

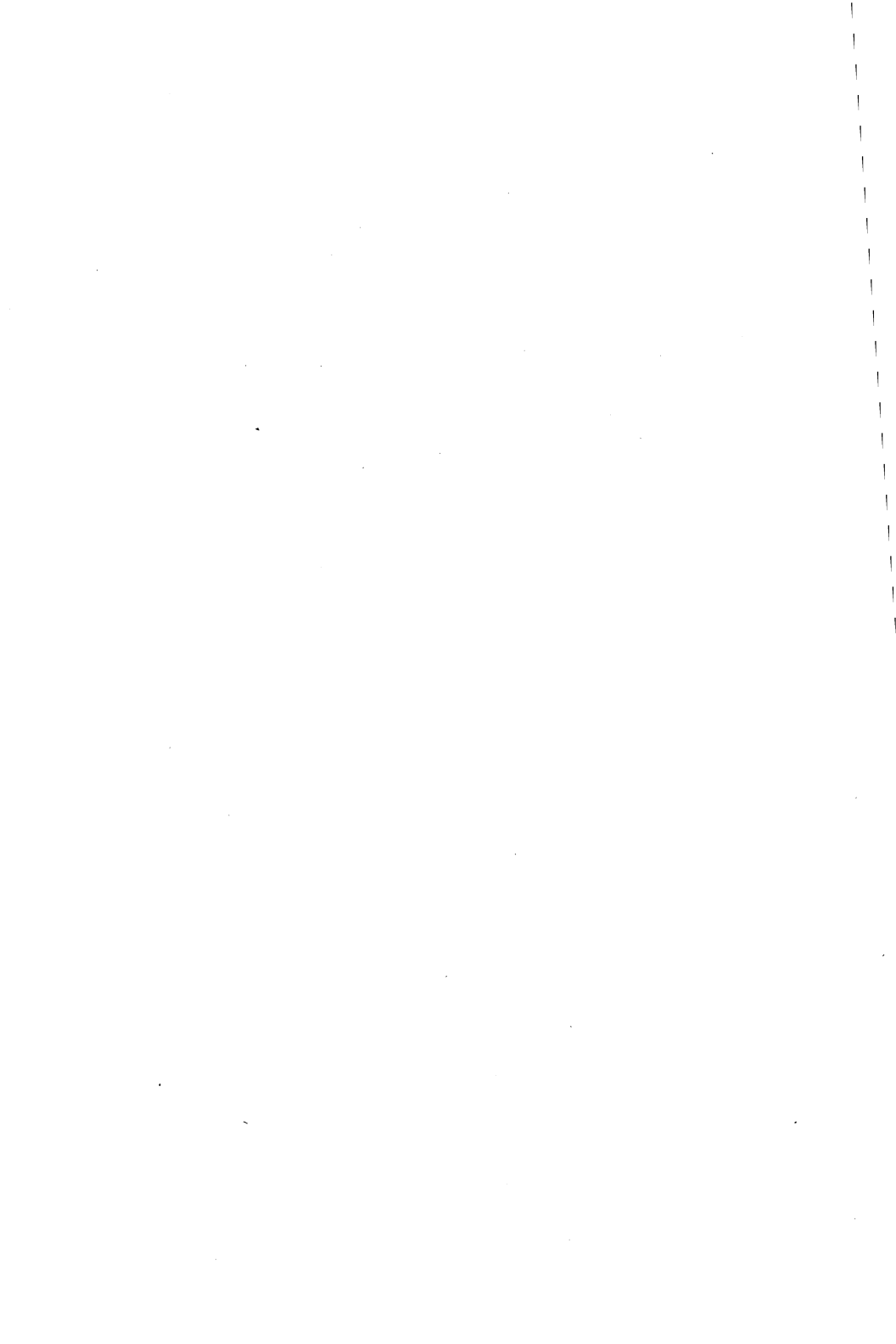
YEARBOOK

1
1952

AMERICAN COUNCIL ON INDUSTRIAL ARTS TEACHER EDUCATION

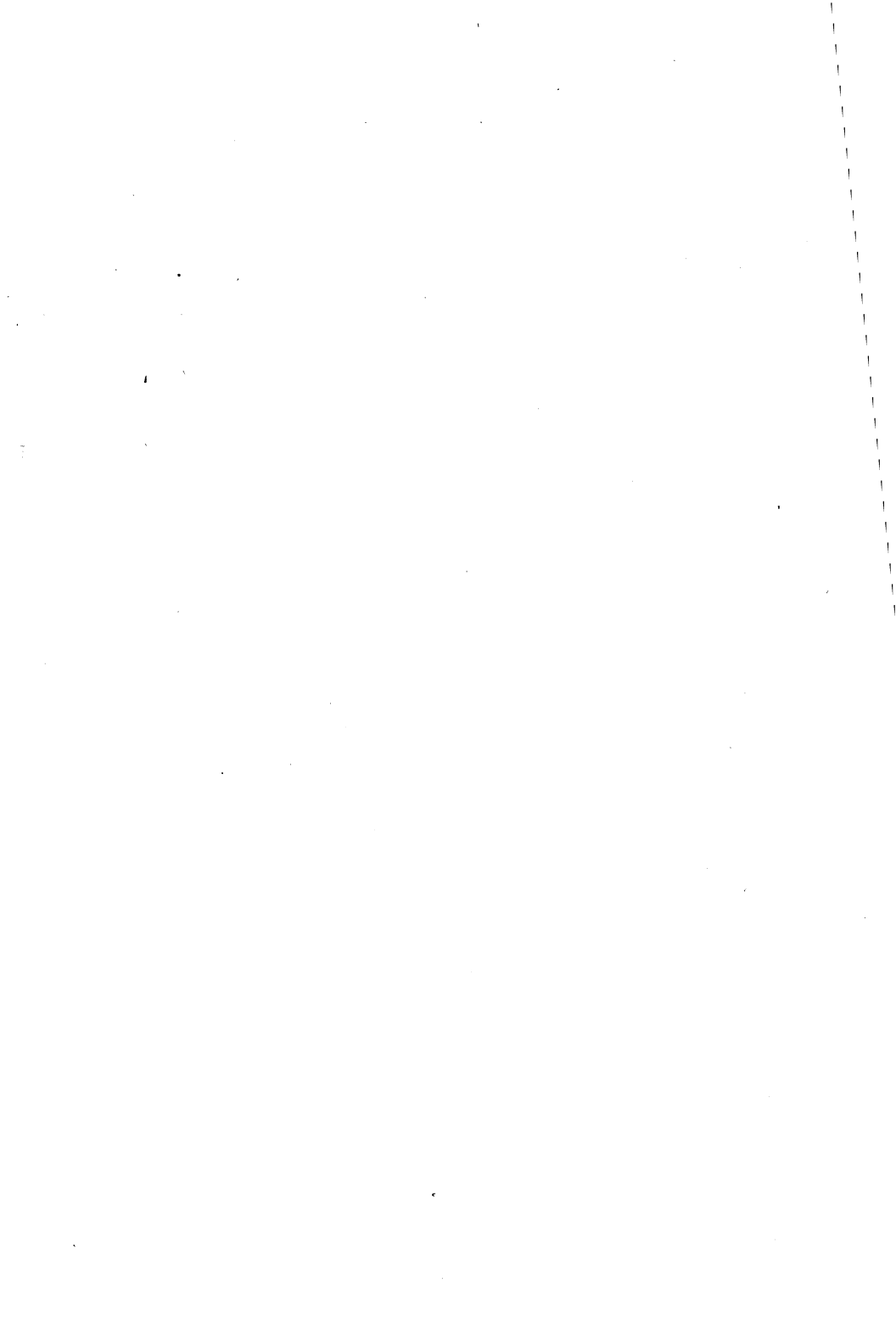
YEARBOOK **1** 1952

AMERICAN COUNCIL ON INDUSTRIAL ARTS TEACHER EDUCATION



FACILITIES  PERSONNEL

INVENTORY-ANALYSIS OF INDUSTRIAL ARTS TEACHER EDUCATION PROGRAMS



Inventory-Analysis of Industrial Arts Teacher Education Facilities, Personnel and Programs

Edited by

Walter R. Williams, Jr., Ph. D.

**Professor of Education and Head
Industrial Arts and Vocational Education
University of Florida
Gainesville, Florida**

and

Harvey Kessler Meyer, Ed. D.

**Associate Professor
Industrial Arts and Vocational Education
University of Florida
Gainesville, Florida**

YEARBOOK

1
1952

AMERICAN COUNCIL ON INDUSTRIAL ARTS TEACHER EDUCATION

Miami University, Oxford, Ohio

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FOREWORD

The officers of the AMERICAN COUNCIL ON INDUSTRIAL ARTS TEACHER EDUCATION take pleasure in presenting Yearbook I to the profession in the hope that a perusal of its pages will prove of genuine interest and abiding value to all engaged in related activities. Through the combined efforts of members in the profession it is now possible to provide an accurate overview of the current status of industrial arts teacher education.

Special commendation is due the McKnight and McKnight Publishing Company. This nationally-known and respected organization has generously agreed to underwrite the entire costs of producing and distributing both this and successive Yearbooks, copies of which will be provided to all members of the Council on a complimentary basis. In addition, annual profits received from the sale of these volumes will be forwarded to the Council Treasury by the publishers who have agreed to absorb any annual losses which may arise. Such generosity is heartening and serves as a favorable omen for distinctive professional contributions through the publication of materials developed by the Council during the years ahead.

Thanks are due individuals throughout the United States whose participation in providing the enclosed institutional data serves to make this study possible. Mention should be made of Dr. John R. Ludington, Specialist for Industrial Arts, United States Office of Education, for helpful suggestions, and of Mr. Everett M. Sloan whose assistance in compiling data was invaluable.

30 April 1952



President, American Council on
Industrial Arts Teacher Education

**AMERICAN COUNCIL ON
INDUSTRIAL ARTS TEACHER EDUCATION**

A Division of the American Industrial Arts Association and the National Education Association. Memberships at \$5.00 are cordially invited of all interested industrial arts teacher educators, and will include a copy of the annual yearbook.

ADMINISTRATIVE STAFF, 1951-52

- Walter R. Williams, Jr. President
University of Florida, Gainesville, Florida
- Fred J. Schmidt, Jr. Vice-President
Ball State Teachers College, Muncie, Indiana
- John A. Whitesel. Executive Secretary
Miami University, Oxford, Ohio
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SYNTHESIS OF DATA COVERING INDUSTRIAL ARTS TEACHER EDUCATION FACILITIES, PERSONNEL AND PROGRAMS

An examination of pertinent data revealed through a nationwide study by the American Council on Industrial Arts Teacher Education led to the decision of providing a brief synthesis of information highlighting the national industrial arts teacher education scene. Accordingly, this overview treats four major phases of the study: (1) comparison with earlier studies; (2) data regarding personnel; (3) data regarding instructional programs; and (4) data regarding facilities. Summary statements are added and concern the "typical" educator, program, and facilities respectively.

Comparison With Other Studies

A brochure published during 1948 by the American Industrial Arts Association dealt with salaries, program locations, and teaching personnel in the United States.* The preface of this volume provided limited statistical information and compared it with a similar directory compiled in 1941. Table 1 reveals a number of significant developments which have taken place during the past decade.

The 1948 *Directory* commented upon "the strange phenomenon of the allocation of industrial arts education within educational systems." It was found, for example, that industrial arts teacher education has been variously allocated to education, engineering, mechanics, fine arts, liberal arts, vocational arts, science and mathematics, social sciences, and agriculture.

This picture of diversity has changed very little. This is revealed by the following list of type designations with the allocation to various administrative subdivisions of the institutions concerned.

It is clear that the term "Industrial Arts" is preferred in 141 of 200 or 70 per cent** of the cases; the term "Industrial Education" in 42 of 200 or 21 per cent of the cases.

* *The 1948 Industrial Arts Teacher Education Directory*, American Industrial Arts Association, 216 East Ninth Street, Cincinnati, Ohio.

** Slide rule values have been used for all calculated values such as percentages, which have been rounded off to the nearest unit. This is true for all similar values which follow.

INDUSTRIAL ARTS TEACHER EDUCATION

Table 1
A DECADE OF PROGRESS IN INDUSTRIAL ARTS
TEACHER EDUCATION 1941-1951

SPECIAL FEATURE	1941	1948	1951
Number of schools offering industrial arts programs	166	164	200
Number of personnel engaged in industrial arts teacher education	604	869	1,018
Number of Bachelor's Degrees among personnel	156	209	179
Number of Master's Degrees among personnel	321	439	635
Number of Doctor's Degrees among personnel	41	70	103
Number of personnel with professorial rank	243	398	538
Number of institutions designating "Industrial Arts"	95 of 166	108 of 164	141 of 200
Number of times term "Industrial Education" is used	22	29	42
Number of institutions offering one degree or more	----	128	183
Number of institutions offering master's work	----	51	69
Number of institutions offering doctor's work	----	20	14
Number of personnel with rank of instructor or above	----	----	908

In 1941, 95 of 166 or 57 per cent of 166 institutions used the term *industrial arts* or *industrial arts education*; in 1948, 108 of 164, or 66 per cent used the term; in 1951, 141 of 200, 71 per cent, used industrial arts in the title. This seems to indicate a definite trend. In this group of institutions there were 18 divisions of industrial arts or similar designations.

The allocation of industrial arts departments to other divisions, however, resulted in a wide range of 26 divisional titles. The following were represented: Divisions of Technical Training, Creative Arts, Vocational and Industrial Arts, The Arts, Health, Physical Education, Recreation and Practical Arts, Fine and Practical Arts, Mechanics and Industrial Arts, Farm and Home Science, Science, Agriculture, Natural Sciences, Vocational Education, Vocational and Practical Arts Education, Education and Psychology, Special Fields, Arts and Music,

Table 2
1951 DEPARTMENTAL DESIGNATIONS *

TITLE	FREQUENCY	PER CENT OF TOTAL **
Industrial Arts Education	29	14.5
Industrial Arts	85	42.5
Industrial Education	42	21.0
Includes "Industrial Arts" in a Variant Title	27	13.5

* Based on data covering 200 institutions.

** Slide rule values have been used for all calculated values such as percentages, which have been rounded off to the nearest unit. This is true for all similar values which follow.

Vocational Arts, Natural Science, Agriculture, Home Economics and Industrial Arts, Industries, Industrial Arts, Mechanic Arts, Engineering Instruction, Engineering and Industrial Education, Academic Science, Fine and Industrial Arts, and Engineering Instruction. Schools in which Industrial Arts is placed were Education, 12; Engineering, 4; and Mechanical Industries, Vocational Education, Applied Arts and Sciences, Science and Arts, Engineering and Technology. Colleges in which Industrial Arts is placed were: Education, 15; Arts and Sciences, 2; Liberal Arts, 2; Applied Science, 2; and Vocations and Professions, Industrial Arts Education, Agriculture, Engineering, and Education and Nursing. While placement in Schools or Colleges of Education is more frequent than in any other single area, such placement is yet in a national minority, and the wide divergence of departmental, divisional, school, and college designation and placement indicates differing opinions as to the role of industrial arts teacher education.

Data Regarding Personnel

The number of personnel in industrial arts teacher education showed a 44 per cent gain in 1948 over 1941, a 17 per cent gain in 1951 over 1948, and an overall 69 per cent gain during the decade 1941-1951. The number of individuals possessing only a bachelor's degree decreased from 26 per cent of the total in 1941 to 24 per cent of the total in 1948. The three year period 1948-51 reveals a much larger decrease, until in 1951, despite the greatly increased total staff, only 18 per cent hold no degree higher than a bachelor's.

One out of every ten staff members in 1951 holds a doctor's degree; 63 per cent hold masters' degrees. Approximately 10 per cent hold no degrees, most of these being in specialized instructor brackets for skills work.

Between 1948 and 1951, there was a 43 per cent gain in the number of institutions offering one or more degrees, and during that same period, a gain of 35 per cent in the number offering master's degrees. The number of institutions offering doctoral work has decreased from 20 to 14. It is altogether possible that the earlier figure of 20 included institutions which do not have a specifically designated program for industrial arts at the doctoral level, but rather offer degrees in education or other fields which are open to industrial arts people.

Profile of an Industrial Arts Teacher Educator

On the basis of the data covering the first five hundred teacher educators listed in the American Council's files, a composite profile of the typical industrial arts teacher educator may be constructed. It would probably read as follows:

He was born in New York state in 1909 and is forty-two years of age. He is married, has two children, and is the holder of a Master of Arts degree. He has taught over seven years in the public schools and approximately ten years in institutions of higher learning. He has contributed very little along the lines of published materials. He is twice as likely to be a member of the American Industrial Arts Association and/or the National Education Association as he is to hold membership in the American Vocational Association and/or the National Association of Industrial Teacher Trainers. The chances are about even that he has travelled abroad and that he is a member of Epsilon Pi Tau. His chief avocational interest is that of out-door sports.

Data Regarding Programs

Instructional programs in industrial arts teacher education have shown a distinct predilection for the familiar materials areas of woods and metals, as well as drafting. Programs in crafts appear to be on the increase. Transportation is a strong new comer. Graphic arts is emphasized, but in far less degree than the "big three", of which woods and drawing are still predominant. The varied degrees offered and the curriculum areas represented are indicated in Tables 3 and 4.

Profile of a "Typical" Program

The "typical" program has been established for 28 years, hence the date of establishment is 1923. It is designated as an Industrial Arts

Table 3
DEGREE TYPES OFFERED*

DEGREE	NUMBER OF INSTITUTIONS OFFERING
Bachelor of Science in Education	97
Bachelor of Science	51
Bachelor of Arts in Education	40
Bachelor of Arts (AB)	21
Bachelor of Science in Industrial Education	10
Bachelor of Science in Industrial Arts	6
Bachelor of Education	2
Bachelor of Science in Elementary Education, Industrial Arts Education, Mechanic Arts, and Vocational Education	1 each
Bachelor's Degree Pending	1
Master of Education	27
Master of Arts in Education	25
Master of Science	10
Master of Science in Education	8
Master of Arts (AM)	8
Master of Science in Industrial Education	6
Master of Arts in Industrial Arts, Industrial Education, Science in Industrial Arts, Science in Industrial Arts Education, and Science in Vocational Education	1 each
Master's Degree Pending	3
Doctor of Philosophy	11
Doctor of Education	10
No Degree Offered	11

* Based on data covering 200 institutions.

Department, but while it is more likely to be in a School or College of Education than in any other single institutional subdivision, it is less likely to be classified under Education than under some alternate grouping.

The department has five faculty members, with a head who ranks as professor, one associate professor, one assistant professor, and two instructors. These men deal with about one hundred industrial arts majors, some full-time, and some part-time students, reasonably equally divided. It is not likely that there is a graduate program, for only one

INDUSTRIAL ARTS TEACHER EDUCATION

Table 4
FREQUENCY OF INDUSTRIAL ARTS
CURRICULUM OFFERINGS*

OFFERING DESIGNATION	INSTITUTIONS OFFERING		SEMESTER HOURS OFFERED PER SCHOOL			MEAN NO. QUARTER HRS. OR EQUIV. PER SCHOOL
	No.	Per Cent	Mean No.	Max.		
				Min. No.	No.	
Woods	190	96.8	18.9	3	40	28.4
Mechanical Drawing	190	96.8	14.0	2	111	21.0
Metals	184	94.0	14.3	1	110	21.4
Electricity	133	67.8	7.8	1	78	11.7
Professional Courses	127	64.8	10.7	2	45	16.1
General Shop	120	61.3	5.0	1	27	7.5
Crafts	120	61.3	5.1	1	22	7.7
Graphic Arts	93	47.4	10.4	1	71	15.6
Other Courses	162	82.7	18.7	1	285	28.0
TOTAL	190		18.1	16	516	27.2

* Approximately 15,500 semester hours course offerings in United States. 27 schools count technical work for graduate credit. This averages 17.5 semester hours; 74 schools offer professional graduate credit, averaging 23.5 semester hours.

Table 5
"TYPICAL" LABORATORY SIZE AND EQUIPMENT VALUE

TYPE OF LABORATORY	APPROXIMATE SQUARE FOOTAGE EACH AREA	APPROXIMATE VALUE EQUIPMENT EACH AREA
Metals	4,800	\$63,000
Woods	3,800	15,000
General Shop	2,800	13,000
Graphic Arts	2,500	21,000
Electricity	1,800	9,500
Drawing	1,800	4,600
Crafts	1,700	12,000
Other Areas	4,100	10,000

in three institutions has such a program. If one exists, it is handled by the regular staff, and has ten graduate students pursuing work.

The staff members' professional preparation is most likely to include the attainment of a master's degree. Less than one-half the departments have a staff member possessing a doctor's degree. Instructors may have a master's degree — many do not.

This typical program offers a total of 105 semester hours of work and includes 19 hours of woods, 14 hours each of drawing and metals, 11 hours each of graphic arts and professional courses, 8 hours of electricity, and 5 hours each of crafts and general shop. Other courses, in which transportation experiences predominate, total 18 semester hours. This program leads to a bachelor of science degree, usually designated as bachelor of science in education. If a master's degree is offered, it is probably a master of arts in education or a master of education degree.

Data Regarding Facilities

The typical laboratory possesses an area of 14,000 square feet and houses equipment valued at \$112,000. If all the areas listed are included, the square footage of space is 23,000, and the equipment valuation is \$148,000. These laboratories are divided in order of size, and equipment value as shown in Table 5. Each student currently enrolled has the use of about 230 square feet of space and, pro rata, an equipment expenditure of \$1,500.

Twenty-five of the two hundred institutions did not report space devoted to industrial arts. Of 200 institutions, 87 per cent devote space to woods, 70 per cent to metals, 59 per cent to drawing, 37 per cent to general shop, 33 per cent to electricity, 30 per cent to graphic arts, 21 per cent to crafts, and 53 per cent to other areas.

Metals and woods occupy 50 per cent of the total space devoted to industrial arts. The minimum floor area listed for any department is 1,500 square feet, which represents only 2 per cent or one fiftieth of the maximum which is 75,340 square feet. This range exhibits a considerable variation in facilities and is portrayed in detail in Table 6.

Twenty-nine of the two hundred institutions did not report values of industrial arts equipment. 85 per cent, therefore, did report values. Of the 200 institutions, 64 per cent indicate equipment values of metals areas; 64 per cent, values of woods areas; 26 per cent, of graphic arts; 38 per cent, of general shop; 27 per cent, of electricity; 54 per cent, of mechanical drawing; 14 per cent, of crafts; and 44 per cent, of other equipment. The percentage of total equipment value devoted

Table 6
INDUSTRIAL ARTS LABORATORY
SPACE ALLOTMENT

LABORATORY TYPE	NO. REPORTING OF 196	TOTAL SPACE		SQ. FT. FLOOR SPACE		
		Sq. Ft. Per Area	Per Cent	Mean	Min.	Max.
Metals	136	654,059	28%	4,809	250	32,888
Woods	139	524,680	22%	3,774	400	31,136
Drawing	116	205,673	9%	1,773	500	13,200
General Shop	72	198,613	8%	2,760	650	10,150
Graphic Arts	59	148,292	7%	2,513	432	17,500
Electricity	64	116,955	5%	1,821	192	9,900
Crafts	41	51,159	2%	1,650	200	7,500
Other Areas	103	427,853		4,154	200	22,275
TOTAL REPORTED IN AREAS		2,327,284				
TOTALS (OVERALL)		170	2,407,520	14,162	1,500	75,340
Mean area when sum of means of all represented areas is taken				23,254		

to each area reveals that the highest cost is that of metals equipment. This is 59 per cent of the total, or more than all others combined.

A combined laboratory space of 23,000 square feet, and an equipment valuation of \$148,000 provide a mean equipment expenditure of \$6.44 per square foot of space. This figure might be added to regional per square foot building costs, and the resultant sum should provide a suggestion of the total cost per square foot of a typical laboratory. As indicated in Table 7 programs vary so widely in estimated value that the minimum listing reported only \$3,300, which represents .13 per cent or one seven-hundred-fiftieth of the equipment expenditure in the maximum listing, which was \$2,500,000.

