their school and are given equal consideration with other subjects in class scheduling. They believed the industrial arts facilities require a larger percentage of the overall school budget, and agreed the industrial arts program is one of the more valuable subjects in their schools.

#### Recommendations

On the basis of the findings and analysis of the opinionnaire of this study, the following recommendations are proposed.

It is recommended that additional research be conducted to determine the reasons Group A administrators expressed a significant difference of opinion than Group B or C in regard to statement 27.

It is also recommended, since administrators expressed in statement 13 a desire to work with industrial arts teachers, that a study of industrial arts teacher's attitudes of administrators be considered as a follow to this study.

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## APPENDIX A

# SAMPLE OF LETTER MAILED

# WITH OPINIONNAIRE

# Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

STILLWATER, OKLAHOMA, 74074 CLASSROOM BUILDING 406 (405) 372-6211, EXT. 6287

March 31, 1976

Dear Sir:

Your opinion is very important. But it is futile unless expressed in some form to other people. I am writing a study that can be a means for you to inform others of your opinions.

This will take about 15 minutes of your time and should be a pleasant change in your busy day. For your convience a selfaddressed stamped envelope is provided for returning the opinionnaire.

Basically, the study seeks to examine and express the attitudes Administrators have toward Industrial Arts.

Your opinions and time is greatly appreciated.

Respectfully yours,

Dwigh O Sokrator-

Dwight Johnston DJ/dj Encl.

# APPENDIX B

# SAMPLE OF OPINIONNAIRE

## OPINIONNAIRE

Would you please give your opinion on the following statements about Industrial Arts Education in your local school? Circle your response of Strongly Agree (SA), agree (a), undecided (u), disagree (d), or Strongly Disagree (SD).

1.	Industrial Arts teachers should be solely responsible for evaluating their curriculum.	SA	a	u	d	SD
2.	Administrators should have the sole responsi- bility for setting the goals of the Industrial Arts curriculum.	SA	a	u	d	SD
3.	Industrial Arts should be an elective for boys in high school.	SA	а	u	d	SD
4.	Do you as a administrator, appreciate the state supervision of the Industrial Arts programs.	SA	a	u	d	SD
5•	Industrial Arts should be recommended to potential high school drop-outs.	SA	a	u	d	SD
6.	Scheduling of Industrial Arts classes is sometimes given more consideration than the scheduling of other subjects.	SA	a	u	d	SD
7.	Principals should be solely responsible for evaluating Industrial Arts curriculum.	SA	a	u	d	SD
8.	Teachers of Industrial Arts should be solely responsible for setting objectives of their program.	SA	a	u	d	SD
9•	Boys should be required to take Industrial Arts classes in junior high school.	SA	a	u	d	SD
10.	Requirements of the State Department of Vocational and Technical Education, Division of Industrial Arts sometimes hinder administrators in providing programs that meet the needs of the community.	SA	a	u	d	SD
11.	Counselors should place slow learners in Industrial Arts classes.	SA	a	u	d	SD
12.	All high school classes should be given equal consideration when the overall schedule is determined.	SA	a	u	d	SD
13.	Evaluating Industrial Arts program should be a joint effort of teacher and administrator.	SA	a	u	d	SD
14.	The school adminstrator should work with the teacher in all aspects of the Industrial Arts program.	SA	a	u	d	SD

	15.	High school girls should be requir one semester of Industrial Arts Cl	ed to asses	take •			SA	a	u	d	SD
	16.	Students in college preparatory courses should be encouraged to take Industrial Arts.						a	u	d	SD
	17.	Industrial Arts facilities usually require a larger percentage of the overall budget than do most other areas of study.						a	u	đ	SD
	18.	Counselors and administrators should be held accountable for evaluating subjects content.						a	u	d	SD
	19.	Most administrators appreciate the to help plan the Industrial Arts c	e oppo curric	rtunit ulum.	;y		SA	a	u	d	SD
	20.	Junior high Industrial Arts should elective subject for girls.	l be a	n			SA	a	u	d	SD
	21.	Students with average ability shou encouraged to take Industrial Arts	ild be 3.				SA	a	u	d	SD
	22.	Industrial Arts facilities are a source of pride for most school administrators.						a	u	d	SD
	23.	The goals of the Industrial Arts curriculum should be cooperatively determined by the administrators and the Industrial Arts Teachers.							u	d	SD
	24.	Counselors should place those students with superior ability in Industrial Arts classes.						a	u	d	SD
-	25.	Most administrators feel Industria one of the least important subject	al Art ts in	s is their	schoo	1.	SA	а	u	d	SD
	26.	Industrial Arts program should be You may check ( $\checkmark$ ) more than one.	offer	ed at	the f	o11ow	ing	gra	de	lev	els.
		7 8 9 10	1	1	_ 12_						
	27.	Which of these subject areas shoul program? Check $(\checkmark)$ one or more an any subjects you feel should be of	reas f	for ea	ded in ch gra	the de le	Indu vel	istr and	ial I wr	Ar ite	ts in
		Area of Study	7	8	9	10	1	1	1	2	
		a. Woodworking									
		b. Drafting									
		c. Metalworking									
		d. Crafts									,
								_			

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e. Other (

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## VITA 3

Dwight Charles Johnston

Candidate for the Degree of

Master of Science

Thesis: OKLAHOMA SECONDARY SCHOOL ADMINISTRATORS' ATTITUDES TOWARD INDUSTRIAL ARTS

Major Field: Industrial Arts Education

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