In 1951 it is just as appropriate to state as did the 1948 *Directory* that "Industrial Arts is stronger than ever before, as witness: (1) the growth in teacher education staffs, (2) the consolidation represented by the general acceptance of the term *industrial arts*, (3) the material

Table 7
INDUSTRIAL ARTS LABORATORY EQUIPMENT VALUE REPORTED

LABORATORY TYPE	NO. REPORTING OF 200	TOTAL VALUE		VARIATION IN VALUE		
		By Areas	Per Cent	Mean	Min.	Max.
Metals	126	\$7,988,979	59%	\$63,405	\$ 600	\$1,950,000
Woods	126	1,890,977	14%	15,008	2,012	75,000
Graphic Arts	50	1,068,581	8%	21,372	2,000	75,000
General Shop	75	941,362	8%	12,551	737	150,000
Electricity	52	498,256	4%	9,582	100	100,000
Mechanical Drawing	105	482,887	4%	4,599	250	74,000
Crafts	28	331,488	3%	11,839	250	200,000
Other Equipment	86	859,363		9,993	300	73,000
<hr/>						
TOTAL REPORTED IN AREAS	126	\$13,730,405				
TOTAL OF ALL REPORTING	163	\$18,248,702		\$111,955	\$3,300*	\$2,500,000**
					*(Actual Minimum Value Reported)	
					**(Actual Maximum Value Reported)	
<hr/>						
Mean value when sum of mean values of all represented areas is taken \$148,349						
Composite Derived Value of Minimum Program \$6,249						
Composite Derived Value of Maximum Program \$2,697,000						

increase in higher academic degrees held by educators in this field, (4) higher degrees offered to students at many institutions, and (5) the improved status of our teachers as reflected by a greater number holding the professorial ranks." An even greater emphasis may be drawn from the recent biennial survey made by the United States Office of Education* in which it is indicated that among all the broad subject

**Biennial Survey of Education in the United States - 1948-50*, Chapter 5.
United States Office of Education, Washington D. C. 1951, page 28.

matter fields industrial arts has enjoyed the greatest percentage increase in high school enrollment during the fifteen year period from 1934 to 1949. It is indeed significant that in this respect industrial arts is equaled by only one other subject matter area and is exceeded by none. It is sobering to reflect, however, that this accomplishment in expanding the high school industrial arts enrollment has been achieved under severe handicaps, and that the total dollar expenditure for all industrial arts teacher education equipment in the United States is approximately the same as that spent for two inter-continental bombers. Some institutions devote only one staff member and as little as \$3,300 worth of equipment and 1,500 square feet of space to industrial arts.

Professional advancement in the field of industrial arts demands a new sense of mission, the envisioning of new goals, and a renewed devotion to the ideal of industrial arts opportunities for all American youth.

INVENTORY-ANALYSIS DIRECTORY*

ALABAMA POLYTECHNIC INSTITUTE

Auburn, Ala.

Industrial Arts Education, Department of Engineering Shops, School of Engineering Sestablished 1928. Degrees granted: B.S.E., M.Ed, 6 full-time majors.

STAFF: (6)

Head Prof. D. T. Jones	Instr. D. G. Sandow, B.S.
Asst. Prof. L. J. Haynes, B. S.	Mechanician W. T. Bryant and
Asst. Prof. W. H. Stoves, M. S.	Mechanician R. A. Patterson

Average years in teacher education, 7.3

Average years in public school teaching, 3.7

UNDERGRADUATE OFFERINGS

	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5		
Mechanical Drawing	4		
Woods	6	8,400	\$ 35,000
Metals	24	25,200	244,000
Shopwork for Elementary Teachers	5		
Total	44	33,600	\$279,000

GRADUATE OFFERINGS

Materials of IA	5
Organization of Shop Courses	5
Industrial Arts Design	5
Research and Thesis	5
Total	20

SPECIAL FEATURE

The Industrial Arts Major and Minor in Education is administered by Department of Engineering Shops in the School of Engineering.

TUSKEGEE INSTITUTE,

Tuskegee Institute, Ala.

Industrial Education Department, School of Mechanical Industries, established 1928. Degree granted: B.S. 150 full-time majors.

STAFF: (14)

Dean T. W. Jones, M.S.	Instr. I. C. Cahill, A.B.
Dept. Head & Assoc. Prof. W. McEnge, M.A.	Instr. W. G. Gaiter, M.A. Instr. M. Love, B.S.
Assoc. Prof. I. L. Guzman, M.S.	Instr. O. L. McDonald, B.S.
Asst. Prof. R. B. Collins, B.S.	Asst. Instr. S. Alexander, B.S.
Asst. Prof. G. B. Love, B.S.	Asst. Instr. R. Ford
Head Instr. C. F. Davis, B.S.	Asst. Instr. S. B. Hudson, B.S.
Head Instr. M. W. Freeman	

*Key to abbreviations used in this section may be found in Appendix I, page . Where possible all *Special Feature* descriptions were recorded from questionnaire forms as received.

Average years in teacher education, 11.3

Average years in public school teaching, .14

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	9	4,360	\$ 3,132
Mechanical Drawing	9	5,011	855
Woods	57	16,453	7,243
Metals	60	9,364	4,965
Graphic Arts	53	8,259	35,633
Electricity (electronics)	53	7,761	7,440
Plastics	53		
Ceramics	Optional		2,820
Transportation	53	7,307	8,736
House and Furniture Painting	4	3,040	1,020
Total	351	61,555	\$71,432

SPECIAL FEATURE

Each student enrolled in Industrial Education must complete:

1. Two years of trade training in a unit shop
2. One (off-campus) three month period of Industrial internship to receive trade experience.
3. Three months of off-campus practice teaching in either a general shop or a unit shop.

COLLEGE OF EDUCATION, THE UNIVERSITY OF ALABAMA

University, Ala.

Industrial Arts Education Department, established 1927. Degree granted: B.A.E. 84 full-time majors.

STAFF: (2)

Chairman & Assoc. Prof. R. R. Schmitz, M.S.

Asst. Prof. H. D. Clark, Ed.D.

Average years in teacher education, 20.

Average years in public school teaching, 5.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4	9,600	\$185,000
Mechanical Drawing	4		
Woods	8	4,000	65,000
Metals	10		
Electricity (electronics)	2		
Handicrafts	6		
Applied Mathematics	2		
Bookbinding	2		
Total	38	13,600	\$250,000

SPECIAL FEATURE

Directed observation and practice teaching of three to six semester hrs.

ARIZONA STATE COLLEGE**Flagstaff, Ariz.**

Department of Industrial Arts and Industrial Education, established 1916. Degrees granted: B.A., B.S., B.S.E., M.A.E.. 48 full-time majors, 12 full-time graduate students.

STAFF: (3)

Prof. & Dept. Head F. C. Osborn, M.A. Assoc. Prof. H. O. Bjerg, B.A.
Assoc. Prof. M. T. Lewellen, M.E.

Average years in teacher education, 17.7

Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS*	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	22	8 875	\$ 9,500
Woods	16	1,800	10,500
Metals	23	4,000	19,800
Handicrafts	12	750	1,800
Applied Mechanics	3		
Elements of Mechanisms	3		
Problems in Upholstering	2		
Historic Furniture	3		
Home Mechanics	2		
Industrial Arts Design	2		
Eng. Materials & Processes	2		
Calculations	2		
Org. & Teaching of IA Courses	3		
Project Analysis	3		
Shop Planning & Org.	3		
The Gen. Shop & the Teaching of IA	3		
Total	107	7,425	\$41,600

GRADUATE OFFERINGS*

Evening Schools — Org. & Mgt.	2
Financial Org. & Mgt. of T & I	2
Public Relations in VE	2
Arch. Prob. & Course Const.	3
Curriculum Procedures in IE	2
The Phil. & Org. of the Gen. Shop	2
IA for the Elementary School	3
Legal & Industrial Relations of Vocational Education	2
Total	18

*These courses are offered in part for the first time starting with the 1951 Summer Session.

SPECIAL FEATURE

Our program includes the official Teacher-Training Program in Trades and Industries for Arizona. This program operates under the assistance and approval of the State Department of Vocational Education.

ARIZONA STATE COLLEGE**Tempe, Arizona**

Department of Industrial Arts and Technology, established 1895. Degrees granted: B.A.E., B.S., M.A.E. 1,347 full-time majors, 50 full-time graduate students.

STAFF: (12)

Prof. & Dept. Head L. S. Neeb, M.A.	Asst. Prof. C. Merritt, M.A.
Prof. M. C. Ensign, M.A.	Instr. K. W. Burk, M.A.
Asst. Prof. W. A. Cavalliere, M.A.	Instr. J. C. Douthit, M.A.
Asst. Prof. J. W. Elmore, M.S.	Instr. L. E. Finley, M.A.
Asst. Prof. J. B. Goodwin, M.S.	Instr. L. B. Kaufman, M.S.
Asst. Prof. M. Keith, M.A.	Instr. F. Vihel, M.A.

Average years of teacher education, 4.5

Average years in public school teaching, 8.2

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6		
Mechanical Drawing	111	4,000	
Woods	27	6,825	
Metals	51	8,095	Not
Electricity (electronics)	78	7,750	
Plastics	9	4,095	
Transportation	24	4,480	Given
Communication	9		
Aeronautics	38		
Building & Construction	57		
Pre-Professional Engineering	24		
Professional IA	16		
Total	450	35,245	\$

GRADUATE OFFERINGS:

Micro-Wave Techniques	3
Radio-Frequency Tests & Measurements	3
Steel Square & Roof Framing	3
IA for Elem., Kindergarten- Primary Teachers	3
Geometry of the Steel Square	3
Estimating & Contracting	6
Metal Work for Jr. High School Teachers	3
Aeronautical Instructional Materials	2
Aeronautical Equip. Design	2
Broadcast Station Operation & Maintenance	3
Supervision & Adm. of IA	3
Utilities Service	3
Communication Circuit Anal.	3
Mechanical Equip. in Arch.	3
Adv. Broadcast Techniques	3
Structural Drafting	3
Steel Fabrication Design	3
Advanced Route Surveying	3
Preflight Aeronautics for Teachers & Laymen	3
History of Architecture	6

Beaux Arts Atelier	6
Practical Application of Building Materials	3
Home Building	3
Building Design	6
Individual Problems	6
Materials & Meth. of Const.	3
Seminar in IA Education	<u>3</u>
Total	94

SPECIAL FEATURE

This department has made it a practice that for all theory involved in the teaching of subject matter, there shall be an immediate practical application of the same. Theory and practice go hand in hand. Strenuous efforts are made at all times to develop creative ability, stimulate individuality in design, provide an adequate insight, and to teach the students the intelligent use of equipment. Emphasis is also given to the development of the need for, an understanding of, and appreciation for, a fine spirit of cooperation and good-will so necessary to insure harmony in shop undertakings and secure unity of effort. Teacher training is a serious matter with us. We believe that to be a good industrial arts teacher, a man should also be able to work on a level commensurate with the requirements of those working in industry or at least be able to command the respect and confidence of the journeyman worker.

ARKANSAS AGRICULTURAL & MECHANICAL COLLEGE

College Heights, Ark.

Industrial Education Department, Division of Technical Training, established 1947. Degree granted: BSIE. 60 full-time majors.

STAFF: (3)

Dept. Head & Assoc. Prof. E. R. Glazener, M.Ed.

Assoc. Prof. B. E. Hart, B.S.E.

Instr. R. W. Wallis, M.E.

Average years in teacher education, 12.8

Average years in public school teaching, 5.7

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	1,650	Not Avail.
Mechanical Drawing	14	1,625	" "
Woods	11		
Metals	9	1,450	\$150,000
Electricity (electronics)	3		
Handicrafts	3	800	Not Avail.
Guidance	3		
History, Dev. & Practices in IE	3		
Methods of Teaching IE	3		
Visual Aids & Methods of Teaching			
Mech. & Mchn. Drawing	3		
Shop Org. & Administration	<u>3</u>		
Total	61	5,525	\$300,000

SPECIAL FEATURE

The college is located in the fastest growing southern yellow pine area of the U.S. Furniture factories, sawmills, cooperage plants, aluminum mfg. establishments (Ark. produces 94% of the U.S. supply of aluminum) and other industries are near which afford an opportunity for excellent field trips and other outside instruction. Although the graduates satisfy requirements for teaching, the majority go into industry with a good general industrial background from the I. E. Dept. and supporting depts. such as Business and Economics.

ARKANSAS STATE TEACHERS COLLEGE**Conway, Ark.**

Industrial Education Department, established 1917. Degree granted: BSE. 35 full-time majors.

STAFF: (3)

Assoc. Prof. E. W. Packard, M.A.;

Asst. Prof. C. B. Ainsworth, M.S.

Instr. V. N. Hukill, M.S.

Average years in teacher education, 5.3

Average years in public school teaching, 5.5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	15	1,125	\$ 1,292
Woods	18	31,136	11,900
Metals	27	30,935	32,888
Ind. Ed. for Elem. Grades	4		
Hist. of Ind. Ed.	3		
Home Mechanics	6		
Materials and Techniques in Ind. Ed. (Lecture & Projection Room)	3		
(Other Space)		1,000	1,130
		<u>11,144</u>	<u>7,790</u>
Total	76	75,340	\$55,000

AGRICULTURAL, MECHANICAL & NORMAL COLLEGE (I.i.)**Pine Bluff, Ark.**

Industrial Arts Education, Division of Mechanic Arts. Degree granted: BS.

STAFF: (13)

Director & Asst. Prof. M. T. Puryear, M.A.

Asst. Prof. A. A. Holback, M.A.

Asst. Prof. R. T. Lockman, M.A.

Instr. M. A. Blakely, B.S.

Instr. J. J. Coleman, B.S.

Instr. M. B. Curry, (n.d.)	Instr. C. W. Hall, M.S.
Instr. G. O. Henderson, B.S.	Instr. E. K. Patterson, B.S.
Instr. H. W. Pennymon, M.A.	Instr. J. R. Seawood, M.S.
Instr. B. D. Shumate, (n.d.)	Instr. L. W. Waddy, M.S.

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	24		
Woods	55		
Metals	165		
Electricity (electronics)	55		
Transportation	55		
Communication	55		
Brickmasonry	55		
Materials & Estimating	6		
Painting & Decorating	58		
Plumbing	55		
Tailoring	81		
Total	664	(n.a.)	(n.a.)

ARKANSAS POLYTECHNIC COLLEGE**Russellville, Ark.**

Industrial Education Department, Division of Education, established 1950. Degrees granted: BAE, BSE. 9 full-time majors, 2 part-time majors.

STAFF: (1) Asst. Prof. V. R. Faulds, M.Ed.

Years in teacher education, 3.

Years in public school teaching, 2.

UNDERGRADUATE OFFERINGS	Sen Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	1,600	\$ 5,000
Mechanical Drawing	6	*1,600	* 5,000
Woods	4	*8,000	* 25,000
Metals	4	*4,000	* 100,000
Electricity (electronics)	3		
Design	4		
Tools and Materials	3		
Methods	3		
Curriculum Construction	3		
History and Philosophy of IE	3		
Administration of IE	3		
Total	44	15,200	\$135,000

*Shared with Veteran's Training.

PACIFIC UNION COLLEGE**Angwin, Calif.**

Industrial Arts Department, established 1945. Degree granted: BSE. 74 full-time majors.

STAFF: (7)

Assoc. Prof. & Dept. Head R. E. Fisher, Ed.M.

Instr. C. E. Black, B.A.

Instr. L. C. Christensen, B.A.

Instr. J. E. Craver, B.A.

Instr. D. A. Edge, B.S.

Instr. G. H. Jeys

Instr. D. J. Truitt, B.S.

Average years in teacher education, 4.6

Average years in public school teaching, 8

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	28	400	
Woods	33	2,250	
Metals	24	4,350	Not
Graphic Arts	40	2,000	
Electricity (electronics)	15	1,000	
Plastics	2		Avail.
Ceramics	2		
Handicrafts	5		
Transportation	15		
Total	164	12,000	

SPECIAL FEATURE

Our program here at Pacific Union College is somewhat unique in that there is a close correlation between the Industrial Arts offerings and Vocational Training of a college level. We believe in rather a heavy emphasis on "skills" even for Industrial Arts majors.

CHICO STATE COLLEGE**Chico, Calif.**

Industrial Arts Department, Practical Arts Division, established 1926.
Degrees granted: BAE, MAE. 88 full-time majors, 17 full-time graduate students.

STAFF: (5)

Prof. & Dept. Head E. E. Siro, Ph.D.

Assoc. Prof. R. B. Kidder, M.S.

Asst. Prof. L. B. Landis, A.B.

Asst. Prof. C. B. Page, M.S.

Instr. L. E. Brandstatt, M.S.

Average years in teacher education, 13.5

Average years in public school teaching, 5.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12	1,800	\$ 3,000
Woods	18	12,776*	25,000
Metals	29	4,416**	35,000**
Graphic Arts	3		
Electricity (electronics)	7	1,216	6,000
Plastics	2		
Ceramics	8		
Handicrafts	6		

Transportation	12		\$ 8,000
Communication	3		
Pattern Making	2		
Concrete & Cement	2		
Manufacturing Processes	3		
Industrial Arts Design	2		
Metal & Wood Finishing	2		
Special Problems	1-2		
		<hr/>	<hr/>
Total	113	20,208	\$77,000

* The floor area of 12,776 Sq. Ft. includes Wood Shop, Machine Shop, and Auto Shop.

** The floor area of 4,416 Sq. Ft. includes Welding, Foundry, Forging, Sheet Metal, Art Metal, Plastics, Lapidary, & Graphic Arts. The equipment value of \$35,000 also includes the Machine Shop.

GRADUATE OFFERINGS	Semester Hours
The General Shop & Its Problems	3
Seminar in IE	3
Shop Planning & Organization	3
Adm. & Supervision of IE	3
New Media & Equip. in the IE Field	3
	<hr/>
Total	15

SPECIAL FEATURE

The department offers two year terminal courses in Industrial Arts, Drafting, and Auto Mechanics; special credentials to vocational industrial teachers who teach Industrial Arts; and four year Vocational Arts Degree to Vocational Industrial teachers.

FRESNO STATE COLLEGE

Fresno, Calif.

Department of Industrial Arts, established 1947. Degrees granted: BAE. 155 full-time majors, 7 part-time majors, 8 full-time graduate students, 9 part-time graduate students.

STAFF: (8)

Dept. Head & Prof. M. A. Grosse, A.M.	Asst. Prof. W. H. Bliss, M.A.
Assoc. Prof. H. O. Schorling, Ed.D.	Asst. Prof. D. J. Dettinger, M.S.
Asst. Prof. W. J. Dunning, M.S.	Asst. Prof. C. Feuches, M.S.
Asst. Prof. G. B. Noakes, A.B.	Instr. F. E. Schroeter, M.S.

Average years in teacher education, 6.5

Average years in public school teaching, 8.2

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	9		
Mechanical Drawing	14	2,760	\$ 7,000
Woods	25	3,680	25,000
Metals	40	8,360	145,000
Graphic Arts (starting new lab. spring 1952)		2,400	22,000

UNDERGRADUATE OFFERINGS (cont'd)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Electricity (electronics)	9	2,880	\$ 10,000
Handicrafts	12	4,600	15,000
Transportation	10	3,360	20,000
Professional Courses (Teaching Aids Lab., including 150 cap. auditorium, dark room, etc.)	6		
		2,300	10,000
Total	125	30,340	\$257,000

GRADUATE OFFERINGS

Seminar, Problems in IA	2
Special Studies	1-5
Total	7

SPECIAL FEATURE

The program at the Fresno State College is geared to meet the needs of the San Joaquin Valley. This program has been functioning for a little over 4 years starting with a nucleus of approximately 175 students taking courses and 40 majors in our field and has grown continuously every semester to the present enrollment of approximately 680 students and 150 majors. We also have approximately 30 majors who are working on a technical credential in one of 4 areas that have been set up—metal, construction area, drawing, and automotive transportation. These men are being placed 100% on completion of their 4 year's work. We are watching our curriculum very closely and making careful studies of changes and revisions in all our various courses. Graduate work is offered for general secondary credential.

SAN DIEGO STATE COLLEGE**San Diego, Calif.**

Department of Industrial Arts, Division of Physical Science, established 1948. Degrees granted: (BSE pending). 100 full-time minoring students.

STAFF: (3)

Chairman & Assoc. Prof. K. Phillips, Ph.D.

Asst. Prof. L. W. Luce, M.S.

Tech. Asst. S. Busby, (n.a.)

Average years in teacher education, 3

Average years in public school teaching, 13.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop*	5		
Mechanical Drawing	15	1,600	\$ 2,500
Woods	15	800	5,000

* A college-wide General Education course.

Metals	19	2,300	\$20,000
Electricity (electronics)	6	300	2,000
Transportation	3	500	4,000
(Offices and Lecture Rooms)		1,000	2,000
	<hr/>	<hr/>	<hr/>
Total	63	6,500	\$35,500

GRADUATE OFFERINGS (Extension only)

IA Org. & Mgt.	2
Recent Trends in IAE	2
Total	<hr/> 4

SPECIAL FEATURE

All technical courses are taught with constant emphasis upon the way that its area would be taught in the Junior and Senior High School situation. Teaching of the area as it would be done in the public schools is an integral part of every course. Construction is under way on the new Industrial Arts Building to be ready by September 1952. The floor space will be allocated according to areas as follows: Woodworking, 3,000 sq. ft.; General Shop, 1,700 sq. ft.; Graphic Arts, 2,033 sq. ft.; General Metals, 3,040 sq. ft.; Transportation, 3,000 sq. ft. (plus outside area); Radio & Electricity, 1,700 sq. ft.; Drafting Room, 2,000 sq. ft.; Display area, locker rooms, offices, 2,500 sq. ft.; General storage, 2,000 sq. ft.; Lecture Room, 1,500 sq. ft.; with a total area of 22,473 sq. ft. New equipment will be purchased to supplement what is now available; \$40,000 will be spent for this purpose.

SAN FRANCISCO STATE COLLEGE**San Francisco, Calif.**

Field of Industrial Arts, The Division of Creative Arts, established 1950. Degree granted: BA. 27 full-time majors.

STAFF: (2)

Director D. W. Nichols, M.S.

Asst. Prof. R. M. Savage, M.A.

Average years in teacher education, 5

Average years in public school teaching, 12.5

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8	Now in temporary quarters.	
Mechanical Drawing	10	New building under construction.	
Woods	12	The Arts and Industries Building to cost	
Metals	8	\$1,000,000. Also use	
Graphic Arts	12	facilities in the community	
Electricity (electronics)	6	—City College and other	
Plastics	2	schools.	
Ceramics	6		
Transportation	4		
Work Experience in Industry	4		
Institutional Production	2		
Minor Problems	1-3		
	<hr/>	<hr/>	<hr/>
Total	77	10,000	Not Avail.

GRADUATE OFFERINGS (being developed and not announced)

	Semester Hours
Laboratory Planning	2
Theory & Org. of the Gen. Shop	3
Preparation of Resource Units for the IA Program	3
Practicum in IAE	2
Directing Work Experiences	2
Seminar in IAE	2
Graduate Problem in IAE	11-3
Total	17

SPECIAL FEATURE

Our program is planned to prepare a well-balanced industrial arts teacher after they have been selected as likeable candidates. The major is preceded by a general education program of 45 units. Each course is outlined by a resource unit and the course of study of each student becomes different as can be determined by their previous experiences.

SAN JOSE STATE COLLEGE

San Jose, Calif.

Division of Industrial Arts, Applied Arts Division, established 1912. Degrees granted: BAE, MAE. 243 full-time majors, 102 part-time majors, 40 full-time graduate students.

STAFF: (16)

Director & Prof. H. A. Sotzin, Ph.D.	Assoc. Prof. J. Aspinwall, A.M.
Assoc. Prof. C. B. MacLean, A.M.	Assoc. Prof. B. W. Spaulding, M.A.
Assoc. Prof. J. E. Stevenson, M.A.	Asst. Prof. D. T. Burbank, A.B.
Asst. Prof. J. N. Casey, M.A.	Asst. Prof. G. G. Peterson, M.A.
Asst. Prof. G. D. Van Arsdale, M.S.	Instr. A. C. Centanni, A.B.
Instr. W. E. Champion, M.A.	Instr. F. Crofut, A.B.
Instr. R. P. Johnson, A.B.	Instr. D. C. Lopez, A.B.
Instr. G. Ohlson, A.B.	Instr. F. E. Peifer, A.B.

Average years in teacher education, 10.3

Average years in public school teaching, 5.1

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	47	2,600	\$ 5,000
Woods	28	5,000	35,000
Metals	41	5,000	85,000
Graphic Arts	57	1,500	35,000
Electricity	8	1,460	7,500
Plastics	3		
Transportation	15	2,000	10,000
Applied Mathematics	6		
Concrete and Cement-	6		
Professional Courses	30		
Watchmaking & Engraving	90	1,000	30,000
Total	331	18,560	\$207,500

GRADUATE OFFERINGS

Quarter Hours

Special Problems	By Arr.
Adv. Auto Mechanics	5
Spec. Prob. in Forg. & Weld.	3
Tool & Die Work	5
Spec. Prob. in Woodwork	5
Safety Ed. & Accident Prev.	3
Spec. Drafting Prob.	5
Electricity	3
Spec. Prob. in Metal Work	5
School Shop Plan. & Org.	3
IA Technical Research	155
Master's Thesis and/or Proj.	5
Driver Education	3
Directed Teaching in IA	By Arr.
Secondary School IA	3
Elementary School IA	3
Total	66 plus those by arrangement.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA COLLEGE

Santa Barbara, Calif.

Department of Industrial Arts, Division of Applied Arts, established 1909. Degree granted: BAE. 303 full-time majors, 100 part-time majors.

STAFF: (13)

Chairman & Prof. L. C. Monroe, Ed.D.

Prof. E. E. Ericson, M.A.

Prof. R. L. Soules, M.S.

Asst. Prof. D. E. Carlsen, M.S.

Asst. Prof. W. F. Holtrop, Ed.D.

Asst. Prof. R. K. Nair, Ed.D.

Asst. Prof. M. F. Richards, Ph.D.

Asst. Prof. J. J. Sayovitz, M.S.

Asst. Prof. K. A. Seefeld, Ed.D.

Asst. Prof. L. S. Taylor, M.A.

Instr. T. S. Ellenwood, M.A..

Instr. J. M. Groebli, M.S.

Instr. F. M. Haight, M.S.

Average years in teacher education, 10.2

Average years in public school teaching, 6.4

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	20		
Woods	24	Not	Not
Metals	29		
Graphic Arts	24		
Electricity (electronics)	24	Itemized	Itemized
Handicrafts	6		
Transportation	3		
Total	133	70,000	\$2,500,000

ADAMS STATE COLLEGE

Alamosa, Colo.

Division of Vocations and Industrial Arts, established 1947. Degree granted: BAE. 12 full-time majors, 2 part-time majors.

STAFF: (1)

Asst. Prof. R. M. Armagast, Ed. M.

Years in teacher education, 4

Years in public school teaching, 4

UNDERGRADUATE OFFERINGS

	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9		
Woods	9	2,616	\$3,500
Metals	9	2,072	5,500
Graphic Arts	2		
Electricity (electronics)	3		
Ceramics	4		
Handicrafts	21	1,024	850
Hist. & Phil. of IA Education	3		
Furniture Repair & Upholstery	3		
Sel. & Org. of Shop Practices	3		
Total	66	5,712	\$9,850

COLORADO AGRICULTURAL AND MECHANICAL COLLEGE

Fort Collins, Colo.

Department of Industrial Arts and Industrial Arts Education, School of Engineering, established 1928. Degrees granted: BSE, M.Ed. 75 full-time majors, 30 part-time majors, 8 full-time graduate students, 94 part-time graduate students.

STAFF: (4)

Prof. & Dept. Head G. F. Henry, M.A. Assoc. Prof. J. C. Dodge, B.S.
 Assoc. Prof. H. H. Kob, M.S. Asst. Prof. L. L. Gibbons, M. S.

(deceased)

Average years in teacher education, 12.5

Average years in public school teaching, 9.3

UNDERGRADUATE OFFERINGS

	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	12		
Woods	8	4,000	\$ 50,000
Metals	13	13,200	180,000
Electricity (electronics)	3		
Handicrafts	2		
IA Design	2		
Machine Tool Maintenance	2		
History of IA Education	5		
Problems of the IA Teacher	5		
Methods of Teaching IA	5		
Student Teaching, IA	9		
Instructional Aids	5		
Total	75	17,200	\$230,000

GRADUATE OFFERINGS

History of IA	3
Problems of the IA Teacher	3
Methods, IA Design	6

Research in IA	9
Seminar in IA	3
Advanced Methods in Woodwork, Art Metal, General Metal	15
Recent Developments in IA	3
Objectives in IA	3
Administration & Super. of IA	3
Org. of IA Lab. & General Shop	3
Job and Ed. Analysis	3
Methods of Teaching IA	3
Philosophy of IA	3
Total	<u>60</u>

SPECIAL FEATURE

Our slogan: "Practical Education at a Mile High Level".

COLORADO STATE COLLEGE OF EDUCATION Greeley, Colo.

Industrial Arts Division of the Arts, established 1891. Degrees granted: AB, AM. 107 full-time majors (125 summer session, 1950); 48 full-time graduate students (183 summer session, 1950).

STAFF: (7)

Chairman, Div. of the Arts & Prof. K. F. Perry, Ph.D.

Prof. C. T. Baab, Ed.D. Asst. Prof. J. B. Woodruff, A.M.

Prof. R. T. Bishop, A.M. Instr. F. E. Krubeck, A.M.

Asst. Prof. E. S. Carter, A.M. Instr. J. M. Lubbers, A.M.

Average years in public school teaching, (not avail.)

Average years in teacher education, (not avail.)

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	15	1,460	\$ 5,000
Woods	33	2,497	17,500
Metals	32	1,460	22,205
Graphic Arts	35	5,457	27,500
Electricity (electronics)	5		
Plastics	5		
Ceramics	6		
Handicrafts	8		
Industrial Arts Design	3		
Professional (Lecture) Courses (Lab. School Gen. Shop, Student Teacher Use)	35	976	700
Total	<u>180</u>	<u>2,276</u>	<u>7,500</u>
		<u>14,126</u>	<u>\$80,405</u>

GRADUATE OFFERINGS

Imp. of Inst. in the Arts	3
Materials of Industry	3
History of IA	6
Philosophy of IA	3
Prin. of Gen. Shop Org.	3
Dev. of Inst. Aids in IA	3
Current Theory & Prac. in the Arts	3

GRADUATE OFFERINGS (cont'd)	Quarter Hours
Org. and Adm. of IA	3
Course Org. in IA	3
The Place of the Arts in Gen. Ed.	3
Adv. Theory & Prac. of Typog. Des.	9
Teaching Techniques & Course Organization in Bookbinding	6
Advanced Construction Problems	3
Contemporary Furn. Des. & Fabric.	5
The Arts in Recreation	3
The Use of New Materials	3
Advanced Art Metal	3
Advanced Gen. Metal Work	3
Industrial Arts Design	3
Intro. to Graduate Study	4
Seminar in IA	3
A critique of Modern IA	3
Indi. Studies in IA	4
Indi. Problems in IA	9
Teaching Tech. & Course Org. in Graphic Arts	3
Problems of Design in the Graphic Arts	3
Teaching Tech. & Course Org. in Woodworking	3
Problems in Woodworking	3
Teaching Tech. & Course Org. in Metalwork	3
Prob. of the Metal Shop	3
Prob. in Draft. & Plan.	6
Adv. Arch. Drafting	8
Thesis	8
Total	134

SPECIAL FEATURE

Industrial Arts is part of the Division of the Arts, including Fine Arts & Home Economics – eliminating overlapping of offerings.

WESTERN STATE COLLEGE**Gunnison, Colo.**

Department of Industrial Arts, Division of Health, Physical Education, Recreation and Practical Arts, established 1940. Degree granted: BAE. 49 full-time majors; 66 part-time majors.

STAFF: (2)

Head of Dept. & Prof. P. W. Wright, M.A.

Prof. W. W. Weare, M.A.

Average years in teacher education, 20

Average years in public school teaching, 8.5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	18	1,200	\$ 5,200
Mechanical Drawing	12	750	1,200
Woods	24	2,250	7,000
Metals	18	1,500	7,500
Electricity (electronics)	3		
Plastics	6		
Ceramics	6		
Handicrafts	18		
Total	105	5,700	\$20,900

TEACHERS COLLEGE OF CONNECTICUT **New Britain, Conn.**

Department of Industrial Arts Education, established 1935. Degree granted: BS. 116 full-time majors, 5 part-time majors.

STAFF: (6)

Chairman & Prof. P. N. Wenger, Asst. Prof. W. D. Chatfield, M.A.
Ed.D.
Asst. Prof. R. E. Bateson, M.A. Asst. Prof. T. I. Monteleone, Ed.D.
Asst. Prof. A. A. Caputo, B.S. Asst. Prof. W. F. Riley, M.Ed.

Average years in teacher education, 4.8

Average years in public school teaching, 10.8

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	12	900	\$ 2,800
Mechanical Drawing	12	882	2,500
Woods	12	918	3,450
Metals	12	900	2,000
Graphic Arts	12	900	10,500
Electricity (electronics)	12	500	800
Transportation	14	1,130	1,300*
IA in Elementary Education	4		
Teaching of IA	4		
Organization of IA	4		
History of IA	4		
Home Mechanics (Classroom)	4		
		470	
Total	106	6,600	\$23,350*

* Plus value of dual control car for Driver Training Laboratory.

SPECIAL FEATURE

The new million dollar Arts and Science Building now under construction will increase the shop floor areas to the following figures: General Shop, 1,508; Mechanical Drawing, 1,296; Woods, 1,632; Metals, 1,690; Graphic Arts, 1,448; Electricity, 1,040; Transportation, 3,198; and classroom, 837.

UNIVERSITY OF MIAMI**Coral Gables, Fla.**

Industrial Education Department, School of Education, established 1948. Degree granted: BE. 60 full-time majors, 10 part-time majors.

STAFF: (4)

Chairman & Asst. Prof. J. R. Instr. A. Dambaugh, (n.a.)
McElheny, M.S. Instr. W. Ishman
Asst. Prof. G. Mehallis, M.A.

Average years in teacher education, 2.8

Average years in public school teaching, 10.8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	12	1,600	\$ 8,500
Mechanical Drawing	12		
Woods	12	1,500	4,500
Metals	6	3,200	18,000
Electricity (electronics)	6		
Ceramics	6	800	1,500
Basic Design	16		
Leather Work	3		
Textiles	3		
Total	76	7,100	\$32,500

GRADUATE OFFERINGS

Problems in IE	3
IA Laboratory Planning	3
Total	6

UNIVERSITY OF FLORIDA

Gainesville, Fla.

Department of Industrial Arts and Vocational Education, College of Education, established 1934. Degrees granted: BAE, BSE, MAE, MEd, EdD. 80 full-time majors, 3 part-time majors, 19 full-time graduate students, 78 part-time graduate students.

STAFF: (5)

Prof. & Dept. Head W. R. Williams, Jr., Ph.D.

Assoc. Prof. H. K. Meyer, Ed.D. Asst. Prof. T. W. Strickland, M.A.E.

Asst. Prof. G. W. F. Neubauer, M.S. Instr. R. F. Bergengren, Jr., M.A.E.

Average years in teacher education, 6.2

Average years in public school teaching, 6

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	12	1,300	\$ 2,500
Woods	9	1,500	8,500
Metals	12	1,000	2,000
Handicrafts	12	1,300	3,000
Laboratory Planning & Maint.	3		
Theory & Practice in Teaching	12-15		
(Offices, Seminar Room & Storage)		1,400	1,000
Total	66	6,500	\$17,000

GRADUATE OFFERINGS

Hist. & Phil. of I & VE	3
School Shop Plan. & Equip. Sel.	3
Problems in IA & VE	3
Adv. IA Design	3
IA & Voc. Lab. Seminar	3 or 6
Handicrafts Seminar	3 or 6
Curriculum Development in IE	3 or 6
Total	30

FLORIDA SOUTHERN COLLEGE

Lakeland, Fla.

Industrial Arts Department, Division One - Arts, established 1938.
 Degrees granted: BA, BS. 30 full-time majors, 23 part-time majors.

STAFF: (2)

Asst. Prof. D. L. Readdick, M.A.

Asst. Prof. G. F. Zimmermann, Jr., B.S.

Average years in teacher education, 4.5

Average years in public school teaching, 0

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8	3,000	\$ 5,000
Mechanical Drawing	20		
Woods	16		
Metals	8		
Graphic Arts	12*		
Electricity (electronics)	4		
Handicrafts	6*		
Transportation	4		
IA Design	4		
Methods of Teaching IA	3		
Total	85	3,000**	\$ 5,000

* Offered in areas other than IA.

** To be increased by 1951-52 Session to approximately 12,000 Sq. Ft.

SPECIAL FEATURE

All college students are required to take 8 hrs. in each of four college divisions regardless of their major. It is through this arrangement that approximately 25% of all the men select Industrial Arts. Many girls elect the area. This arrangement gives ample opportunity to encourage those we judge capable to major in the area - likewise, the average student gets to understand more about the program.

We will be housed in a new physical plant next year designed by Frank Lloyd Wright.

FLORIDA AGRICULTURAL AND MECHANICAL COLLEGE (l.i.)

Tallahassee, Fla.

Department of Industrial Education, Division of Mechanical Engineering & Mechanic Arts. Degree granted: BS.

STAFF: (3)

Director and Assoc. Prof. M. S. Thomas, M.Ed.

Instr. J. M. Brown, M.A.

Instr. R. E. Webber, B.S.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	8		
Woods	6		
Metals	6		
Graphic Arts	6		

UNDERGRADUATE OFFERINGS (cont'd)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Electricity (electronics)	6		
Transportation	6		
Departmental Courses*	26		
Orientation & Practice Teaching	6		
Preparation of Inst. Materials	3		
Org. & Mgt. of the General Shop	3		
Teaching Methods for IA	3		
Total	79	(n.a.)	(n.a.)

* Student's choice of a trade; Automobile Mechanics, Building Construction, Cabinet Making, Carpentry, Ceramics, Electricity, Machine Shop, Masonry, Painting & Decorating, Plumbing & Heating, Printing, Radio, Sheetmetal & Roofing, or Tailoring.

FLORIDA STATE UNIVERSITY

Tallahassee, Fla.

Industrial Arts Education, Department of Arts Education, established 1949. Degrees granted: BAE, MSE. 32 full-time majors, 6 part-time majors, 1 full-time graduate student.

STAFF: (3)

Director & Instr. C. E. Burns, M.S. Instr. S. E. Sweet, M.E.

Instr. A. P. Newcomb, Jr., M.F.A. Instr. S. E. Sweet, M.E.

Average years in teacher education, 2.8

Average years in public school teaching, 6

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	18	4,000	\$10,000
IA in the Home	12		
IA in General Education	6		
Teaching of IA	2		
Applied Chemistry for IA	2		
Applied Physics in IA	2		
Advanced Design Laboratory	6		
Directed Individual Study	9		
Total	53	4,000	\$10,000

GRADUATE OFFERINGS

Materials of Industry	3
Curriculum Planning in IA	3
History & Philosophy of Arts Ed.	3
Arts Laboratory Planning & Selection of Materials & Equipment	3
Directed Individual Study	9
Study	4
Thesis	6
Total	31

SPECIAL FEATURE

We are preparing teachers for general shop instruction by giving them all of their shop experiences in a comprehensive shop in broad sequences which allow for combinations of materials and development of problems around large areas of interest. Our teacher education program

is a pattern for them to use as teachers, and we do not depend too much on theory—we call attention to what we are doing each day. Shop maintenance, design, planning, good teaching techniques, teaching aids — all are a part of the daily experiences of the pupils.

UNIVERSITY OF TAMPA**Tampa, Fla.**

Industrial Arts Department, established 1950. Degrees granted: BA, BS. (No. of students not avail.)

STAFF: (3)

Prof. & Dept. Head J. F. Bignell, M.A.

Instr. N. Borchardt, (n.d.)

Instr. A. J. Small, M.A.

Average years in teacher education, (n.a.)

Average years in public school teaching, (n.a.)

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	3,000	\$5,000
Mechanical Drawing	15		
Handicrafts	6		
Mechanism & Kinematics	3		
Total	30	3,000	\$5,000

UNIVERSITY OF GEORGIA**Athens, Ga.**

Industrial Arts Department, College of Education, established 1942. Degrees granted: BSE, MEd. 66 full-time majors, 15 part-time majors, 5 full-time graduate students.

STAFF: (3)

Head & Prof. O. S. Harrison, Ed.D.

Asst. Prof. J. M. Pollock, M.S.

Instr. V. C. Nix, B.S.

Average years in teacher education, 5.3

Average years in public school teaching, 2.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	10		
Mechanical Drawing	20	1,100	\$ 500
Woods	10	2,560*	3,080*
Metals	5		
Industrial Arts for Teachers (Classroom, Storage Rooms, Offices)	10	1,600	700
Total	55**	5,260	\$4,280

* Includes General Shop and finish room.

** Also three Education courses in Industrial Arts getting ready for apprentice teaching. Then a full quarter of apprentice teaching, making a total of 85 quarter hours.

GRADUATE OFFERINGS	Quarter Hours
Principles of IA	5
Organization of IA	5
Special Problems in IA	5
Administration of IA	5
Problems in T & IA	5
Total	<u>25</u>

GEORGIA TEACHERS COLLEGE**Collegeboro, Ga.**

Industrial Arts Department, Division of Fine and Practical Arts, established 1935. Degree granted: BSE. 75 full-time majors.

STAFF: (4)

Assoc. Prof. & Chairman Div. of Asst. Prof. E. C. Godfrey, M.S.
 F. & P. A., D. F. Hackett, M.E. Instr. J. R. Pelts, M.A.
 Assoc. Prof. J. H. Erickson, M.Ed.

Average years in teacher education, 2.6

Average years in public school teaching, 2.4

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	10	1,600	\$ 7,100
Mechanical Drawing	15	700	1,000
Woods	10		
Metals	15	1,710	17,250
Electricity (electronics)	5		
Design	3		
School Shop Planning	2		
Content & Methods	5		
Problems of Coordinator	5		
Selection & Org. of Subject Matter (Laboratory High School General Shop)	5	2,420	3,100
(Planning & Finish Rooms & Misc. Equipment)		700	1,900
Total	<u>75</u>	<u>7,130</u>	<u>\$30,350</u>

SPECIAL FEATURE

Our General Shop Course is a required course for every student who plans to graduate – it is a part of the core curriculum – general education. Every elementary teacher is also required to complete a course designed for elementary teachers.

All shop courses are conducted in general shops and all students (majors) actually participate in general shop classes.

THE BERRY SCHOOLS**Mount Berry, Ga.**

Industrial Arts Department, The Division of Mechanics and Industrial Arts, established 1940. Degree granted: BSE. 60 full-time majors.

STAFF: (5)

Chairman H. Keown, B.S. Instr. C. E. Prickett, B.S.
 Instr. H. C. Hibbs, B.S. Instr. J. R. Schwalbe, B.S.

Instr. T. E. Miller, M.S.

Average years in teacher education, 2.6

Average years in public school teaching, 2.2

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	20	750	\$ 500
Woods	18	2,400	10,000
Metals	16	2,400	10,000
Electricity (electronics)	3		
Transportation	8	750	3,500
Professional Courses	8		
General Shop Practice Teaching	2		
Total	75	6,300	\$24,000

SPECIAL FEATURE

All students required to work 16 hours per week for room and board.

All maintenance work on over 100 buildings done by these students.

Work assignment integrated with major interest in Industrial Arts program.

Approximately one-half of 1000 students remain in summer months to work in various school programs that will give tuition credit for following year.

NORTHERN IDAHO COLLEGE OF EDUCATION Lewiston, Ida.

Department of Industrial Arts; College of Education, established 1903.

Degrees granted: BAE, BSE. 70 full-time majors, 25 part-time majors.

STAFF: (2)

Dept. Head G. M. Satchwell, M.S. Instr. A. Stegeman, M.A.

Average years in teacher education, 7.5

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6		
Woods	21	4,250	\$15,000
Metals	9	3,125*	20,000*
Electricity (electronics)	3		
Plastics	3		
Handicrafts	6		
Transportation	6		
Theory	6		
Total	60	7,375	\$35,000

* Also includes other Crafts.

UNIVERSITY OF IDAHO Moscow, Ida.

Industrial Arts Education Department, School of Education, established

1950. Degree granted: BSE. 27 full-time majors.

STAFF: (1)

Asst. Prof. & Dept. Head G. V. Radcliffe, M.Ed.

Years in teacher education, 2.

Years in public school teaching, 17.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	6		
Woods	8	2,400	\$5,000
Metals	6		
Graphic Arts	4		
Electricity (electronics)	6		
Plastics	2		
Ceramics	6		
Handicrafts	9		
Transportation	2		
IA & General Education	3		
Org. & Adm. of IA Education	3		
IA Problems	3		
Course Making	3		
Vocational Guidance	3		
Total	67	2,400	\$5,000

SPECIAL FEATURE

We are using the other school's shops for training at the present time. Ours will have to be very much woodworking since it is the one that the University is weakest in. Please take into consideration that we are now setting up our shops for this Fall, 1951 term.

RICKS COLLEGE

Rexburg, Ida.

Department of Applied Engineering, Division of Farm & Home Science, established 1943. Degree granted: BS. 8 full-time majors, 103 part-time majors.

STAFF: (2)

Dept. Head K. E. Hart, M.Ed. Instr. M. G. Forsyth, B.S.

Average years in teacher education, 3

Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	30		
Woods	28	8,400	\$16,400
Metals	12		
Electricity (electronics)	3		
Transportation	42	1,600*	*
Upholstery	2		
School Shop & Its Org.	3		
Masonry	9		
General Farm Shop	16		
Industrial Arts Education	6		
Total	151	10,000	\$16,400

* For Aviation Mechanics we have contractual arrangement with local Airport

operator for teaching part on our campus and rest in his shop. He furnishes all laboratory equipment. (Airplane Hangar, 1,600 Sq. Ft.). Auto Mechanics and all other shop work taught in our shop, listed on previous page as wood shop.

SPECIAL FEATURE

It is our fundamental philosophy that students graduating in Industrial Arts must have well-rounded college education along with it. Our classes are purposely set up as part of our Academic curriculum.

SOUTHERN ILLINOIS UNIVERSITY

Carbondale, Ill.

Department of Industrial Education, College of Vocations & Professions, established 1913. Degrees granted: BSE, MSE. 185 full-time majors, 31 part-time majors, 3 full-time graduate students (15 minors), 8 part-time graduate students.

STAFF: (8)

Prof. & Chairman W. C. Bicknell,	Instr. J. J. Gunderson, M.A.
Ed.D.	Instr. W. A. Howe, M.S.
Prof. J. H. Schroeder, M.S.	Instr. M. E. Johnson, M.S.
Asst. Prof. R. W. English, M.A.	Instr. R. J. C. Kohler, A.M.
Instr. W. A. Benson, M.S.	

Average years in teacher education, (n.a.)

Average years in public school teaching, (n.a.)

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	44		
Woods	40	Not	Not
Metals	44		
Electricity (electronics)	4		
Plastics	4	Itemized	Itemized
Handicrafts	8		
Meth. of Teach. Rural & Elem. IE	4		
Prin. of T & I Teaching	4		
Org. & Adm. of IE	4		
Sel. & Org. of Subject Matter	4		
Total	164	15,000	\$30,000

GRADUATE OFFERINGS

Prin. of T & I Teach.	4
Org. & Adm. of IE	4
Sel. & Org. of Subject Matter	4
Special Investigations in IE	4
History & Philosophy of IE	4
Problems of Co-ordinator	4
Seminar in IE	4
Research in IE	3-6
Total	34

SPECIAL FEATURE

In keeping with our practice in this state of having teachers who teach $\frac{1}{2}$ day Vocational-Industrial Education and $\frac{1}{2}$ day Industrial Arts — our collegiate program does not segregate the two groups. Also we graduate more people with a major in Industrial Education to go into industry rather than teaching. We do not segregate these people from Industrial Arts and Vocational Industrial people on the advanced senior college level. Five years of experience in such a program leads me to believe it works to considerable advantage to all concerned — as determined by success of graduates in all three areas of work (Industrial Arts, Vocational Industrial Education, & Industry).

EASTERN ILLINOIS STATE COLLEGE**Charleston, Ill.**

Industrial Arts Education Department, established 1902. Degrees granted: BSE, MSE. 100 full-time majors.

STAFF: (7)

Prof. & Head W. A. Klehm, Ed.D. Asst. Prof. G. S. Duncan, Ed.D.

Prof. R. L. Landis, Ed.D. Instr. C. A. Elliott, M.Ed.

Assoc. Prof. E. W. Fowler, Ed.D. Instr. O. J. Quick, M.A.

Assoc. Prof. H. Gunderson, Ed.D.

Average years in teacher education, 10.6

Average years in public school teaching, 6.4

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4	960	\$ 3,236
Mechanical Drawing	12	720	1,213
Woods	22	2,520	10,138
Metals	24	2,280	18,885
Graphic Arts	12	1,440	15,277
Electricity (electronics)	4		
Handicrafts	12		
Housing	8		
Methods	8		
History of I & VE	4		
Student Teaching	16		
Industrial Arts Design (Class, Store-rooms, Lib. & Off.) (Plus War Surplus in all areas)	2	3,250	4,850
			15,618
Total	128	12,370	\$69,217

GRADUATE OFFERINGS

Course Making in IA	4
Tests & Meas. in IA	4
Total	8

SPECIAL FEATURE

Offering graduate work leading toward the degree of Master of Science in Education for the first time in the summer of 1951. More courses to follow later.

CHICAGO TEACHERS COLLEGE**Chicago, Ill.**

Department of Industrial Arts, established 1938. Degrees granted: BA, BAE, MAE. 74 full-time majors, 3 full-time graduate students.

STAFF: (2)

Dept. Head C. Hewitt, M.A. Instr. J. P. Byrne, A.M.

Average years in teacher education, 8

Average years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Woods	3	Physical Facilities Data Not Available	
Metals	3		
Electricity (electronics)	3		
Plastics	3		
Ceramics	3		
Handicrafts	3		
Methods	3		
Total	21		

SPECIAL FEATURE

Graduate program was discontinued during World War II. Only those who had started before that time are finishing now.

THE JAMES MILLIKIN UNIVERSITY**Decatur, Ill.**

Department of Industry, Division of Science, established 1903. Degrees granted: BAE, BSE. (MAE and MED pending). 90 full-time majors, 5 part-time majors.

STAFF: (4)

Assoc. Prof. & Dept. Head G. E. Snoeyenbos, B.A. Instr. W. L. Olsen, Jr., B.S.
Instr. F. E. Wilson, B.S.

Assoc. Prof. R. W. Rogers, M.S.

Average years in teacher education, 6.8

Average years in public school teaching, 3.6

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	14	1,600	\$ 2,000
Woods	12	4,000	24,000
Metals	19	5,700	232,000
Handicrafts	6	1,200	5,000
Testing Laboratory	2	900	20,000
Quality Control	2		
IA Education	2		
Industrial Education	2		
Special Problems	8		
Total	67	13,400	\$283,000

SPECIAL FEATURE

As the preceding resume' of our physical facilities indicates, we

SPECIAL FEATURE (cont'd)

specialize in preparing our graduate for work in the metal trades areas with enough outside courses to give him a desirably broad background. About half our graduates go into industry as supervisors or as trainees for supervisory jobs.

NORTHERN ILLINOIS STATE TEACHERS COLLEGE DeKalb, Ill.

Industrial Arts Department, College of Arts & Sciences, established 1909. Degree granted: BSE. 140 full-time majors.

STAFF: (5)

Assoc. Prof. & Head M. T. Oakland, M.A.

Assoc. Prof. P. E. Harrison, M.S. Asst. Prof. R. G. Kohler, M.A.

Asst. Prof. E. F. Edell, M.A. Asst. Prof. L. C. Secrest, M.A.

Average years in teacher education, 21.4

Average years in public school teaching, 2.4

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4	3,840	\$ 7,000
Mechanical Drawing	20	1,200	3,000
Woods	16	2,800	15,000
Metals	16	4,800	25,000
Graphic Arts	24	2,800	25,000
Electricity (electronics)	8	625	3,000
Handicrafts	8		
Power	4		
Freehand Composition	4		
Design	4		
Industrial Arts Teaching	16		
Laboratory Planning	4		
Philosophy of IA	4		
Problems in IA (Auxiliary)	4		
Total	136	10,935	22,000
		27,000	\$100,000

WESTERN ILLINOIS STATE COLLEGE**Macomb, Ill.**

Industrial Arts Department, established 1906. Degrees granted: BSE, MEd. 72 majors, 10 part-time majors.

STAFF: (4)

Associate Prof. & Dept. Head W. Instr. H. Griesenbrock, Jr., M.A.

Wetzell, M.S.

Instr. D. E. Reid, M.S.

Asst. Prof. R. F. Miller, M.A.

Average years in teacher education, 15

Average years in public school teaching, 3.2

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	16	4,000	
Mechanical Drawing	36	3,000	
Woods	16	7,200	

Metals	12	3,500	Not
Graphic Arts	12	3,500	Itemized
Electricity (electronics)	4		
Plastics	4		
Handicrafts	4		
Transportation	12		
Communication (Classrooms)	4	4,000	
Total	120	25,200	\$40,000 Approximately

ILLINOIS STATE NORMAL UNIVERSITY**Normal, Ill.**

Division of Industrial Arts Education, established 1903. Degrees granted: BSE, MSE. 110 full-time majors, 4 part-time majors, 6 full-time graduate students, 16 part-time graduate students.

STAFF: (7)

Director & Prof. R. M. Stombaugh, Ph.D.

Assoc. Prof. W. D. Ashbrook, Ph.D. Instr. R. G. Hammond, M.A.

Assoc. Prof. H. O. Reed, Ed.D. Instr. M. L. Honn, M.S.

Asst. Prof. C. M. Hammerlund, M.S. Instr. C. B. Porter, M.S.E.

Average years in teacher education, 9.7

Average years in public school teaching, 11.1

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
(General Shop)	-----	2,000	\$ 4,500
Mechanical Drawing	17	1,152	3,000
Woods	14	3,000	14,000
Metals	11	7,830	48,500
Graphic Arts	10	2,600	25,000
Electricity (electronics)	7	750	2,500
Handicrafts	4		
Transportation	3		
Communication	3		
Principles of Safety Education	3		
Problems in IA	2		
IA Laboratory	3		
Student Teaching & Methods	5-10		
Total	87	17,332	\$97,500

GRADUATE OFFERINGS :

Contemporary IAE	2
Prin. General Shop Org.	2
IA in the Elem. School	2
Materials & Meth. of Teach. Safety	2
Foundations of IE	3
Evaluation Techniques in IE	3
Seminar in IA	2
Improvement of Instruction in IA	3
Occupational & Job Analysis	2
Org. & Adm. of IE	3
Thesis or Research Project	2-4
Special Projects in IA	3
Total	31

SPECIAL FEATURE

In our course Special Projects in Industrial Arts, in addition to extending work experiences and developing advanced skills, we are attempting to treat with the historical, personnel practices, and local phases of the project or practice. Also the acquired information is expected to be organized and prepared for group instruction.

BRADLEY UNIVERSITY**Peoria, Ill.**

Industrial Arts Education, established 1897; Bennett College, established 1949. Degrees granted: BSIE, MSIE, DEIE. 350 full-time majors, 15 part-time majors, 30 full-time graduate students, 130 part-time graduate students.

STAFF: (12)

Dean & Prof. F. Strickler, Ph.D.	Asst. Prof. C. C. Crookshank, M.A.
Assoc. Dean & Prof. F. E. Dace, E.E.	Asst. Prof. B. M. Cunningham, M.S.
Prof. P. Becker, Jr., M.S.	Asst. Prof. E. V. Gardner, M.S.
Prof. E. J. Schlegel, M.Ed.	Asst. Prof. W. A. Sellon, Ed.D.
Asst. Prof. G. O. Arvin, M.S.	Asst. Prof. W. E. Thompson, M.S.
Asst. Prof. H. R. Brill, Ph.M.	Instr. B. H. Hargrove, M.S.

Average years in teacher education, 13.8

Average years in public school teaching, 8.6

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	70	2,671	\$ 10,000
Woods	40	4,750	25,000
Metals	35	14,250	145,000
Graphic Arts	8	432	2,000
Electricity (electronics)	40	3,125	9,000
Plastics	4		
Handicrafts	8		
Transportation	41	10,750	15,400
Professional Courses (Classrooms, etc.)	14	1,022	
Total	260	37,000	\$206,400

GRADUATE OFFERINGS

History of IE	2
The General Shop	3
Philosophy of IA	3
Leaders in American IE	2
In-Service Training of Ind. Teach.	2
Life Adjustment Ed. Through IA	2
Comprehensive VE Programs	2
Occupational Analysis	2
Ind. Workshops (IA, MD, Elec.)	6
Intro. to Research in IE	3
IE Objectives	3
Industry-Education Relations	2
The Supervision of IE	2
IA in Elementary Education	2

The Place of IA in a Mod. Ed. Program	2
School Shop Planning	2
IA Curriculum Analysis & Const.	3
Principles of VE	2
Techniques of Evaluation in IE	3
Current Trends & Devel. in IE	2
Safety Problems	3
Professional Problems	3-6
Technical Problems	3-6
Spec. Prob. Teach. IA	2
Scientific Proc. in IE	2
Guided Prof. Devel.	Var.
Advanced Research	15
Total	<u>84</u>

SPECIAL FEATURE

Charles A. Bennett, called in from Columbia University in 1897, to head up the new Department of Industrial Education, soon made Bradley the outstanding center for this work in the country. Bennett College, established in 1949, commemorates the achievements of Bennett and strives to perpetuate his leadership.

UNIVERSITY OF ILLINOIS

Urbana, Ill.

Division of Industrial Education, College of Education, established 1921. Degrees granted: BAE, BSE, MAE, MEd, DEd, PhD. 60 full-time majors, 10 full-time graduate students, 40 part-time graduate students.

STAFF: (5)

Prof. A. B. Mays, M.A. Asst. Prof. R. N. Evans, Ph.D.
 Assoc. Prof. M. K. Humble, Ph.D. Asst. Prof. C. R. Hill, D.Ed.
 Assoc. Prof. M. R. Karnes, Ph.D.

Average years in teacher education, 14.2

Average years in public school teaching, 3.2

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	1,500	\$20,000
Mechanical Drawing	37		
Woods	17	3,600	28,000
Metals	34	1,700	50,000
Graphic Arts	9		
Electricity (electronics)	8		
Plastics	2		
Ceramics	7		
Handicrafts	9		
Transportation	9		
Communication	3		
Upholstering & Finishing	2		
Total	<u>143*</u>	<u>6,800**</u>	<u>\$98,000**</u>

* 43 semester hours is offered in the Div. of Industrial Arts, and 100 semester hours is offered in other departments of the University.

(2nd note referring to preceding page)

** Floor area and Equipment Value is listed for the Div. of Industrial Arts only. Students take laboratory and shop type courses in several other departments of the University.

GRADUATE OFFERINGS	Semester Hours
The Problem of IE	3
Total	3

PURDUE UNIVERSITY

Lafayette, Ind.

School of Trade and Industrial Education, Division of Education and Applied Psychology, established 1924. Degrees granted: BS, MEd, PhD. 40 full-time majors, 4 full-time graduate students.

STAFF: (16*)

Chairman and Assoc. Prof. H. S. Belman, M.A.	Asst. Prof. M. D. Roberts, M.S.
Prof. A. Swope, M.A.	Asst. Prof. C. J. Rogers, M.A.
Assoc. Prof. W. B. Hill, B.S.	Asst. Prof. D. Sams, M.S.E.
Assoc. Prof. O. D. Lascoe, M.S.	Asst. Prof. W. O. Satterley, M.A.
Asst. Prof. P. W. Case, M.S.	Instr. H. G. Browman, M.A.
Asst. Prof. C. E. Highlen, M.E.	Instr. H. A. Montgomery, B.S.
Asst. Prof. W. H. Mason, M.S.E.	Instr. H. L. Newport, B.S.
Asst. Prof. H. W. Porter, Ph.D.	Instr. A. J. Vellinger, (n.d.)

Average years in teacher education, 11.2

Average years in public school teaching, 7.5

* Notice explanation under *Special Feature*.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	2,400	\$ 18,000
Mechanical Drawing	12		
Woods	6	3,200	24,000
Metals	25	27,850	1,950,000
Electricity (electronics)	6	1,500	8,000
Handicrafts	3		
Production Illustration	3		
Industrial Safety	3		
Total	61	34,950	\$2,000,000

GRADUATE OFFERINGS

Audio-Visual Aids for Teachers	3
Curriculum Development in IA	3
Prin. & Prob. of V&E Guidance	3
Tests & Measurements in IE	3
Org. of Instr. Materials for T&I	3
Individual Research Problems	6
Research in T&I	6
Research in Education	6
Total	33

SPECIAL FEATURE

The Trade and Industrial Education curriculum at Purdue University is concerned primarily with preparing people to secure employment in one of the following areas: vocational industrial teaching, training in industry, school building service. However, it is recognized that some students come to Purdue who are not qualified by experience or by interest to enter one of these fields, but who may desire to prepare themselves for industrial arts teaching.

BALL STATE TEACHERS COLLEGE**Muncie, Ind.**

Department of Industrial Arts, established 1918. Degrees granted: BSE, MAE. 227 full-time majors, 5 full-time graduate students, 12 part-time graduate students.

STAFF: (8)

Dept. Head & Prof. F. J. Schmidt, Jr., Ed.D.	Asst. Prof. L. W. Yoho, M.S. Instr. B. Josif, M.A.
Assoc. Prof. O. C. Bumb, Ed.D.	Instr. R. H. McGinnis, M.S.
Asst. Prof. H. A. Loats, Ph.D.	Instr. C. D. Richards, M.S.
Asst. Prof. A. R. Pawelek, Ph.D.	

Average years in teacher education, 6.2

Average years in public school teaching, 6.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8	4,620	\$ 18,889
Mechanical Drawing	24	2,750	14,261
Woods	16	4,895	21,553
Metals	12	5,186	72,126
Graphic Arts	12	3,520	56,776
Electricity	8	2,805	11,825
Plastics (part of GS)			
Ceramics (part of GS)			
Handicrafts (part of GS)			
Transportation	4		
Communication (part of Elec)			
Orientation	4		
Methods	4		
Teaching Aids	4		
Vocational Guidance	4		
Modern Industries	4		
Curriculum Problems	4		
(Planning Center)		640	568
(Classrooms, Offices, Etc.)		5,248	8,257
Total	108	29,664	\$204,255

GRADUATE OFFERINGS

Shop Planning	4
Equipment Planning	4
IA for Elem. Grades	4
Seminar	4
Vocational Guidance	4

GRADUATE OFFERINGS (cont'd)	Quarter Hours
Modern Industry	4
Teaching Aids	4
Curriculum Problems	4
Trends	4
Methods of Research	4
Practicum	4
Electricity	4
Carpentry & Concrete	4
Printing	4
Drawing	4
Metals	4
Total	<u>64</u>

SPECIAL FEATURE

An extensive new physical plant houses the enriched program.

INDIANA STATE TEACHERS COLLEGE**Terre Haute, Ind.**

Industrial Arts Area, Department of Industrial Arts and Trades and Industry, established 1906. Degrees granted: AB, BS, BSE, MS, MA, MAE, MSE, 202 full-time majors, 6 full-time graduate students, 4 part-time majors, 6 part-time graduate students.

STAFF: (9)

Chairman & Assoc. Prof. S. A. Yager, M.S.

Assoc. Prof. A. H. Luehring, M.S. Asst. Prof. D. E. Price, M.S.

Assoc. Prof. J. C. Tranbarger, M.S. Asst. Prof. H. J. Snidow, M.Ed.

Asst. Prof. H. T. Barrick, M.S. Instr. M. R. Bell, M.S.

Asst. Prof. B. E. Morton, D.Ed. Instr. E. A. Svendsen, M.A.

Average years in teacher education, 14.7

Average years in public school teaching, 6.3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	36	2,046	\$ 6,000
Woods	32	3,062	12,500
Metals	44	4,984	103,000
Graphic Arts	44	2,526	53,000
Electricity (Electronics)	28	2,112	1,500
Handicrafts	4		
Communication	12		
Farm Shop	4		
Home Mechanics	4		
Professional (Methods, Org. of Instructional Materials, Industry and Ind. Occupations)	24		
(Storage and Stock Room)		1,500	
Total	<u>236</u>	<u>16,230</u>	<u>\$176,000</u>

GRADUATE OFFERINGS

Spec. Prob. in Drafting	4
Spec. Prob. in Wood	4
Spec. Prob. in Metal	4

Spec. Prob. in Graphic Arts	4
Spec. Prob. in Electricity	4
Ed. & Voc. Guidance	4
Industry & Industrial Occupations	4
Philosophy of IE	4
Modern Trends in IE	4
Org. & Supv. of IA Education	4
Prob. in IE	4
Tests & Measurements in IE	4
Shop Planning & Org.	4
Total	<u>52</u>

SPECIAL FEATURE

Full time student-teacher program on a state-wide basis. Development of close coordination between Industrial Arts Education and Industrial Vocational Education. Development of an organized program of school visitation and industrial trips.

IOWA STATE COLLEGE**Ames, Iowa**

Curriculum in Industrial Education, Department of Vocational Education. Division of Agriculture, established (date not avail.). Degrees granted: BS, MS, Ph.D. 125 full-time majors, 25 part-time majors, 30 full-time graduate students, 5 part-time graduate students.

STAFF: (5)

Prof. T. A. Hippaka, Ph.D.	Instr. D. M. Hanson, M.S.
Assoc. Prof. L. L. Carver, M.S.	Instr. M. O. Wiener, M.S.
Asst. Prof. C. T. Dean, M.S.	

Average years in teacher education, 6.5

Average years in public school teaching, 7.8

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	12	720	\$ 2,000
Woods	12	1,728	8,000
Metals	18	1,728	10,000
Electricity (electronics)	9		
Plastics	2		
Handicrafts	2		
Design (IA)	3		
Shop Planning	3		
Shop Safety	2		
History of IE	3		
Methods in IA	6		
Trade & Industrial Education	6		
Student Teaching	9-12		
(Misc.)		824	1,000
Total	<u>93</u>	<u>4,800</u>	<u>\$21,000</u>

NOTE: We use the facilities of the Engineering Drawing Department for part of our drawing work. The facilities of the Mechanical Engineering Department are used for Machine Shop, Casting & Welding.

GRADUATE OFFERINGS	Quarter Hours
Technique of Teaching Trades	3
Foundations of IE	3
Teaching IE	3
Problems in IE	3
Trade Analysis	3
Industrial Conference Methods	3
Co-ordination in Part-Time Ed.	3
Industrial Occupations	3
Adm. & Suprv. of IE	3
Evaluation in IE	3
Problems in Organization	3
Analysis and Org. of Instruction	3
Curriculum Bldg.	3
Research	1-10
Special Topics	1-5
Total	54

SPECIAL FEATURE

Our undergraduate program is designed primarily to supply specialized teachers of Industrial Arts and Vocational Industrial Education for the larger schools of our state and neighboring states. Our junior and senior years are very flexible so that we are able to build a program to meet individual needs. Many of our boys go into jobs other than teaching. At present approximately 30% of our graduates go into industry, business, or the trades.

IOWA STATE TEACHERS COLLEGE

Cedar Falls, Iowa

Department of Industrial Arts, established 1905. Degree granted: BAE.
91 full-time majors, 79 part-time majors.

STAFF: (9)

Assoc. Prof. & Dept. Head H. G. Palmer, Ph.D.	Instr. E. D. Crosby, M.A.
Prof. Emeritus C. H. Bailey, B.S.	Instr. R. L. Crossman, M.S.
Asst. Prof. W. E. Ditzler, M.A.	Instr. R. E. Matala, B.S.
Asst. Prof. W. H. Wagner, M.Ed.	Instr. L. S. Wright, M.S.
Instr. L. B. Callahan, M.S.	

Average years in teacher education, 11.3

Average years in public school teaching, 7.5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop (Intro. to IA)	3	871	\$ 6,000
Mechanical Drawing	13		
Woods	11	1,730	7,900
Metals	9	3,216	46,500
Graphic Arts	8	443	3,200
Electricity (electronics)	5	628	8,000
Ceramics	3		
Transportation	8	1,116	4,000
Communication	2		

Plan. & Equip. School Shop	2		
Org. & Adm. of IA	3		
Teaching of IA	2		
(Exh. Room, Aud. & Vis. Aids, and Misc.)		1,224	8,900
Total	69	9,288	\$84,500

SPECIAL FEATURE

The unique feature of the program rests in the organization of the work leading to teaching in the one-teacher school. Thus preparation starts in a model one-teacher introductory laboratory – where activity and philosophy for industrial arts are stressed – followed by technical emphasis in the various areas, followed by a form of monitorship at the late junior level and preceding the practice teaching in the campus laboratory school at the senior level.

WESTMAR COLLEGE**Le Mars, Iowa**

Department of Industrial Arts, Division of Natural Sciences, established 1924. Degree granted: BS. 20 full-time majors, 43 part-time majors.

STAFF (2)

Dept. Head E. W. Danne, M.A.

Instr. C. P. Cram, M.A.

Average years in teacher education, 5.5

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12		
Woods	16		
Metals	8		
Photography	3		
Methods of Teaching IA (General Units)	3	3,000	\$5,000
(Misc.)		2,700	2,500
Total	42	5,700	\$7,500

KANSAS STATE TEACHERS COLLEGE**Emporia, Kansas**

Industrial Arts Department established 1896. Degree granted: BSE. 45 full-time majors.

STAFF: (5)

Prof. & Dept. Head E. L. Barnhart, M.S. Instr. E. L. McMullen, B.S.

Instr. N. R. Ashbaugh, M.A.

Instr. H. O. Woods, M.S.

Instr. R. D. Hogan, M.S.

(on military leave)

Average years in teacher education, 2.5

Average years in public school teaching, 4.8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	950	\$ 4,000
Mechanical Drawing	10	835	5,000
Woods	17	3,772	14,000
Metals	11	4,244	47,000
Graphic Arts	2		
Electricity (electronics)	2	627	1,500
Transportation	5	1,300	7,000
Introduction to IA Education	2		
Organization of IA	2		
Total	54	11,728	\$78,500

FORT HAYS KANSAS STATE COLLEGE**Hays, Kansas**

Industrial Arts Department, Applied Arts and Sciences, established 1908. Degrees granted: BAE, BSE. Approximately 50 full-time majors, 12 part-time majors.

STAFF: (4)

Prof. & Dept. Head E. Davis, M.A. Asst. Prof. R. Cain, M.S.
Asst. Prof. R. U. Brooks, M.S. Asst. Prof. W. H. Rayburn, M.S.

Average years in teacher education, 16.3

Average years in public school teaching, .7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	640	\$ 1,850
Mechanical Drawing	11	960	966
Woods	16	2,416	6,250
Metals	5	960	10,950
Transportation	3	1,750	2,500
Upholstering	2	*	450
Farm Machinery & Power	8	1,200	4,000
Industrial Arts Education (War Surplus Equipment, stored)	2		27,000
Total	50	7,926	\$53,966

* Part of Wood Shop.

SPECIAL FEATURE

New building contract let and now under construction, which will give an additional 19,500 square feet of floor area.

KANSAS STATE COLLEGE (I.I.)**Manhattan, Kansas**

Department of Shop Practice, School of Engineering & Architecture.
Degrees granted: BS, MS.

STAFF: (21)

Prof. & Head G. A. Sellers, M.S. Instr. J. L. Hooper, B.S.
Prof. W. W. Carlson, M.E. Instr. C. L. Nelson, (n.d.)

STAFF (cont'd)

Assoc. Prof. E. G. Darby, M.S.	Instr. L. A. Scott, (n.d.)
Assoc. Prof. A. E. Hostetter, Ph.D.	Instr. H. D. Smethers, M.S.
Assoc. Prof. J. J. Smaltz, M.S.	Instr. G. G. Timmons, (n.d.)
Asst. Prof. J. P. Clifton, B.S.	Instr. R. C. Warren, B.S.
Asst. Prof. K. G. Wikle, M.S.	Instr. R. E. Wishart, (n.d.)
Instr. C. P. Ballard, (n.d.)	Instr. C. L. Woodard, M.S.
Instr. E. C. Byers, A.B.	Instr. A. R. Yowell, (n.d.)
Instr. H. F. Dietrich, (n.d.)	Instr. D. E. Zabel, M.S.
Instr. M. R. Dodge, B.S.	

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	11		
Woods	13		
Metals	22		
Transportation	8		
Refrigeration Service	4		
Finishing	2		
Methods of Teaching IA	3		
Safety	2		
Inspection	2		
Pattern Making	2		
Thesis	Var.		
Total	71 plus Var.	(n.a.)	(n.a.)

GRADUATE OFFERINGS

Industrial Mgt.	3		
Production Control	2		
Time & Motion	2		
Product Cost Est.	3		
Factory Design	2		
Adv. Shop Practice	Var.		
Metallography	3		
Physical Metallurgy	2		
Aircraft Materials & Fabr.	3		
General Shop Organization	3		
Shop Practice Teaching	Var.		
Research in Shop Practice	Var.		
Total	23 plus Var.		

McPHERSON COLLEGE

McPherson, Kansas

Industrial Arts Education Department, Division of Social Sciences, established 1917. Degree granted: BS. 50 full-time majors, 75 part-time majors.

STAFF: (2)

Dean of Men & Prof. S. M. Dell, M.S.

Instr. A. E. Willems, B.S.

Average years in teacher education, 13

Average years in public school teaching, 2.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	8		
Woods	15	2,300	\$5,000
Metals	10	1,200	1,500
Handicrafts	3		
Theory (Misc.)	6		
		2,500	1,500
Total	42	6,000	\$8,000

BETHEL COLLEGE**North Newton, Kansas**

Industrial Arts Department, Division V, The Applied Arts and Sciences, established 1918. Degree granted: BSE. 15 full-time majors, 2 part-time majors.

STAFF: (2)

Dept. Head & Prof. P. R. Kaufman, A.M.

Instr. M. Stucky, B.S.

Average years in teacher education, 3.5

Average years in public school teaching, 5.5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	11		
Woods	33	3,000*	\$2,500*
Metals	26	*	*
Electricity (electronics)	3	*	*
Farm Mechanics	3	2,280	2,500
Methods in IA	3		
Special Problems in IA	Var.		
Total	69	5,280	\$5,000
	Plus Var.		

* Shared by Woods, Metals, Electricity.

SPECIAL FEATURE

We get many students from the rural farming section. We offer night courses in Electric Welding for farm boys. Always have a good enrollment in our night classes. Approximately 30 to 40 boys per semester.

KANSAS STATE TEACHERS COLLEGE**Pittsburg, Kansas**

Department of Industrial Education and Art, established 1903. Degrees granted: BSE, BS in Mechanic Arts, MSIE. 265 full-time majors, 28 full-time graduate students.

STAFF: (16)

Prof. & Dept. Head O. A.

Asst. Prof. L. G. Cutler, M.S.

Hankammer, Ph.D.

Asst. Prof. B. O. Keeney, M.S.

Assoc. Prof. E. W. Baxter, M.S.

Asst. Prof. C. H. Morgan, M.S.

Assoc. Prof. H. V. Hartman, M.S.

Instr. L. M. Ensmen, M.S.

Assoc. Prof. J. V. Melton, Ph.D.

Instr. E. D. Larkin, M.A.

Assoc. Prof. B. A. Spencer, A.M.

Instr. F. L. Penny, M.S.

Asst. Prof. L. Brewington, M.S. Asst. R. A. Boyer, B.S.
 Asst. Prof. L. H. Caldwell, A.M. Asst. L. E. Fluharty, B.S.
 Asst. Prof. L. B. Carlyon, M.S.

Average years in teacher education, (n.a.)
 Average years in public school teaching, (n.a.)

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	1,600	
Mechanical Drawing	31	3,300	
Woods	40	8,190	Not
Metals	37	5,525	
Graphic Arts	71	4,100	
Electricity (electronics)	45		Given
Ceramics	7		
Handicrafts	22	3,700	
Transportation	38	2,200	
Communication	13		
Audio-Visual Aids	6		
Total	313	28,615	

GRADUATE OFFERINGS

Problems in IE	2
Research Problems	3-4
Philosophy of IE	4
Instructional Methods in IE	3
Practicum in IA Education	2
History of IE	3
Adult Program in IE	2-3
Research and Thesis	4
Course Construction	2-3
Occupational Analysis	2-3
Problems of the General Shop	3
Org. & Meth. of Inst. for VE	2
Philosophy of VE	2
Tests & Measurements in IE	2
Adv. Audio-Visual Problems	3
Total	38

SPECIAL FEATURE

Provide special work in printing such as Linotype and Teletype. Have large air-conditioned dark rooms for photography.

Make much use of audio-visual aids.

Have a large vocational school (sub-college) as an adjunct to the department.

WESTERN KENTUCKY STATE COLLEGE

Bowling Green, Ky.

Industrial Arts Department, established 1920. Degree granted: BS.
 180 full-time majors.

STAFF: (4)

Dept. Head L. T. Smith, M.A. Asst. Prof. H. B. Clark, M.A.
 Asst. Prof. C. B. Barnes, A.M. Asst. Prof. W. B. Nalbach, M.A.

Average years in teacher education, 17

Average years in public school teaching, 4.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	6	1,000	\$ 2,000
Woods	15	4,200	15,000
Metals	22	2,400	16,200
Graphic Arts	9	1,100	2,000
Transportation	9	2,000*	1,800*
Farm Shop	6	*	*
House Planning	3		
Organization, Philosophy, History, Methods, etc.	10		
Total	83	8,900**	\$37,000

* Auto Mechanics and Farm Shop share the same shop.

** Exclusive of Offices, Storage and Classrooms. There is some overlapping of floor areas listed for individual shops.

GRADUATE OFFERINGS (for IA Minor with Education Major)	Semester Hours
Problems Courses in IA	9
Investigation Courses in IA	9
Total	18

SPECIAL FEATURE

The Industrial Arts Department here is probably not unusual in any respect except that it has enjoyed a steady, continuous growth since its establishment. We have trained Industrial Arts teachers for all Southern States and are probably one of the oldest Industrial Arts Teacher Training Departments in a State Institution in this area, operated since 1920.

Many of our graduates are now connected with Teacher Training Institutions.

L. T. Smith came to organize the Industrial Arts program and has served as Head of the Department since its inception.

KENTUCKY STATE COLLEGE

Frankfort, Kentucky

Department of Industrial Arts, established 1948. Degree granted: BS. 14 full-time majors.

STAFF: (2)

Asst. Prof. W. F. Shauntee, M.S. Instr. L. J. Anderson, M.A.

Average years in teacher education, 3

Average years in public school teaching, 4.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	15	644	\$ 1,913
Woods	12	1,320	2,012
Metals	18	1,200	8,086

KENTUCKY

53

Electricity (electronics)	9	192	2,019
Handicrafts	6		
Building Construction	15		
IA Education (Misc.)	9	588	
Total	<u>87</u>	<u>3,944</u>	<u>\$14,030</u>

MOREHEAD STATE COLLEGE

Morehead, Kentucky

Industrial Arts Department, established 1931. Degrees granted: BA, BS. 38 full-time majors.

STAFF: (2)

Asst. Prof. & Dept. Head J. T. Mays, A.M.

Asst. Prof. J. G. Black, Jr., M.S.

Average years in teacher education, 11.5

Average years in public school teaching, (n.a.)

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9	1,200	\$ 2,000
Woods	13	3,500	10,000
Metals	9	3,125	9,500
Handicrafts	6		
Total	<u>37</u>	<u>7,825</u>	<u>\$21,500</u>

MURRAY STATE COLLEGE

Murray, Kentucky

Department of Industrial Arts, established 1946. Degrees granted: BS, MAE. 100 full-time majors, 6 full-time graduate students (20 in summer school), 1 part-time graduate student.

STAFF: (3)

Dept. Head H. L. Oakley, M.Ed. Instr. M. A. Brown, B.S.

Asst. Prof. G. T. Lilly, M.A.

Average years in teacher education, 3.3

Average years in public school teaching, 3.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6		
Mechanical Drawing	18	1,715	\$ 5,000
Woods	12	4,704	26,000
Metals	12	4,100	40,000
Electricity (electronics)	12*	2,700*	5,000*
Plastics	3		
Handicrafts	3		
Transportation	**	3,000	8,000
Prin. of Teach. IE	3		
Sel. & Org. of Subject Matter	3		
School Shop Planning & Equipment	3		
Total	<u>75</u>	<u>16,219</u>	<u>\$84,000</u>

UNDERGRADUATE OFFERINGS cont'd (footnotes)

* Physics & Electronics Dept.

** Auto-Mechanics shop listed, but course and credit allocations are not available.

GRADUATE OFFERINGS	Semester Hours
Prin. of Teach. IE	3
Sel. & Org. of Subject Matter	3
School Shop Planning	3
History of Ind. Education	3
Voc. Guidance	3
Supervision of IE	3
Org. & Adm. of IE	3
Philosophy of IA & VE	3
Total	24

SPECIAL FEATURE

Although Industrial Arts teacher preparation is the primary objective of this department, we, also, train a considerable number of students to enter the trades and industry. Many of our majors enter industry in good paying positions with opportunity for advancement. Also, quite a number of students take our courses to broaden their general educational background.

EASTERN KENTUCKY STATE COLLEGE **Richmond, Kentucky**

Industrial Arts Department, Applied Arts & Science Division, established 1909. Degrees granted: BSE, MAE. 86 full-time majors, 6 full-time graduate students, 16 graduate students in Summer School.

STAFF: (4)

Dept. Head & Assoc. Prof. R. W. Asst. Prof. J. H. Davis, M.Ed.

Whalin, M.Ed.

Instr. D. C. Barnes, M.S.

Assoc. Prof. N. G. Deniston, M.S.

Average years in teacher education, 13.8

Average years in public school teaching, 3.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	936	\$ 2,028
Mechanical Drawing	17	864	2,675
Woods	27	3,276	13,723
Metals	22	2,964	51,624
Electricity (electronics)	6	480	1,450
Handicrafts	5		
Upholstery	2		
Methods, Org., Problems	10		
Design	4		
(Library & Planning Room, Misc.)		1,580	1,251
Total	96	10,100	\$72,751
GRADUATE OFFERINGS			
Philosophy of the Practical Arts & Voc. Education	3		
Vocational Guidance	3		
Total	6		

LOUISIANA STATE UNIVERSITY**Baton Rouge, Louisiana**

Department of Industrial Education, School of Vocational Education.
The College of Agriculture, established 1936. Degrees granted: BSIE,
MSIE. 66 full-time majors, 12 full-time graduate students, 6 part-time
graduate students.

STAFF: (6)

Head & Assoc. Prof. N. A. Hauer, Ph.D.	Instr. P. V. Rougon, B.S. Instr. R. E. Stucki, M.S.
Assoc. Prof. E. G. Smith, M.S.	Instr. M. Yarbrough, B.S.
Asst. Prof. C. G. Mainous, M.S.	

Average years in teacher education, 8.2

Average years in public school teaching, 4.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12	3,600*	\$ 7,500*
Woods	12	3,000	20,000
Metals	18	20,950*	97,500
Electricity (electronics)	3	%	%
Ceramics	6	1,800**	2,000**
Handicrafts	3	1,900**	2,200**
Transportation	12	6,435	16,000
Art & Design	12		
Total	78	37,685	\$145,200

* Mechanical & Architectural Drawing are in Engineering Dept. Machine Shop
is in Engineering Dept. with 11,250 Sq. Ft. of floor area and \$80,000
in equipment.

% General Metal and Electricity share same shop of 4,700 Sq. Ft. of floor
area and \$11,500 in equipment.

** Ceramics and General Handicrafts are in the Dept. of Fine Arts.

GRADUATE OFFERINGS	Semester Hours
History of IE	3
Advanced IE	6
Curriculum Construction in IE	3
Principles of Voc., T. & I.E.	3
Conference Methods	3
Adm. & Supv. of IE	3
Survey Techniques in IE	3
Total	24

SOUTHERN UNIV. & AGRICULTURAL & MECHANICAL COLLEGE**Baton Rouge, Louisiana**

Department of Industrial Arts, established 1946. Degree granted: BAE.
120 full-time majors, 10 part-time graduate students.

STAFF: (7)

Director E. C. Harrison, Ph.D.	Instr. O. S. Copeland, B.S.
Asst. Prof. J. L. Murry, M.A.	Instr. N. S. Harrison, M.Ed.
Asst. Prof. H. L. Thurman, Jr. M.S.	Instr. C. R. Jaymes, B.S.
Instr. S. W. Austin, (n.a.)	

Average years in teacher education, 7

Average years in public school teaching, (n.a.)

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	?	2,400	\$ 2,000
Woods	10	3,240	5,000
Metals	6	2,400	20,000
Graphic Arts	21	3,240	50,000
Electricity (electronics)	?	2,100	26,000
Transportation	21	3,960	6,000
Total	?	17,340	\$109,000

GRADUATE OFFERINGS (n.a.)

SOUTHWESTERN LOUISIANA INSTITUTE **Lafayette, Louisiana**

Department of Industrial Education, School of Education, established 1945. Degree granted: BSE. 138 full-time majors, 10 part-time majors.

STAFF: (4)

Prof. & Dept. Head R. W. E.

Assoc. Prof. P. J. Van Horn, M.S.

Bowers, M.S.

Asst. Prof. C. A. Bernard, Jr., M.S.

Assoc. Prof. E. H. Rush, M.A.

Average years in teacher education, 4.1

Average years in public school teaching, 12.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6		
Woods	12	5,880	\$18,000
Metals	12	1,400	14,000
Electricity (electronics)	3		
Handicrafts	3	1,200	7,000
Transportation	12	4,000	10,000
Professional IA	18		
Professional VE	27		
(Future Expansion Building Built; General Shop, Handicrafts, Printing)		6,392	
Total	93	18,872	\$49,000

NORTHWESTERN STATE COLLEGE

Natchitoches, Louisiana

Industrial Education Department, School of Applied Arts & Sciences, established 1945. Degrees granted: BAE, BSE. 80 full-time majors, 10 part-time majors.

STAFF: (2)

Dept. Head & Prof. W. J. Robinson, Ed.D.

Asst. Prof. J. R. Postman, M.Ed.

Average years in teacher education, 11

Average years on public school teaching, 8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	2,079	\$ 3,000
Mechanical Drawing	12	1,296	250
Woods	13	3,600	10,000
Metals	9	3,600	30,000
Electricity (electronics)	6		
Handicrafts	3		
Transportation	6		
IA Design	3		
IA for Elementary Teachers	3		
Tools & Materials	3		
Shop Planning & Organization	3		
Methods	3		
Independent Study in IA	1-3		
Farm Mechanics	3		
Total	73	10,575	\$43,250

SPECIAL FEATURE

Building and greater part of equipment came from Government Surplus.

XAVIER UNIVERSITY

New Orleans, Louisiana

Department of Industrial Arts Education, The School of Education established 1942. Degree granted: BS. 25 full-time majors, 7 part-time majors.

STAFF: (2)

Director & Asst. Prof. V. Labat, M.A.

Instr. F. W. Richardson, M.A.

Average years in teacher education, 6.5

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8	2,405	\$ 8,150
Mechanical Drawing	8	380	525
Woods	12		
Metals	6		
Handicrafts	3		
Hist. of Manual & IE	3		
Prin. of VIE	3		
Teaching General Shop	2		
Trade & Job Analysis	2		
Curriculum in V & IE	2		
School Shop Adm. & Safety	2		
IA for Teachers in Elem. Schools	3		
Method of Teaching IA	2		
Sel. & Org. of Subj. Matter in IE	3		
Vocational Guidance	2		
Observation & Practice Teaching	6		
Industrial Sociology (Office, Tool Room, etc.)	3		
Total	70	693	1,335
		3,478	\$10,000

SPECIAL FEATURE

The curriculum in industrial arts is designed for the preparation of

SPECIAL FEATURE (Con't.)

teachers of industrial arts subjects in elementary and secondary school programs. In addition to technical requirements, certain professional and liberal arts courses are included. These meet the requirements of the Department of Education of the State of Louisiana. The Industrial Arts Education Building was completed in 1947.

GORHAM STATE TEACHERS COLLEGE**Gorham, Maine**

Industrial Arts Teacher Training Program, established (date not avail.)

Degree granted: BSE. 72 full-time majors.

STAFF: (6)

Director A. I. Martin, Ed.M.

Instr. R. E. Duso, M.A.

Instr. A. E. Brown, M.A.

Instr. J. Mitchell, M.A.

Instr. L. N. Cilley, (n.d.)

Instr.-Registrar-Dean of Men

E. S. Packard, M.A.

Average years in teacher education, 12

Average years in public school teaching, 6.7

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5	1,300	\$ 3,000
Mechanical Drawing	6	500	2,000
Woods	10	1,800	15,000
Metals	10	2,000	50,000
Graphic Arts	3	500	2,000
Electricity (electronics)	5	1,800	3,000
Transportation	10	1,600	15,000
Communication	5		
Total	54	9,500	\$90,000

SPECIAL FEATURE

18 weeks of on-campus student teaching and 18 weeks of off-campus student teaching. 12 to 15 class hours per week of wood, metal, electricity, transportation and comprehensive general shop.

UNIVERSITY OF MARYLAND**College Park, Md.**

Department of Industrial Education, College of Education, established 1923. Degrees granted: BSE, MAE, MEd, DEd, PhD. 92 full-time majors, 5 part-time majors, 8 full-time graduate students, 52 part-time graduate students (including 35 at the Baltimore Center).

STAFF: (4)

Dept. Head & Prof. G. D. Brown, M.A. Assoc. Prof. G. S. Wall, M.A.

Prof. R. L. Hornbake, Ph.D.

Asst. Prof. D. Maley, Ph.D.

Average years in teacher education, 8.8

Average years in public school teaching, 7.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	10	700	\$ 2,500
Woods	10	2,000	10,500
Metals	18	6,050	106,000
Electricity (electronics)	14	650	4,000
Handicrafts	6		
Weaving	8*		
Photography	4*		
Ceramics	8*		
Gas Engines, Tractors, Automobiles (Tool Room, Reading Room, Offices, etc.)	3**	3,400	
Total	83	12,800	\$123,000

* College of Home Economics
 ** College of Agriculture

GRADUATE OFFERINGS

General Shop	2
Training Aids Development	2
Shop Org. & Management	2
Modern Industry	2
Philosophy of IA Education	2
School Shop Planning & Equip. Sel.	2
Supervision of IA	2
Research in IA	2
Content & Method of IA	2
Seminar in IA & VE	2
Internship	12-16
Research	1-6
Total	42

SPECIAL FEATURE

Confining the remarks to the program and to the undergraduate level, the positive features would include: (1) students are provided an early orientation and are given careful counselling from the beginning, (2) the shop courses are developed from a professional perspective, (3) students experience a full year of child study, and (4) the geographical area is rich in industrial and cultural facilities.

MARYLAND STATE COLLEGE (I.i.)

Princess Anne, Md.

Industrial Education, Division of Mechanic Arts. Degree granted: BS.

STAFF: (4)

Instr. W. Clelland, B.S.

Instr. C. Stubblefield, B.S.

Instr. D. R. Hinton, B.S.

Instr. J. A. Sullivan, (n.d.)

UNDERGRADUATE OFFERINGS

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6		
Woods	10		
Metals	15		

INDUSTRIAL ARTS TEACHER EDUCATION

UNDERGRADUATE OFFERINGS (con't.)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Electricity (electronics)	6		
Shop Calculations	6		
Job Analysis	3		
Shop Org. & Mgt.	3		
Total	49	(n.a.)	(n.a.)

TEACHERS COLLEGE OF THE CITY OF BOSTON Boston, Mass.
 Industrial Arts Division, established 1888.* Degree granted: BSE.
 104 full-time majors.

* Sloyd Training School 1888-1922.

STAFF (5)

Asst. Director E. Staebner, M.Ed.

Foreman J. F. Walker, M.Ed.

Foreman W. L. Hartnett, M.Ed.

Foreman W. Young, (n.a.)

Foreman A. B. Ventura, BSE.

Average years in teacher education, 4.8

Average years in public school teaching, 22.6

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	3		
Woods	27	1,800	Not
Metals	18	1,800	
Graphic Arts	18	1,800	
Electricity (electronics)	18	1,800	Avail.
Handicrafts	6	1,800	
Total	90	9,000	

SPECIAL FEATURE

The Industrial Arts Division of Boston Teachers College takes pride in the fact that it is the descendent of one of the oldest schools for training teachers of industrial arts in the United States. The emphasis in this school is in the general woods area. This is because more Boston schools are equipped for the teaching of industrial arts wood than for work in any other field.

STATE TEACHERS COLLEGE**Fitchburg, Massachusetts**

Industrial Arts Department, established 1910. Degrees granted: BSE, MEd. (Major in Education with a Minor in IA). 134 full-time majors.

STAFF: (8)

Director & Assoc. Prof. J. J.

Asst. Prof. E. A. Jacobsen, M.S.Ed.

Hammond, M.Ed.

Asst. Prof. E. E. Koehler, M.A.

Assoc. Prof. C. W. Hague, M.Ed.

Asst. A. E. Purinton, B.S.

Asst. Prof. W. J. Harrod, Ed.M.

Instr. W. E. Farrington, M.A.

Asst. Prof. O. C. Jejkal, D.Ed.

Average years in teacher education, 11.6
 Average years in public school teaching, 5.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	792	\$ 737
Mechanical Drawing	9	1,292	5,000
Woods	9	3,780	25,000
Metals	9	3,780	35,000
Graphic Arts	9	3,000	30,000
Electricity (electronics)	6		
Handicrafts	3		
Power Mechanics	3	1,575	4,500
Design in General Culture	3		
Const. Work in the Elem. Grades	1		
Curriculum Materials	8		
Seminar in IA Ed.	2		
Practice Teaching in IA	8		
Total	73	14,219	\$100,237
GRADUATE OFFERINGS			
Curriculum Materials in IA	4		
Curriculum Materials in VE	4		
Guidance	4		
Supervision	4		
Administration	4		
Total	20		

WAYNE UNIVERSITY **Detroit, Michigan**

Department of Industrial Education, Division of Vocational Education, College of Education, established 1932. Degrees granted: BSE, MEd, EdD. 126 full-time majors, 75 part-time majors, 75 full-time graduate students, 25 part-time graduate students.

STAFF: (33)

Prof. & Chairman G. H. Silvius, Ed.D.

Asst. Prof. G. Baysinger, M.A.

Instructors, Teachers, Lecturers, etc.*

A. Althouse, A.M.	C. Falik, M.Ed.
E. L. Bedell, A.M.	R. R. Fraser, M.Ed.
D. C. Black, A.M.	T. Garritty, A.M.
E. L. Brown, M.S.	M. Hamburg, M.A.
J. Campbell, M.Ed.	W. Merrifield, A.M.
E. H. Curry, A.M.	P. Payne, (n.a.)
H. J. Davison, Ph.D.	C. Pozzini, A.M.
H. L. Doliber, A.M.	H. Saul, M.Ed.
S. A. Dunham, M.Ed.	C. Sechrest, M.Ed.
D. Duryee, A.M.	F. Shelter, (n.a.)
A. Elges, M.Ed.	R. M. Shields, A.M.
R. L. Emig, A.M.	J. Slagle, (n.a.)

* Part-time personnel from other parts of the University, the Board of Education, and from industry. This is unique.

STAFF cont'd (Instructors, Teachers, Lecturers, etc.)

H. Sonsmith, A.M.	A. A. Vezzani, A.M.
W. E. Stirton, M.S.	H. E. Wright, M.Ed.
H. A. Stormzand, B.S.E.	D. Zwickey, A.M.
C. H. Turnquist, M.Ed.	

Average years in teacher education, 7.5

Average years in public school teaching, 18.4

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value	
General Shop	2	No laboratories or equip- ment at the University.		
Mechanical Drawing	8			
Woods	12			
Metals	22			
Graphic Arts	2			
Electricity (electronics)	2			
Plastics	2			
Handicrafts	6			Unlimited space avail- able in the various schools throughout the city.
Transportation	18			
Communication	2			
Cooperative Work Study in Ind.	16			
Total	92	None	None	

GRADUATE OFFERINGS

Model Yacht Building	2
Adv. Tech. in Gen. Metalworking	2
Plastic Craft	2
Theory & Org. of Gen. Shop Subj.	2
Drafting Room Techniques	2
Teaching Aids & Devices	2
Total	12

SPECIAL FEATURE

One outstanding phase of the program is the student contact experience received by prospective shop teachers. Inasmuch as the University does not maintain such practice laboratories as found in other institutions, prospective teachers of industrial arts receive invaluable experiences and contact with pupils throughout the city's numerous school shops that are modernly equipped with the necessary facilities for the administration of such programs.

MICHIGAN STATE COLLEGE

East Lansing, Michigan

Department of Industrial Arts Education, School of Science and Arts, established 1946. Degrees granted: BA, MA. 132 full-time majors, 3 part-time majors, 12 full-time graduate students, 29 part-time graduate students.

STAFF: (4*)

Assoc. Prof. & Chairman J. A. Fuzak, Ed.D.

* Two half-time appointments up for approval; eight others devote about one-third time.

STAFF (cont'd)

Assoc. Prof. H. P. Skamser, M.A. Asst. Prof. G. J. Posthumus

Asst. Prof. O. G. McMurray, M.A.

Average years in teacher education, 5.2

Average years in public school teaching, 4

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	NOTE: All shops at present shared in administration and use with mechanical engineering, agricultural engineering, forestry, electrical engineering, and art. Proposal up to State Board of Agriculture for our own shop to be used in addition to the above facilities.	
Mechanical Drawing	14		
Woods	7		
Metals	16		
Graphic Arts	5		
Electricity (electronics)	3		
Ceramics	3		
Handicrafts	3		
Plumbing & Fitting	3		
Methods of Teaching Drawing	4		
Special Methods in IA	5		
Apprentice Teaching Drawing	4		
Stage & Scenery Construction	3		
Orientation in IA	3		
Gas Engines & Tractors	3		
Farm Machinery	3		
Rural Electrification	3		
Soil Conservation	2		
Methods in Farm Shop	3		
Total	93		
GRADUATE OFFERINGS			
Philosophy & Adm. of VE	3		
Adult Education	3		
Teaching Occupational Information	3		
School & Community	3		
Philosophy & Org. of IA	3		
Techniques of Research	3		
Option—Ind. Experience, Chrysler Corp., Detroit	6		
Problems in IA	2-8		
Thesis in IA	12-15		
Shopwork (for Minor)—Metal, Wood, Farm Shop, Etc., according to needs of candidate	12-15		
Total	62		

SPECIAL FEATURE

In the undergraduate program the student teaching is probably unique. Special Methods are correlated with general observation from elementary through secondary and later to the actual situation in which the student teacher will do his student teaching. This is done the term before student teaching. Student teaching is done on a full day basis for one quarter, usually with the students living in some community out in the state during that term.

In graduate work the unusual features are the minor in actual shop courses, and the industrial experience where the student works and receives on the average of two hours of instruction per day as well as credit. (Shared with Wayne & University of Michigan).

WESTERN MICHIGAN COLLEGE OF EDUCATION**Kalamazoo, Michigan**

Industrial Arts Department, Division of Vocational and Practical Arts Education, established 1902. Degree granted: BS. 125 full-time majors, 35 part-time majors.

STAFF: (9)

Prof. & Dept. Head J. L. Feirer, Ed.D.

Prof. E. C. Weaver, A.M.

Asst. Prof. H. J. Beukema, A.M.

Assoc. Prof. F. S. Huff, A.M.

Asst. Prof. L. J. Brink, A.M.

Assoc. Prof. C. S. Nichols, A.M.

Asst. Prof. L. G. Farnan, M.S.

Assoc. Prof. D. O. Pullin, A.M.

Asst. Prof. J. H. Plough, A.M.

Average years in teacher education, 17.8

Average years in public school teaching, 5.8

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	7	2,000	\$ 15,000
Mechanical Drawing	22	2,400	10,000
Woods	20	3,000	30,000
Metals	24	2,000	60,000
Graphic Arts	30	2,800	75,000
Electricity (electronics)	5	1,400	20,000
Handicrafts	6	1,200	7,000
Transportation	6		
Communication	5		
Total	125	14,800	\$217,000

GRADUATE OFFERINGS

Teaching Problems in IA

4

Total

4

SPECIAL FEATURE

We are working very closely in cooperation with the Industrial Technical Dept., which has more instructors and larger physical facilities than we do. Industrial Arts students can select courses in this department in all phases of aviation, radio, and television, etc.

NORTHERN MICHIGAN COLLEGE OF EDUCATION**Marquette, Michigan**

Industrial Arts Department, established 1914. Degree granted: BSE. 68 full-time majors.

STAFF: (3)

Acting Head K. A. Wahtera, M.S.

Asst. Prof. S. D. Sorensen, M.S.

Asst. Prof. W. T. Sargent, M.Ed.

Average years in teacher education, 3

Average years of public school teaching, 4.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12	1,400	\$ 2,500
Woods	11	4,300	12,500
Metals	7	2,000	10,000
Electricity (electronics)	3		
Transportation	2		
Industrial Mathematics	3		
Teaching (Cadet)	8		
Organization of IA	3		
Vocational Education (Offices, Storage, etc.)	3		
		<u>2,000</u>	<u>1,000</u>
Total	52	9,700	\$26,000

SPECIAL FEATURE

The Driver Education and Training Program as administered and taught by the Industrial Arts Department has set the pattern for teacher training and in-service training for the state. See write-up in 1948 issue of the Motor News, AAA publication.

CENTRAL MICHIGAN COLLEGE OF EDUCATION

Mount Pleasant, Michigan

Industrial Arts Department, established 1906. Degree granted: BS.
147 full-time majors, 22 part-time majors.

STAFF: (5)

Prof. & Dept. Head G. F. DePuy, M.A. Asst. Prof. W.S. Dunbar, M.A.
Asst. Prof. J. H. Bailey, M.A. Instr. I.M. Cambell, M.A.
Asst. Prof. J. E. Bowman, M.A.

Average years in teacher education, 8.6

Average years in public school teaching, 6.4

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	2,700	\$ 4,165
Mechanical Drawing	13	1,430	1,697
Woods	8	2,750	8,433
Metals	6	3,240	19,403
Graphic Arts	8	2,000*	*
Electricity (electronics)	3		
Handicrafts	6		
Transportation	5	1,350	805
Farm Shop	3	1,200	210
Shop Mathematics	4		
IE - Org., Current Prac. & Trends	1		
General Shop Organization (Classroom, Offices, Locker Rooms, etc.)	2		
		<u>1,640</u>	<u>1,534</u>
Total	62	16,310	\$36,247

* Print Shop is shared with Extension Press and equipment is owned by Extension Press.

MICHIGAN STATE NORMAL COLLEGE**Ypsilanti, Michigan**

Department of Industrial Arts, established 1900. Degree granted: BSE.
110 full-time majors.

STAFF; (7)

Prof. & Dept. Head G. A. Willoughby, A.M. Asst. Prof. N. W. Risk, M.A.
Asst. Prof. D. Chamberlain, A.M. Instr. S. A. Glow, A.M.
Asst. Prof. R. F. Gilden, A.M. Instr. R. Larsen, B.S.
Asst. Prof. R. A. LaBounty, A.M.

Average years in teacher education, 8.4
Average years in public school teaching, 4.1

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5	3,375	\$ 12,000
Mechanical Drawing	18	2,500	6,000
Woods	5	2,500	* *
Metals	5	250*	1,000*
Graphic Arts	4	625	7,500
Electricity (electronics)	5	*	*
Plastics & Art Metal	2		
Ceramics	3		
Handicrafts	6	625	2,000
IA for Elementary Grades	5	1,250	1,000
Weaving	3		
Farm Shop	2	2,813	8,000
(Special Education Shop)		2,400	2,500
Total	63	13,838	\$ 40,000

* Woods, Electricity, and a part of Metals, are taught in the General Shop.

BEMIDJI STATE TEACHERS COLLEGE**Bemidji, Minnesota**

Department of Industrial Arts Education, Division of Fine and Applied Arts, established 1927. Degrees granted: BA, BS. 75 full-time majors.

STAFF; (2)

Asst. Prof. & Dept. Head C. H. McClintock, M.A.
Instr. J. H. Warford, M.A.

Average years in teacher education, 14
Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5		
Mechanical Drawing	30	800	\$ 1,700
Woods	30	1,750	9,500
Metals	20	884	11,000
Graphic Arts	2		
Electricity (electronics)	10	595	1,000
Plastics	2		

Handicrafts	8		
Transportation	6		
Household Mechanics	3		
IA for Rural School Teachers	4		
Methods	3		
Shop Org. & Adm.	4		
Student Teaching	8		
(Diversified – in Lab. School Bldg.)		2,352	10,000
Total	135	6,381	\$33,200

UNIVERSITY OF MINNESOTA, DULUTH BRANCH Duluth 5, Minn.

Department of Industrial Education, Division of Education and Psychology, established 1930. Degree granted: BS. 48 full-time majors, 3 part-time majors.

STAFF: (3)

Dept. Head & Asst. Prof. F. J. Kovach, M.A.

Asst. Prof. G. O. Voss, M.A.

Instr. G. W. Senteney, M.Ed.

Average years in teacher education, 8.7

Average years in public school teaching, 9.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6	900*	\$ 750
Woods	10	850	2,500
Metals	10	1,500	5,900
Graphic Arts	3		
Electricity (electronics)	6	900*	1,000
Plastics	2	750	400
Upholstering	2		
Building Construction	3		
Professional Courses	27		
Total	69	4,000	\$10,550

* Mechanical Drawing and Electricity use same shop of 900 sq. ft.

MANKATO STATE TEACHERS COLLEGE Mankato, Minnesota

Department of Industrial Arts Education, Division of Fine & Applied Arts, established (date n.a.). Degree granted: BS. 150 full-time majors.

STAFF: (4)

Acting Division Chairman & Assoc. Asst. Prof. L. B. Bjornstad, M.A.

Prof. C. J. Gerbracht, Ph.D. Asst. Prof. I. H. Johnson, M.S.

Dean of Men & Prof. M. J. Nelson, M.A.

Average years in teacher education, 17

Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	1,500	\$ 7,500
Mechanical Drawing	13	1,200	1,000
Woods	12	2,000	12,500
Metals	15	2,300	15,000
Graphic Arts	6	1,250	5,000
Electricity (electronics)	3	400	5,000
Transportation (lab. not in use at present)		2,250	
Orientation & Appreciation	3		
Org. & Adm.	4		
Elementary-level IA	4		
Student Teaching	4		
Special Problems	Arranged		
Total	67	10,900	\$46,000

SPECIAL FEATURE

All college students working toward a B.S. in education are required to take a 3-hour course in Orientation to American Industry. This course makes it possible for students to understand more fully (1) the American industrial scene, and (2) the contributions made by industrial arts and industrial-vocational education to the education of public school children.

UNIVERSITY OF MINNESOTA**Minneapolis 14, Minnesota**

Department of Industrial Education, College of Education, established 1920. Degrees granted: BS, MA, MEd, PhD.* 100 full-time majors, 10 part-time majors, 25 full-time graduate students, 15 part-time graduate students.

STAFF: (9)

Prof. & Dept. Head H. J. Smith, Ph.D.	Instr. W. A. Kavanaugh, M.A.
Assoc. Prof. W. J. Micheels, Ph.D.	Instr. A. J. LaBerge, M.A.
Assoc. Prof. H. T. Widdowson, M.A.	Instr. C. W. McIntosh, M.Ed.
Asst. Prof. H. F. Nelson, M.A.	Instr. R. A. Tinkham, M.A.
Instr. W. C. Anderson, M.A.	

Average years in teacher education 10.4

Average years in public school teaching, 9

* Education Major with Industrial Education Minor.

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area* (Sq. Ft.)	Equipment* Value
Mechanical Drawing	9		
Woods	8		
Metals	6		
Graphic Arts	6		
Electricity (electronics)	6		
Handicrafts	6		
Shop Finishing	3		
Analysis (Instructional)	2		

Course Organization	3		
Equipment & Management	3		
Student Teaching	9		
Philosophy of VE	2		
Practices in VE	2		
Related Subjects	2		
Teaching of Industrial Subjects	3		
Introduction to IA	2		
Tests in Industrial Subjects	2		
Vocational Guidance	3		
	<hr/>		
Total	77	Not	Given

* We have some shops of our own for *first* courses in several areas. Majors go to Mech. Engineering shops, Agr. Engineering shops, and to Dunwoody Industrial Institute under a 25-year-old cooperative agreement. May take elective courses in campus divisions of Arts, Art Education, Visual Aids, etc.

GRADUATE OFFERINGS

Industrial Instruction	3
Tests in Industrial Subjects	3
The General Shop	3
(Not Shop Course)	
Instructional Aids	3
Adm. of IE	3
Coordination	3
Apprenticeship	2
Conference Leading for Industry	3
Vocational Guidance	3
Supv. of IE	3
Phil. & Prac. of IE	3
Industrial Course Construction	3
Part-time Education	3
Research Problems	3-9
Literature of IE	6
	<hr/>
Total	53

SPECIAL FEATURE

Variety of offerings, plus varied sources of instruction. Unification of all phases of Industrial Education – at all levels – by requirement and by election. One year daily Practice Teaching on campus and in Minneapolis Public Schools. Service to other Departments of the College through courses for other majors.

MOORHEAD STATE TEACHERS COLLEGE Moorhead, Minnesota

Department of Industrial Arts, The Division of Special Fields, established (date not available). Degrees granted: BA, BS. 30 full-time majors.

STAFF: (2)

Co-Chairmen O. E. Ursin, M.A., and M. E. Wegner, M.A.

Average years in teacher education, 4.5

Average years in public school teaching, 2.1

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	23	900	\$ 500
Woods	18	3,600	10,000
Metals	18	1,800	14,485
Graphic Arts	16	1,800	20,000
Electricity (electronics)	2		
Plastics	2		
Handicrafts	4		
Visual Aids	2		
School Shop Adm.	4		
Student Teaching	10		
IA in the Secondary School	4		
Problems of Shop Maintenance (Lecture Room)	4		
		?	
Total	107	8,100	\$44,985

SPECIAL FEATURE

Four to eight page College newspaper, The Western MISTIC, is linotyped and printed in the Industrial Arts print shop. 2500 copies are printed each week.

STATE TEACHERS COLLEGE**St. Cloud, Minnesota**

Industrial Arts Department, Division of Arts and Music, established 1907. Degrees granted: BAE, BSE. 90 full-time majors.

STAFF: (5)

Chairman R. H. Larson, M.A.

C. A. Parks, B.S.

W. R. Burdette, M.S.

P. G. Rawland, B.A.

O. E. Markkula, B.S.

Average years in teacher education, 4.6

Average years in public school teaching, 3.2

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9	840	\$ 4,000
Woods	5	2,446	5,000
Metals	9	2,659	30,000
Graphic Arts	3	1,140	20,000
Electricity (electronics)	6	378	1,000
Ceramics	2	324	4,000
Handicrafts	6		
Power	3	1,027	10,000
Elementary Industrial Arts	4		
Jr. High School IA	2		
Construction & Upholstery	2		
Industrial Education	2		
Philosophy of IA	2		
Course Construction	2		
Administration of IA	2		
Instructional Aids	2		
Shop Planning, Equipment and Maintenance (Auxiliary Area)	3		
		1,186	
Total	64	10,000	\$74,000

WINONA STATE TEACHERS COLLEGE

Winona, Minnesota

Department of Industrial Arts, Division of Fine and Applied Arts, established 1915. Degree granted: BSE. 50 full-time majors.

STAFF: (3)

Div. Chairman H. R. Jackson, M.S. Instr. R. D. Hobson, M.A.
Instr. J. H. Capron, M.S.

Average years in teacher education, 10.7

Average years in public school teaching, 4.3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	16	680	\$ 1,500
Woods	12	800	7,500
Metals	12	1,200	16,500
Graphic Arts	8	680	6,000
Electricity (electronics)	4	400	1,000
Handicrafts	4		
Transportation	8		
Methods	4		
Practice Teaching (Misc.)	5		
		<hr/>	<hr/>
		740	2,500
Total	77	4,500	\$35,000

MISSISSIPPI SOUTHERN COLLEGE (I.i.) Hattiesburg, Mississippi

Industrial Arts Department, Division of Practical Arts. Degree granted: BS.

STAFF: (1)

Asst. Prof. O. Thomas, M.A.

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	10		
Woods	12		
Metals	2		
Handicrafts	4		
Plan. & Equip. of the School Shop	4		
Org. & Adm. of IA	4		
The Teaching of IA	4		
		<hr/>	<hr/>
Total	44	(n.a.)	(n.a.)

MISSISSIPPI STATE COLLEGE

State College, Mississippi

Department of Industrial Education, School of Education, established 1945. Degree granted: BSE. 50 full-time majors.

STAFF: (1)

Assoc. Prof. W. B. Montgomery, M.A.

Years in teacher education, 30

Years in public school teaching, none

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	8		
Woods	6	2,500	\$15,000
Metals	9	2,500	10,000
Electricity (electronics)	3		
Handicrafts	4		
Professional Courses	12		
Total	42	5,000	\$25,000

NOTE: There are five other persons on the IE staff, devoting less than half time to IE. Some shop work is done in the Engineering Shops. Commercial Education and Vocational Education are included in the Department of Industrial Education, but are not listed here.

SOUTHEAST MISSOURI STATE COLLEGE Cape Girardeau, Missouri
Industrial Arts Department, established 1901. Degrees granted: BS, BSE. 75 full-time majors.

STAFF: (3)

Prof. & Dept. Head A. G. Williams, M.S. Instr. C. Lamb, (n.d.)

Asst. Prof. R. G. Wagoner, M.A.

Average years in teacher education, 22

Average years in public school teaching, 4

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2.5	1,800	\$10,500
Mechanical Drawing	21.5	3,100	9,000
Woods	8.0		
Metals	7.5	1,200	20,000
Handicrafts	5.0		
Special Problems in IA	2.5		
Content & Methods	2.5		
IA Design	2.5		
(Offices, Library, Storage & Supply)		3,700	3,000
Total	52.0	9,800	\$42,500

SPECIAL FEATURE

Industrial Arts Dept. has fine working cooperation with the Fine Arts Dept.

Industrial Arts administers *Crafts* including leather, plastics, and chip carving units.

Fine Arts administers *pottery* and *jewelry* courses.

UNIVERSITY OF MISSOURI

Columbia, Missouri

Department of Industrial Education, College of Education, established 1900. Degrees granted: BSE, AM, MS, MEd, PhD, EdD. 31 full-time majors, 18 full-time graduate students, 3 part-time graduate students.

STAFF: (4*)

Prof. & Dept. Head H. H. London, Ph.D. Instr. D. B. Doty, M.Ed.
 Asst. Prof. W. C. Brown, M.Ed. Instr. R. B. Sonderman, M.Ed.

Average years in teacher education, 8.2

Average years in public school teaching, 3.4

* Other persons devote less than half-time to our group.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	2,624	\$10,000
Mechanical Drawing	9		
Woods	6		
Metals	9		
Electricity (electronics)	3		
Ceramics	3**		
Handicrafts	5		
Tools & Materials	2		
Industrial Arts Design	3		
Special Problems in IE	1-3		
Vocational Guidance	3		
Sel. & Org. of Subject Matter	2		
Principles of T. & I. Teaching	3		
Org. & Adm. of IE	3		
Jewelry	3**		
Weaving	3**		
(Other shops & drawing room available to use of IE Dept.)		8,000	
(Office equipment)			1,500
(High School Composite General Shop)		960	3,500
Total	63	11,584	\$15,000

** Electives in Art Crafts Department

GRADUATE OFFERINGS

Special Problems in IE	2-6
Vocational Guidance	3
Sel. & Org. of Subject Matter	2
Principles of T. & I. Teaching	3
Org. & Adm. of IE	3
Special Investigations in IE	2-6
History of IE	2
Problems of Adult Education	3
Philosophy of the Prac. Arts & VE	2
Seminar in IE	1/2-2
In-Service Course in IE	2-6
Research in IE	2-12
Total	50

SPECIAL FEATURE

Our Program includes, under Industrial Education, both Industrial Arts and Vocational Industrial Education. Students specializing in either field get some work in both. Thus our graduates understand both fields, can work together, and frequently move from one to the other.

LINCOLN UNIVERSITY**Jefferson City, Missouri**

Industrial Arts Education, Mechanic Arts Department, College of Arts & Sciences, established 1938. Degrees granted: BSE, BSIE. 14 full-time majors, 2 part-time majors.

STAFF: (3*)

Asst. Prof. & Act. Head C. B. Taylor, M.S.

Asst. Prof. I. A. Rouce, M.S.

Asst. Instr. L. Booker, B.S.

Average years in teacher education, 6

Average years in public school teaching, 5

* Four other persons spend less than half-time.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12	864	\$ 1,500
Woods	24	2,400	8,000
Metals	15	2,400	20,000
Graphic Arts	15	1,800	50,000
Handicrafts	2	920	2,000
Industrial Arts Design	3		
Building Trades - Masonry	17	2,400	500
Maintenance of Laboratory Equip.	3		
Total	91	10,784	\$82,000

SPECIAL FEATURES

In the Department of Mechanic Arts the shops are used by persons who are majors in Vocational Industrial Education, terminal-technical and technical professional courses. The only shop that is exclusively Industrial Arts is the General Shop and Crafts which is also used by Laboratory High as a general shop.

NORTHEAST MISSOURI STATE TEACHERS COLLEGE**Kirkville, Missouri**

Industrial Education, Division of Practical Arts, established 1910. Degrees granted: BSE, BSIE. 235 full-time majors.

STAFF: (3)

Head, Div. P. A. & Asst. Prof.

Asst. Prof. W. T. Minor, M.S.

O. L. Barnett, M.Ed.

Asst. Prof. D. R. Cole, M.S.

Average years in teacher education, 6.3

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	22.5	1,100	\$ 3,500
Woods	25.0	2,400	25,000

MISSOURI

75

Metals	15.0	1,750	\$ 75,000
Electricity (electronics)	15.0	475	3,000
Plastics	2.5		
Ceramics	2.5*		
Handicrafts	10.0	550	2,500
Transportation	20.0		
Teacher Education	7.5		
	<hr/>	<hr/>	<hr/>
Total	120.0	6,275	\$109,000

* In Division of Fine Arts

NORTHWEST MISSOURI STATE COLLEGE**Maryville, Missouri**

Industrial Arts Department, established 1915. Degrees granted: BS, BSE. 90 full-time majors, 110 part-time majors.

STAFF: (4)

Chairman D. N. Valk, M.S.

Instr. H. Ringold, M.S.

Instr. D. Crozier, BSE

Instr. K. T. Thompson, B.S.

Average years in teacher education, 17.3

Average years in public school teaching, 9.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5.0	2,500	\$ 9,000
Mechanical Drawing	12.5	3,500	4,000
Woods	12.5	4,800	20,000
Metals	7.5	2,300	45,000
Electricity (electronics)	2.5		
Handicrafts	2.5	1,500	3,000
Transportation	5.0	2,000	4,000
(Lecture Rooms)		1,800	1,000
	<hr/>	<hr/>	<hr/>
Total	47.5	18,400	\$86,000

SOUTHWEST MISSOURI STATE COLLEGE**Springfield, Missouri**

Industrial Education Department, established 1947. Degree granted: BSE. 40 full-time majors.

STAFF: (3)

Prof. & Dept. Head D. Kemper, M.A.

Instr. E. H. Thomas, M.S.

Instr. A. F. Gimbel, M.A.

Average years in teacher education, 12

Average years in public school teaching, 10

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2.5	5,850	\$25,000
Mechanical Drawing	22.5	2,700	3,000
Woods	15.0		
Metals	15.0		
Electricity (electronics)	2.5		

UNDERGRADUATE OFFERINGS (Con't.)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Care & Maintenance of Tools & Equipment	2.5		
Org. & Adm. of IA	2.5		
IA for Elem. Teachers	2.5		
Materials of Industry	2.5		
Shop Processes	2.5		
Cost Estimating	2.5		
Production Planning	2.5		
Industrial Safety	2.5		
Content & Methods in IA	2.5		
Total	80.0	8,550	\$28,000

SPECIAL FEATURE

Our physical set-up is unique, we think, in that all shop work is done in one large shop organized as a general shop. Areas of work are localized within the shop making it possible to operate as a general shop or as several unit shops. We find this way satisfactory and believe that we can adequately train teachers to work in with a one-teacher department or otherwise.

CENTRAL MISSOURI STATE COLLEGE **Warrensburg, Missouri**

Industrial Arts Department, Division of Applied Arts & Science, established 1908. Degrees granted: BS, BSE. 47 full-time majors, 30 part-time majors. (These figures do not include freshmen and sophomores.)

STAFF: (5)

Prof. & Dept. Head N. B. Grinstead, A.M.

Assoc. Prof. T. R. Gaines, M.A.

Assoc. Prof. R. E. Smith, A.M.

Assoc. Prof. R. E. Goetz, M.A.

Asst. Prof. M. Jenkins, B.S.

Average years in teacher education, 11.2

Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	1,500	\$ 2,000
Mechanical Drawing	17	1,500	1,800
Woods	12	3,600	7,000
Metals	7	1,200	15,000
Graphic Arts	9	2,600	12,000
Electricity (electronics)	2		
General Crafts	3	1,200	1,000
Metal Crafts & Lapidary	2		
Ind. Arts for Elem. Schools	3		
Organization & Administration (Storage, Offices, etc.)	3	400	
Total	61	12,000	\$38,800

SPECIAL FEATURE

Our development in Graphic Arts and Photography is our most recent. These courses are offered from the Industrial Arts viewpoint. Pro-

duction work is not done for credit in these courses.

MONTANA STATE COLLEGE**Bozeman, Montana**

Industrial Arts, Agricultural Engineering Department, established 1948. Degree granted: BAE. 93 full-time majors.

STAFF: (6)

Prof. & Head of Ag. Eng. Dept.	Asst. Prof. S. J. Cox, (n.a.)
O. W. Monson, M.S.	Asst. Prof. W. J. Sutter, B.S.
Assoc. Prof. R. Kenck, B.S.	Instr. C. R. Anthony, B.S.
Assoc. Prof. H. M. Skinner, B.S.	

Average years in teacher education, 10.5

Average years in public school teaching, 9.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	15	3,200	\$20,000
Mechanical Drawing	18		
Woods	22	6,400	8,500
Metals	16	8,650	76,800
Electricity (electronics)	3	800	3,000
Handicrafts	4	2,250	250
Total	78	21,300	\$108,550

SPECIAL FEATURE

During summer school courses are given for employed vocational and industrial arts teachers.

WESTERN MONTANA COLLEGE OF EDUCATION**Dillon, Montana**

Division of Industrial Arts Education, established 1915. Degree granted: BS in Elementary Education. 10 full-time majors, 14 part-time majors

STAFF: (1)

Director & Prof. O. K. Moe, M.A.

Years in teacher education, 24

Years in public school teaching, 11

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. St.)	Equipment Value
General Shop	—	6,080	\$8,500
Mechanical Drawing	16		
Woods	18		
Metals	2		
Graphic Arts	4		
Handicrafts	2		
Communication	2		
Teaching the IA	4		
Total	48	6,080	\$8,500

NORTHERN MONTANA COLLEGE**Havre, Montana**

Department of Industrial Arts, established 1945. No degrees granted;
Junior College. 30 full-time majors, 50 part-time majors.

STAFF: (3)

Dept. Head & Asst. Prof. O. E. Kjos, M.Ed.

Asst. Prof. J. W. King, A.B.

Instr. C. Elnes, (n.d.)

Average years in teacher education, 2.3

Average years in public school teaching, 3.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12		
Woods	16	1,500	\$15,000
Metals	25	2,640	13,500
Electricity (electronics)	9	720	3,000
Handicrafts	2		
Transportation (Lecture Room)	6	3,500	2,500
		350	
Total	70	8,700	\$34,000

SPECIAL FEATURE

Our Industrial Arts students carry the largest part of their manipulative work here; then transfer to Montana State for the remainder of their work.

NEBRASKA STATE TEACHERS COLLEGE AT CHADRON**Chadron, Nebraska**

Department of Industrial Arts, Division of Practical Arts, established 1917. Degree granted: BSE. 24 full-time majors.

STAFF: (2)

Chairman, Div. P. A., Head, Dept. IA, & Prof. D. M. Burkhiser, M.S.

Asst. Prof. F. A. Thoendel, A.M.

Average years in teacher education, 4.5

Average years in public school teaching, 17

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	5,900	\$10,000
Mechanical Drawing	22	900	2,000
Woods	11		
Metals	7		
Graphic Arts	2		
Electricity (electronics)	3		
Plastics	2		
Handicrafts	9	800	500
Machine & Tool Maintenance	2		
Industrial Arts Design	2		
Total	63	7,600	\$12,500

SPECIAL FEATURE

We feel that our graduates receive a well-rounded program in Industrial Arts philosophy and preparation. With this basis they are capable of taking their place in the shops and classrooms of our state and nation, as well as a sound foundation for graduate study in Industrial Arts Education.

NEBRASKA STATE TEACHERS COLLEGE **Kearney, Nebraska**

Industrial Education Department, Vocational Arts Division, established 1916. Degree granted: BAEd. 50 full-time majors.

STAFF: (3)

Prof. & Div. Head O. C. Olsen, A.M. Asst. Prof. O. W. Means, B.S.
Asst Prof. K. F. Carlson, M.A.

Average years in teacher education, 13.7

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	3	960	\$ 1,500
Machine Drawing	3		
Architectural Drawing	6		
Woods	14	3,360	4,150
Woodwork for Women	2		
Toy Construction	2	576	1,000
Wood Finishing	2	336	300
Metals	5	1,200	2,348
Electricity (electronics)	1		
Manuscript Writing	1		
Saw Fitting	1		
Traffic Safety & Driving Training (Auxiliary Space)	3		
		<u>1,376</u>	<u>250</u>
Total	45	7,808	\$ 9,548

NEBRASKA WESLEYAN UNIVERSITY **Lincoln, Nebraska**

Department of Industrial Arts, Division of Natural Science, established 1946. Degree granted: BAE. 11 full-time majors, 50 part-time majors.

STAFF: (1)

Assoc. Prof. R. A. Niles, M.S.

Years in teacher education, 5

Years in public school teaching, 19.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	8	2,240	\$ 650
Woods	12	2,240	8,750

UNDERGRADUATE OFFERINGS (Con't.)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Metals	14	1,024	\$ 1,250
Electricity (electronics)	3		
Handicrafts	1		
Shop Maintenance and Repair	1		
Org. and Adm. of IA	3		
Instructional Aids	3		
Total	47	5,504	\$10,650

SPECIAL FEATURE

No attempt is made to do any work in the Vocational field. The work is organized along the theme of modern Industrial Arts and attempting to meet the needs of those who wish to enroll in the Department from the general education view and those who are preparing to teach Industrial Arts.

UNIVERSITY OF NEBRASKA**Lincoln, Nebraska**

Department of Practical Arts, established 1918. Degree granted: BSE. 192 full-time majors, 19 part-time majors.

STAFF: (3)

Asst. Prof. A. C. Easton, M.A.
Instr. N. Munson, B.S.

Asst. Instr. J. H. Elliott, B.S.E.

Average years in teacher education, 10.7

Average years in public school teaching, 4

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	3,000	\$ 9,760
Mechanical Drawing	3		
Woods	14		
Metals	9		
Upholstering	3		
Total	32	3,000	\$ 9,760

UNIVERSITY OF OMAHA (I.i.)**Omaha, Nebraska**

Industrial Arts Education, Colleges of Applied Arts and Education (jointly), established 1950. Degree granted: BSE. 5 full-time majors, 12 part-time majors.

STAFF: (2)

Asst. Prof. J. H. Brown, B.S.

Asst. Prof. C. H. Prewett, M.S.

Average years in teacher education, 6

Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	2,400	\$18,650
Mechanical Drawing	12	2,100	5,000

Woods	9		
Metals	5		
Electricity (electronics)	3		
Wood Finishing	3		
Properties of Materials	3		
Shop Teaching Methods	3		
School Shop Adm.	3		
History of IA	3		
Student Teaching	6		
Total	53	4,500	\$23,650

NEBRASKA STATE TEACHERS COLLEGE **Peru, Nebraska**

Department of Industrial Arts, Division of Practical Arts, established 1910. Degrees granted: BAE, AB. 60 full-time majors.

STAFF: (2)

Head, Div. P. A. & Prof. A. V. Larson, A.M.

Instr. D. V. Jarvis, A.B.

Average years in teacher education, 14

Average years in public school teaching, 9.8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	10	600	\$ 1,200
Woods	14	1,400	4,500
Metals	9	2,000	9,500
Graphic Arts	4		
Electricity (electronics)	2	600	500
Plastics	2		
Handicrafts	2		
Transportation	3		
Farm & Home Mechanics	2		
Upholstery & Woodfinishing	2		
Shop Maintenance	2		
(Misc.)			300
Total	52	4,600	\$16,000

NEBRASKA STATE TEACHERS COLLEGE **Wayne, Nebraska**

Industrial Arts Department, Division of Practical Arts, established 1910. Degree granted: BAE. 60 full-time majors.

STAFF: (3)

P. A. Div. Chairman R. A. Schreiner, M.A. Instr. A. J. Netherda, A.B.

Prof. C. Wriedt, M.S.

Average years in teacher education, 6

Average years in public school teaching, 8.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	12	1,200	\$ 1,500

UNDERGRADUATE OFFERINGS (Con't.)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Woods	16	4,000	\$ 7,500
Metals	9	2,100	6,000
Handicrafts	2	900	750
Transportation	3		
Concrete Construction & Carpentry	3		
Methods of Teaching IA	2		
Care & Management of Shop Equip.	2		
Total	51	8,200	\$15,750

KEENE TEACHERS COLLEGE

Keene, New Hampshire

Department of Trade and Industry, established 1924. Degree granted: BAE. 3 full-time majors, 80 part-time majors!

STAFF: (3)

Asst. Prof. C. A. Adams, Ed.M.

Asst. Prof. S. E. Eaton, M.S.

Asst. Prof. L. Bushnell, M.Ed.

Average years in teacher education, 21.7

Average years in public school teaching, none

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6	500	
Woods	6	500	Not
Metals	6	500	
Electricity (electronics)	6		Given
Transportation	6	800	
Total	30	2,300	

NEW JERSEY STATE TEACHERS COLLEGE AT NEWARK

Newark, New Jersey

Department of Industrial Arts Education, established 1922. Degree granted: BSE. 101 full-time majors, 21 part-time majors.

STAFF: (3)

Chairman & Assoc. Prof. C. E. Frankson, Ph.D.

Assoc. Prof. F. M. Richmond, M.A.

Asst. Prof. A. W. Earl, M.A.

Average years in teacher education, 13

Average years in public school teaching, 10.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9		
Woods	12	800	\$ 9,000
Metals	12	560	15,000
Graphic Arts	9	540	6,000

Electricity (electronics)	4	660	3,500
Ceramics	3	580	3,500
Mathematics of IA	4		
Principles of IA	2		
Curriculum & Teaching of IA	2		
Household Mechanics	2		
Elementary School IA	2	704	3,000
Total	61	3,844	\$40,000

SPECIAL FEATURE

We are now organizing a graduate Industrial Arts program.

STATE TEACHERS COLLEGE OF NEW JERSEY Trenton, New Jersey

Industrial Arts Department, established 1896. Degree granted: BSE.
78 full-time majors.

STAFF: (3)

Prof. & Head F. O. Armstrong, M.A. Instr. V. A. Dresser, M.A.

Asst. Prof. C. J. Johnson, B.S.

Average years in teacher education, 9.7

Average years in public school teaching, 7.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	13	960	\$ 1,500
Woods	6	3,200	20,000
Metals	6	2,300	25,000
Graphic Arts	6	2,300	5,000
Electricity (electronics)	3		
Ceramics	3	1,200	3,000
Handicrafts	3		
Transportation	3	960	3,000
(Lecture Room & Science Lab.)		1,200	1,800
Total	43	12,120	\$59,300

SPECIAL FEATURE

A serious attempt has been made at this college to make applied science, mathematics and technical information a functioning part of the Industrial Arts work. Our students get 6 semester hours of applied mathematics taught by the Industrial Arts staff. These courses deal with strength of materials and other engineering data which is closely related to projects in wood and metal. Six semester hours of industrial chemistry are also taught by the Industrial Arts staff with the intent of broadening the prospective teachers knowledge of the chemistry used in the school shop. This aspect of the work here has been developed further than it has been in most teacher training institutions.

UNIVERSITY OF NEW MEXICO**Albuquerque, New Mexico**

Division of Industrial Arts, established 1946. Degrees granted: BSE, BSA. 82 full-time majors.

STAFF: (4)

Assoc. Prof. A. P. Bailey, M.S. Asst. Prof. R. M. Davis, B.A.

Asst. Prof. C. R. Brown, M.S. Instr. R. E. Blankley, (n.d.)

Average years in teacher education, 2.9

Average years in public school teaching, 6.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12*		
Woods	24	2,100	\$10,000
Metals	21	7,500	75,000
Electricity (electronics)	6*		
Handicrafts	6		
Shop Computations	6		
Construction Materials	3		
Shop Equipment	3		
Shop Management	3		
Total	74	9,600	\$85,000

* In College of Engineering

SPECIAL FEATURE

Expect to have Graduate courses set up for the first semester 1951-52.

NEW MEXICO HIGHLANDS UNIVERSITY (l.i.) Las Vegas, New Mexico

Department of Industrial Arts. Degrees granted: BA, MA..

STAFF: (2)

Asst. Prof. & Head of Dept. H. K. Brandt, M.A.

Instr. W. H. Watson, M.S.

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	21		
Woods	21		
Metals	8		
Graphic Arts	12		
Electricity (electronics)	2		
Communication	6		
Teaching Methods in IA	3		
Foundations of IA	3		
Written Instructional Materials	2		
Occupational Analysis	4		
Seminar	1-4		
Spec. Prob. in Drafting	4		
Spec. Prob. in Machine Shop	4		
Spec. Prob. in Woodworking	4		
Curriculum Building in IA	4		
Dev. & Use of Audio-Visual Aids	4		
The Steel Square	2		
Total	112	(n.a.)	(n.a.)

GRADUATE OFFERINGS	Quarter Hours
Shop Planning & Org.	4
IA Org.	4
Supervision of IA	2
The General Shop & Its Problems	2
Research in Education	4
Hist. of Manual & IE	4
Seminar	1 - 4
Total	24

SPECIAL FEATURE

It is desirable that a major in Industrial Arts do work in the Arts & Crafts field and secure at least a minor in that department.

EASTERN NEW MEXICO UNIVERSITY**Portales, New Mexico**

Division of Industrial Arts, School of Technology, established 1938.
Degrees granted: BAE, BSE, MAE. 25 full-time majors, 3 full-time graduate students.

STAFF: (3)

Asst. Prof. & Director R. R. Black, (n.a.)

Instr. A. A. Bettina, M.A.

Instr. A. C. Evans, M.S.

Average years in teacher education, 6

Average years in public school teaching, 1

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6		
Woods	8		\$12,000
Metals	18		31,100
Graphic Arts	20	1,800	25,000
Ceramics	3*		
Handicrafts	5*		
Intro. to IA (Replaced GS)	2		
Applied Mechanics	3		
Teaching IA	3		
Shop Organization	3		
Vocational Education	3		
Total	74	18,220**	\$68,100***

* Three hours of each course is taken in Art Department.

** Industrial Arts Building, 16,420 sq. ft., houses machine shop, welding, foundry, sheet metal, woodworking, engr. drawing, and 2 classrooms.

*** Excluding engr. drawing equipment value.

GRADUATE OFFERINGS

Problems in Woodworking	3
Problems in Metalworking	3
Special Problems	6
Job Analysis	3
Trade Analysis	3

GRADUATE OFFERINGS (Con't.)	Semester Hours
Shop Organization	3
Course Organization	3
Teaching the Ind. Arts	3
Vocational Education	3
Total	30

SPECIAL FEATURE

Shop was USAAF base gym which was moved in one piece cross-country for a distance of about 60 miles. Our current 4 year curriculum went into effect at the beginning of the 1949-50 school year.

NEW MEXICO WESTERN COLLEGE**Silver City, New Mexico**

Department of Industrial Arts and Vocational Education, established 1947. Degree granted: BSE. 45 full-time majors.

STAFF: (4)

Assoc. Prof. & Dept. Head
H. A. White, M.S.

Assoc. Prof. L. M. Frederick, M.S.
Assoc. Prof. W. R. Hein, B.S.

Assoc. Prof. N. Erckmann, M.S.

Average years in teacher education, 3.3

Average years in public school teaching, 6

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9	1,075	\$ 1,000
Woods	15	2,780	7,000
Metals	12	4,000	?
Graphic Arts	15	3,625	20,000
Handicrafts (in Art Dept.)	30		
Transportation	15	4,425	10,000
Fundamentals of Design (Art Dept.)	9		
Total	105	15,905	\$38,000*

* Equipment value of Machine Shop not available.

SPECIAL FEATURE

Started Industrial Arts in June 1947 - has grown to be the second largest department in the college. They are building us a new Industrial Arts Building. In Automechanics one course is on the Sun Electric testing equipment (we have all of it).

NEW YORK STATE COLLEGE FOR TEACHERS (I.i.)**Buffalo, New York**

Industrial Arts Division. Degree granted: BS. (Master's Degree pending). 330 full-time majors.

STAFF: (16)

Director and Prof. I. C. Perkins, M.A.A.	Asst. Prof. E. L. Morrice, M.A.
Prof. E. E. Neuthardt, Ed.D.	Asst. Prof. E. M. Russel, Ed.D.
Asst. Prof. D. G. Brossman, M.A.	Asst. Prof. H. J. Steffen, Ed.M.
Asst. Prof. L. J. Callan, M.A.	Instr. D. A. Cappiello, M.S.
Asst. Prof. C. A. Cook, M.S.	Instr. H. J. Meyer, B.S.
Asst. Prof. J. Fontana, A.M.	Instr. W. C. Palmeter, Jr., B.S.
Asst. Prof. A. W. Grabau, M.A.	Instr. E. H. Strong, B.S.
Asst. Prof. O. Harlan, M.A.	Instr. B. S. Waagen, M.A.

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8		
Mechanical Drawing	17		
Woods	7.5		
Metals	7.5		
Graphic Arts	7.5		
Electricity (electronics)	7.5		
Ceramics	5		
Transportation	5		
Ind. History & Labor Prob.	3		
Prin. & Prac. of IA	6		
Prac. Arts for the Handicapped	3		
Textiles	2.5		
Practice Teaching & Conference	15		
Total	94.5	(n.a.)	(n.a.)

GRADUATE OFFERINGS

Workshop in IAE	3
Seminar in IA	3
Field Studies Related to IAE	3
Tech. & Devices for School Lab.	3
Thesis	6
Project	4
Research Methods & Tech.	2
Total	24

SPECIAL FEATURE

Since September, 1947, courses bearing graduate credit are offered in the extension and in the summer programs. Graduate courses will continue on this basis until such time as fifth year work is authorized by the State University.

**NEW YORK STATE SCHOOL OF INDUS. AND LABOR RELATIONS,
CORNELL UNIVERSITY,** Ithaca, New York

Prof. L. A. Emerson, Head of Industrial Education.

(No Industrial Arts staff.)

Cornell University does not have a definite program for training industrial arts teachers. Their program is designed to prepare persons for leadership positions in the field of vocational industrial and technical

education. It provides the courses required for state certification for administrative and supervisory positions in this field.

The work offered is largely at the graduate level, and leads toward the degrees of Master of Science in Education, Doctor of Education, and Doctor of Philosophy. Recent program offerings include the following courses:

Administration of Industrial Education
 Supervision of Industrial Education
 Development of Courses of Study in Industrial Education
 Instructional Materials Workshop
 Industrial Education in Small Communities
 Seminar in Industrial Arts Education
 Industrial and Technical Education on the Post-Secondary Level
 Labor Union Structure, Government, and Administration
 Survey of Industrial and Labor Relations
 Human Relations
 Personnel Administration
 Social Security
 Audio-Visual Methods
 Public Relations
 Public Issues in Industrial and Labor Relations
 Labor Relations Law and Legislation
 Conference Methods in Industrial and Labor Relations

A great variety of courses in the field of general secondary education are also available.

CITY COLLEGE OF NEW YORK

New York, New York

Industrial Arts Teacher-training Program, School of Education, established 1949. Degree granted: BSE. 76 full-time majors.

STAFF: (5)

Prof. and Director A. R. Spillman, M.A. Instr. J. R. McDermott, M.A.

Asst. Prof. G. R. Keane, M.A. Instr. H. S. Spielman, Ed.D.

Asst. Prof. G. K. Wiggins, M.A.

Average years in teacher education, 2.5

Average years in public school teaching, 17

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5	1,500	\$ 6,000
Mechanical Drawing	4	900	2,000
Woods	7.5	1,650	6,000
Metals	7.5	1,350	8,000
Graphic Arts	7.5	1,200	8,000
Electricity (electronics)	7.5	900	4,000
Plastics (part of GS)			
Ceramics (part of GS)			
Transportation (New shop ready for Fall 1952)			
Communication (part of Elec.)			
Design	2		
Prin. & Prob. of IA	2		
Methods and Materials of IA	4		
Ed. & Voc. Guidance	2		
Student Teaching	6		
Total	55.0	7,500	\$34,000

SPECIAL FEATURE

Entrance to the program by written examination only. Special written and oral English Tests for all students – these must be passed, but need not be passed the first time taken. Classes limited to 12 to 18 students. A student takes *two* shop courses each term, except the last. Academic program is the same as for others in the School of Education except no foreign language is required.

NEW YORK UNIVERSITY

New York, New York

Industrial Arts Teacher Training Program, Department of Vocational Education, School of Education, established 1925. Degrees granted: BSE, MAE, Ed.D., Ph.D. 370 full-time majors, 160 full-time and part-time graduate students.

STAFF: (24)

Assoc. Dean & Prof. R. E. Pickett, Ph.D.	Instr. D. Kauffmann, Ph.B.
Chairman & Prof. W. P. Sears, Ph.D.	Instr. P. Malek, M.A.
Prof. R. E. Haines, M.A.	Instr. J. G. Miller, M.A.
Prof. R. H. Spaulding, Ph.D.	Instr. I. R. Minsley, M.A.
Assoc. Prof. J. V. Adams, Ed.D.	Instr. F. Navratil, M.A.
Assoc. Prof. R. L. Thompson, Ed.D.	Instr. G. A. Post, M.A.
Asst. Prof. F. J. Behlen, M.A.	Instr. C. F. Pfeiffer, M.A.E.
Asst. Prof. R. Canfield, M.A.E.	Instr. E. Polansky, M.A.
Asst. Prof. R. Van Tassel, Ed.D.	Instr. L. Polansky, M.A.
Instr. C. E. Ball, M.A.	Instr. S. A. Rosenkamppff, M.A.
Instr. C. E. Bauer, M.A.	Instr. H. F. Strickland, M.A.
Instr. K. R. Benson, M.A.	Instr. E. A. Trumbower, B.S.

Average years in teacher education, 9.3

Average years in public school teaching, 5.2

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	2,300	\$ 75,000
Mechanical Drawing	4	1,100	10,000
Woods	17	3,750	65,000
Metals	17	4,900	155,000
Graphic Arts	7	3,200	38,000
Electricity	6	2,600	50,000
Plastics	4		
Ceramics	16	2,000	20,000
Handicrafts	8	7,500	200,000
Transportation	3	3,600	25,000
IA Design & Project Design	10		
Home Mechanics	4		
Recreational Crafts	4		
Leather	8		
Ed. Toys & Games	10		
Jewelry & Art Metal	12		
Textiles	15	1,750	20,000
Total	151	32,700	\$658,000

GRADUATE OFFERINGS	Semester Hours
Ind. Hist. & Labor Prob.	4
Principles of IA	2
Ed. & Voc. Guid. for IA Teach.	2
Study of Ind. Occupations	2
Curr. Const. & Course Org.	2
Methods of Teaching IA	2
Tools, Processes & Equip.	2
Practicum in Prob. of IA Ed.	6
Research in Adv. Shop Tech.	12
Supervision of IA	3
IA Teacher in the Sch. Prog.	3
Adv. Project Design	6
Thesis Seminar	6
Content Seminar	6
Total	<u>58</u>

SPECIAL FEATURE

Strong emphases on fundamental skills of teaching, including shop skills on undergraduate level. Master of Arts program tailored to suit individual needs of candidates. Research emphasis for doctoral candidates.

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

New York, New York

Fine and Industrial Arts Department, established 1893. Degrees granted: MAE, DEd, PhD. 20 full-time graduate students.

STAFF: (4)

Prof. & Dept. Head E. Ziegfeld, Ph.D. Instr. W. H. Hinely, M.A.
Instr. M. L. Fairchild, M.A. Instr. J. S. Leary, M.A.

Average years in teacher education, 5.7

Average years in public school teaching, 4

GRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Teaching & Supervision of IA	3-4		
Problems in Fine & IA	1-3		
Supervision of Fine & IA	3-4		
Art Orientation through Crafts	2	1,730	
Designing with Materials	2		Value
Industrial Design Laboratory	2		
Mechanical Drawing	2		
Metalwork & Jewelry	2		Not
Ceramic Sculpture	3		
Pottery	2	1,338	
Weaving	2	432	Given
General Shop Work	2-3	1,540	
General Woodworking (2 courses)	2-3		
Lithography	3		
Advanced Studio Work (Individual Problems)	1-6		
Total	<u>43</u>	<u>5,040</u>	

SPECIAL FEATURE

For the last ten years study in Industrial Arts at Teachers College, Columbia, has been only at the graduate level. The Department of Fine and Industrial Arts operates under one head. Emphasis is placed upon a philosophy and program which will promote a closer relationship between fine and industrial arts in our schools. The department draws students from all parts of the U.S. and from countries beyond our boundaries.

STATE UNIVERSITY OF NEW YORK, TEACHERS COLLEGE**Oswego, New York**

Division of Industrial Arts Teacher Education, established 1886. Degrees granted: BSE, MS. 397 full-time majors; 150 part-time majors (Summer Sessions and Extension Program Only).

STAFF: (21)

Dir. & Prof. G. O. Wilber, Ph.D. Asst. Prof. J. A. Storm, M.S.
 Chairman & Prof. A. Hauler, M.S. Instr. W. A. Allen, M.Ed.
 Prof. C. R. Hutchcroft, Ed.D. Instr. H. G. Gilbert, M.A.
 Asst. Prof. G. Essex, M.S. Instr. T. A. Harter, M.Ed.
 Asst. Prof. P. T. Hiser, M.A. Instr. J. R. Hastings, M.A.
 Asst. Prof. W. E. Huss, Ed.D. Instr. R. D. Helsby, M.A.
 Asst. Prof. H. M. Karcher, M.A. Instr. P. L. Kleintjes, M.A.
 Asst. Prof. F. E. Robinson, M.Ed. Instr. R. McWilliams, B.S.
 Asst. Prof. J. D. Rudolph, M.A. Instr. L. Olewine, Ed.M.
 Asst. Prof. W. M. Scoville, M.S. Instr. J. G. Townsend, M.A.
 Asst. Prof. F. E. Schneider, M.A.

Average years in teacher education, 12.3

Average years in public school teaching, 9.6

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5	2,567	\$ 10,000
Mechanical Drawing	6	1,680	3,000
Woods	5	*5,573	**30,000
Metals	5	3,134	60,000
Graphic Arts	5	2,816	50,000
Electricity (electronics)	5	2,380	35,000
Ceramics	5	2,320	6,000
Transportation	5	5,599	50,000
Elementary Industrial Arts	4	2,232	13,000
Textiles	5	2,761	4,000
Special Methods	6		
Cadet Teaching	15		
IA Design	2		
Total	73	31,062	\$261,000

* This figure represents our present building plus extension now under construction to be completed about January 1952.

** This figure represents present equipment only.

GRADUATE OFFERINGS	Semester Hours
Seminar in IA Education	2
Workshop in Prob. in IA Ed.	2
Shop Plan. & Equip. Selection	2
Sel. & Org. of IA Subj. Matter	2
IA for the Elem. School	2
Adv. Shop & Tech. Drawing	9
History of IA Education	3
Adm. & Supv. of IA	3
Total	25

WESTERN CAROLINA TEACHERS COLLEGE

Cullowhee, North Carolina

Division of Industrial Arts Education, established 1947. Degree granted: BSE. 40 full-time majors.

STAFF: (2)

Prof. R. L. Leftwich, M.A.

Instr. M. R. Brooks, M.A.

Average years in teacher education, 5

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	5,948*	
Mechanical Drawing	18	960	
Woods	12		Not
Metals	9		
Graphic Arts	3		
Electricity (electronics)	9		Itemized
Plastics	3		
Ceramics	6	560	
Handicrafts	3	560	
Industrial Design (Classroom)	3	672	
Total	69	8,700	\$30,000

* Includes Office & Storage, etc.

SPECIAL FEATURE

Our college is located in the mountains of western North Carolina near the Great Smoky Mountain National Park. We offer woodcarving, ceramics, and mountain crafts as well as the standard Industrial Arts courses. Our summer program makes it possible to enjoy a vacation in the mountains while taking college work. Industrial Arts classes are open to all students of the college as electives and the largest part of our classes are made up of these students.

THE AGRIC. & TECH. COLLEGE OF NORTH CAROLINA (l.i.)

Greensboro, North Carolina

Department of Industrial Education, School of Mechanic Arts. Degrees granted: BS, MS.

STAFF: (15)

Asst. Prof. J. F. Dawkins, M.S.	Instr. W. H. Foust, (n.d.)
Asst. Prof. G. C. Gail, M.A.	Instr. M. B. Holloway, (n.d.)
Asst. Prof. C. M. Powell, M.A.	Instr. J. Jenkins, Jr., B.S.
Instr. I. Barnett, (n.d.)	Instr. J. T. Norris, Jr., (n.d.)
Instr. L. G. Baker, M.A.	Instr. J. E. Wilkins, (n.d.)
Instr. N. E. Brown, B.S.	Instr. A. W. Williams, (n.d.)
Instr. C. L. Burge, (n.d.)	Instr. R. P. Williams, (n.d.)
Instr. M. L. Cousins, (n.d.)	

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	15		
Woods	36		
Metals	4		
Electricity (electronics)	9		
Transportation	3		
Materials of Construction	3		
Upholstery	6		
History of IE	3		
Materials, Equipment & Shop Mgt.	3		
Masonry	6		
Observation & Prac. Teach. in IE	5		
Meth. of Teach. IE	5		
Total	98	(n.a.)	(n.a.)

GRADUATE OFFERINGS

Foundations of IE	3
Current Prob. in IE	3
Industrial Psychology	3
Super. & Adm. of IE	3
Curr. Lab. in IE	3
Research Prob. in IE	3-6
Cooperative Training	3
Lab. Planning for Ind. Shops	3
General IE Programs	3
Seminar in IE	3
Workshop in IE	3
Total	36

EAST CAROLINA COLLEGE

Greenville, North Carolina

Industrial Arts Department, established 1950. Degrees granted: BS, BA. 51 full-time majors.

STAFF: (2)

Director K. L. Bing, Ed.D

Assoc. Prof. P. E. Powell, M.S.

Average years in teacher education, 10

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	1,950*	\$ 6,000*
Mechanical Drawing	21	960	2,000
Woods	12	*	*

UNDERGRADUATE OFFERINGS (cont'd)	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Metals	12	1,450*	\$ 7,000*
Electricity (electronics)	6	480*	To be equipped
Plastics	3		
Handicrafts	6		
Industrial Design	3		
Content & Methods of IA	3		
Shop Problems in IA	3		
History & Philosophy of IA	3		
IA for Elementary Teachers	3		
Care & Maintenance of Shop Equip.	3		
Special Problems in IA	3		
(Offices, Library, Planning Center, classroom, Storeroom, Finishing room)		1,910	
Total	84	6,750	\$17,500

* Woodwork and Crafts use the General Shop. Electricity uses Metal Shop

NORTH CAROLINA STATE COLLEGE OF AGRIC. & ENGIN. OF THE UNIVERSITY OF NORTH CAROLINA

Raleigh, North Carolina

Department of Industrial Arts Education, School of Education, established (date not avail.). Degrees granted: BSE, MS. 45 full-time majors, 5 full-time graduate students, 20 part-time graduate students.

STAFF: (2)

Dept. Head & Prof. I. Hostetler, Ed.D.

Assoc. Prof. M. L. Schmitt, M.A.

Average years in teacher education, 9.7

Average years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	3,521*	\$18,600*
Mechanical Drawing	9		
Woods	9		
Metals	9	864	5,000
Graphic Arts	3		
Electricity (electronics)	6		
Handicrafts	3		
IA Design	3		
Tools & Materials	3		
Home Mechanics	3		
Laboratory Problems in IA	9		
(Lecture Room, Finishing Room, Storage, etc.)		1,004	500
Total	63	5,389	\$24,100

* General Shop contains these areas: Graphic Arts, Drawing, Woodworking, Ceramics & Crafts, Electricity, Metalworking, Textiles, Welding and Transportation.

GRADUATE OFFERINGS

IA in the Elementary School	3
Laboratory Problems in IA	9
Modern Industries	3
Curriculum Problems in IA	3

Instructional Aids & Devices	3
School Shop Plan. & Equip. Sel.	3
Individual Problems in Education	3
IA Workshop	3
Mod. Prins. & Prac. in Sec. Ed.	3
Research in IAE	9
Philosophy of IA	3
Total	<u>45</u>

SPECIAL FEATURE

Since most of our graduates will teach in small schools with one or two industrial arts teachers, special emphasis is given to the training of general shop teachers in our program. All of our students start out with a general shop course (Orientation in IA); following this, they take unit shop courses in woodwork, metalwork, electricity, graphic arts and drawing. The last required laboratory course is another general shop course (The General Shop), which follows his quarter of student teaching. This gives the student an opportunity to round out his experiences in the areas in which he finds himself weak.

STATE NORMAL AND IND. COLLEGE Ellendale, North Dakota

Industrial Education Department, established 1899. Degree granted: BSIE. 57 full-time majors, 40 part-time majors.

STAFF: (5)

Dept. Head E. L. Kurth, M.Ed. Instr. E. G. Monson, B.S.
 Asst. Dept. Head R. E. B. Fagan, M.A. Instr. R. E. Syverson, B.S.
 Instr. L. W. Burroughs, B.S.

Average years in teacher education, 4.4

Average years in public school teaching, 6.8

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8	1,400	\$ 2,000
Mechanical Drawing	38	1,200	2,000
Woods	22	2,800	7,000
Metals	16	3,900	25,000
Electricity (electronics)	4		
Handicrafts	4		
Transportation	24	2,000	4,000
Professional Courses	16		
Observation & Directed Teaching	12		
Total	<u>144</u>	<u>11,300</u>	<u>\$40,000</u>

STATE TEACHERS COLLEGE Dickinson, North Dakota

Industrial Arts Department, Division of Agriculture, Home Economics, and Industrial Arts, established 1925. Degree granted: BAE. 8 part-time majors.

STAFF: (1)

Dept. Head R. R. Harding, M.A.

Years in teacher education, 16

Years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	12	2,750	\$5,000 ^a
Mechanical Drawing	28		
Pattern Making (not foundry)	4		
Practice Teaching (H. S.)	4		
Handwork	2		
Total	50	2,750	\$5,000

UNIVERSITY OF NORTH DAKOTA**Grand Forks, North Dakota**

Industrial Arts Department, School of Education, established 1920
 Degrees granted: BAE, BSE: 30 full-time majors, 4 full-time minor graduate students, 10 part-time minor graduate students.

STAFF: (2)

Asst. Prof. & Dept. Head M. F. Poyzer, M.A.

Instr. R. E. Bergstrom, B.S.

Average years in teacher education, 2.5

Average years in public school teaching, 2.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
(General Shop)	—	3,200	\$ 7,000
Mechanical Drawing	14	800	400
Woods	4		
Metals	8		
Graphic Arts	8	850	2,150
Electricity (electronics)	4	800	200
Plastics	2		
Handicrafts	2		
Transportation	4		
Problems & Processes	4		
Org. & Adm. of IA	2		
Industrial and Vocational Ed.	3		
Practice Teaching (Office, Classroom, Storerooms, etc.)	6		
Total	61	1,350	1,100
		7,000	\$10,850

GRADUATE OFFERINGS (for Education Majors with IA Minor)

Minor Problems of IA	8
Total	8

SPECIAL FEATURE

The inclusion of lapidary and silversmithing in the Metals course.

The inclusion of leather carving and allied crafts in the Problems and Processes class.

STATE TEACHERS COLLEGE**Minot, North Dakota**

Industrial Arts Department, Division of Fine and Applied Arts, established 1913. Degrees are not granted. 15 full-time minor students.

STAFF: (2)

Chairman, Div. F. & A. A. & Assoc. Prof. D. C. Blide, M.S.

Asst. Prof. C. J. Mayer, M.S.

Average years in teacher education, 14

Average years in public school teaching, 3.5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	12	792	\$ 2,700
Woods	8	900	6,500
Metals	8	900	6,000
Graphic Arts	12	792	8,000
Handicrafts	8		
(Storage, etc.)		?	?
Total	48	3,600 plus	\$25,000

VALLEY CITY STATE TEACHERS COLLEGE (I.i.)**Valley City, North Dakota**

Department of Industrial Education, Division of Applied Arts. Degrees not granted – Minor only.

STAFF: (1)

G. Hanna, A.B.

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6		
Mechanical Drawing	12		
Woods	6		
Metals	4		
Methods for Teaching IA	3		
Theory & Org. of the General Shop	4		
Total	35	(n.a.)	(n.a.)

OHIO NORTHERN UNIVERSITY**Ada, Ohio**

Industrial Arts Department, College of Liberal Arts, established 1935.

Degree granted: BSE. 10 full-time majors, 7 part-time majors and minors.

STAFF: (1)

Prof. D. F. Kittle, M.S.

Years in teacher education, 5

Years in teacher education, 16

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	5	4,900	\$10,000
Mechanical Drawing	15		

UNDERGRADUATE OFFERINGS (cont'd)	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Woods	16		
Metals	19		
Graphic Arts	2		
Electricity (electronics)	3		
Ceramics	3		
Handicrafts	9		
Student Teaching	6		
Methods in IA	5		
Shop Planning & Equipment	2		
Materials of Industry	5		
Special Problems in IA	1-4		
Total	94	4,900	\$10,000

OHIO UNIVERSITY**Athens, Ohio**

Department of Industrial Arts, College of Applied Science, established 1904. Degrees granted: BSE, MEd. 75 full-time majors, 15 part-time majors, 3 full-time graduate students.

STAFF: (5)

Assoc. Prof. C. R. Kinison, M.S.	Instr. D. E. Perry, M.S.
Asst. Prof. L. V. Calvin, M.A.	Instr. G. K. Tinetti, M.S.
Asst. Prof. F. T. Paige, M.A.	

Average years in teacher education, 12

Average years in public school teaching, 8.2

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	5*		
Woods	12	2,177	\$20,000
Metals	15	3,807	82,000
Graphic Arts	15	1,890	9,000
Electricity (electronics)	3	630	1,000
Ceramics	2	260	500
Handicrafts	3	630	1,000
Transportation	7		
Cement & Concrete Construction	2		
Farm Shop	6		
Materials and Finishes	3		
Constructive Design	2		
Shop and Machine Maintenance	4		
Teaching of IA	3		
Adm. of the General Shop	3		
History of I & VE	3		
Special Problems in IA	3		
Total	93	9,394	\$113,500

* In Engr. Dwg. Dept.

GRADUATE OFFERINGS

Adm. of the General Shop	3
History of Ind. & Voc. Arts	3
Spec. Problems in IA	1-3
Adv. Wood, Metal, or Printing	3
Curr. Building in IA	3

Research in IA	1-3
Seminar in IAE	1-3
Thesis	1-8
Total	<u>29</u>

SPECIAL FEATURE

Over half the students served by our department have objectives other than teacher education. To satisfy the large variety of needs the basic technical course work in the four broad areas was reorganized into a group of core courses. There are two core courses totaling six hours credit in the graphic arts, cold and hot metal working, electricity and power, and the wood working areas. These courses, while general in nature, are technical enough to serve as prerequisites for the advanced courses over specialized subject matter. This is evidence of an increasing understanding of the place of industrial arts work on the college level.

BOWLING GREEN STATE UNIVERSITY**Bowling Green, Ohio**

Department of Industrial Arts, College of Education, established 1914. Degrees granted: BSE, MSE, MEd. 180 full-time majors, 10 full-time graduate students, 30 part-time graduate students.

STAFF: (7)

Chairman & Assoc. Prof. R. M. Torgerson, M.A.	Instr. R. T. Austin, B.Ed.
Assoc. Prof. J. L. Hill, M.Ed.	Instr. F. R. Hofacker, M.S.
Assoc. Prof. E. C. Powell, M.A.	Instr. H. D. Miner, M.Ed.
	Instr. C. E. Schumacher, M.A.E.

Average years in teacher education, 10.6

Average years in public school teaching, 6.8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	15	3,000	\$ 1,800
Woods	12	3,600	8,466
Metals	23	9,720	159,183
Graphic Arts	12	3,900	15,928
Electricity (electronics)	6	480	1,863
Plastics	2		
Ceramics	6		
Methods	3		
Student Teaching (Visual Education)	6	480	1,518
Total	<u>85</u>	<u>21,180</u>	<u>\$188,758</u>

GRADUATE OFFERINGS

Instructional Aids	3
Curriculum Planning	3
Laboratory Planning	3

GRADUATE OFFERINGS (Con't.)	Semester Hours
T. & I. Education	3
Literature of IE	3
Seminar in IE	6
Thesis	3-6
Total	<u>27</u>

SPECIAL FEATURE

We operate student teaching on a "block plan." Teaching & Methods courses total 14 semester hours. Students attend Methods classes - 5 weeks, Observation - 2 weeks, On- or off-campus teaching, full days - 7 weeks, Off campus teaching (school of student choice) - 3 weeks, Return to methods classes & review - 1 week.

THE OHIO STATE UNIVERSITY**Columbus 10, Ohio**

Industrial Arts Teacher Education Area, Department of Education, established 1919. Degrees granted: BSE, MAE, Ph.D. 139 full-time majors, 7 full-time graduate students, 6 part-time graduate students.

STAFF: (6)

Prof. J. R. Strobel, Ed.D.	Instr. T. E. Eachus, B.S.
Prof. W. E. Warner, Ph.D.	Instr. R. T. Mansfield, Ph.D.
Asst. Prof. R. W. Haws, Ph.D.	Instr. W. D. Wardwell, Sr., Ph.D.

Average years in teacher education, 9.2

Average years in public school teaching, 11.3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	12		
Woods	8	3,150	Value
Metal	19	3,200	
Electricity (electronics)	4	*	Not
Graphic Arts	4	1,900	
Ceramics	3-6		Given
Photography	3		
Methods	5		
Visual Ed.	3		
Elem. School IA (Auxiliary Space)	3		
Total	<u>68</u>	<u>2,150</u>	<u>\$</u>
GRADUATE OFFERINGS			
IA in Elem. Schools	3		
Teaching of IA	5		
Selection & Organization of Subject Matter	3		
Laboratory Planning	3		
Administration of IA	3		
Practicum in IA	5		
Scientific Studies in IA	2		
Research in IA	<u>3</u>		
Total	<u>29</u>		

* Electricity and metal use same shop.

KENT STATE UNIVERSITY**Kent, Ohio**

Department of Industrial Arts, College of Liberal Arts, established 1913. Degrees granted: BSE, MAE, MEd. 250 full-time majors, 20 part-time majors, 5 full-time graduate students, 70 part-time graduate students.

STAFF: (11)

Prof. & Head D. F. Barich, M.A.	Assoc. Prof. A. W. Paton, B.S.E.
Prof. D. W. Olson, M.A.	Asst. Prof. G. Bowers, M.S.
Prof. E. W. Tischendorf, M.A.	Asst. Prof. R. C. Gaede, B. Arch.
Assoc. Prof. O. C. Luey, M.Ed.	Asst. Prof. M. O. Johnsen, M.A.
Assoc. Prof. F. A. Marschik, M.S.E.	Asst. Prof. T. B. Nabers, M.S.
Assoc. Prof. J. F. Morbito, M.Ed.	

Average years in teacher education, 11

Average years in public school teaching, 5.5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	1,812	\$ 3,000
Mechanical Drawing	92	2,072	3,200
Woods	21	3,775	4,000
Metals	36	6,050	35,000
(Graphic Arts)	—	1,925	50,000
Electricity (electronics)	10	1,280	3,000
Plastics	3		
Ceramics	10	1,462	4,000
Handicrafts	5		
Transportation	97	5,660	5,000
(Office Space & Library)		2,000	6,400
Total	277	26,036	\$113,600

GRADUATE OFFERINGS

Industrial Practice	2-12
IA Curriculum	5
IA Org. & Adm.	5
History & Treand in IE	5
Special Problems in Drawing	12
Special Problems in Woodworking	9
Special Prob. in Metal-working	15
Upholstery	3
Adv. Cab. & Furn. Const.	3
General Shop	6
Industrial Electronics	3
Radio & TV Const. & Maint.	3
Special Problems in Ceramics	6
Special Problems in Plastics	3
IA for the Elem. School	3
Thesis	8
Total	101

SPECIAL FEATURE

1. Work experience program in cooperation with the Chrysler Corp., Ind. Practice. 2. Curriculum in Aviation Technology. 3. Curriculum

SPECIAL FEATURE (Con't.)

in Industrial Technology. 4. Four year pre-professional curriculum in Architecture leading to B.S. Degree with major in Architecture. 5. Curriculum in T. & I. Ed. 6. Distributive Ed. 7. Curriculum in IA Teacher Education.

MIAMI UNIVERSITY**Oxford, Ohio**

Department of Industrial Arts Education, Division of Practical Arts, School of Education, established 1905. Degrees granted: BSE, MAE, MEd. 52 full-time majors, 5 full-time graduate students, 16 part-time graduate students.

STAFF: (8)

Prof. & Dept. Head W. D. Stoner, Ph.D. Asst. Prof. M. F. Foss, M.A.
 Prof. J. A. Whitesel, Ph.D. Asst. Prof. W. M. Ramsey, M.A.
 Assoc. Prof. A. A. Grinnell, M.A. Asst. Prof. W. A. Yaekle, M.A.
 Asst. Prof. A. W. Bauer, M.A. Instr. R. E. Rueggeberg, M.A.

Average years in teacher education, 13.4

Average years in public school teaching, 8.6

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	23	3,200	\$ 8,000
Woods	12	3,200	10,000
Metals	9	3,200	45,000
Graphic Arts	12	4,200	12,000
Electricity (electronics)	4	1,600	5,000
Plastics	3		
Ceramics	3		
Handicrafts	3	2,200	10,000
Transportation	6	2,600	12,000
Communication	4		
Orientation	12		
Design	6		
Special Methods	3		
Teaching (Research Laboratory)	5-10	400	2,000
(Class Rooms, Offices, Dept. Library, & Aux.)		6,200	
Total	110	26,800	\$104,000

GRADUATE OFFERINGS

IA Laboratory Planning	2
History of IA	2
Org. & Adm.	3
Technical Problems in IAE	2-4
Professional Problems in IAE	2-4
Problems in IA Design	2-4
Research in Graphic Arts	2-4
Total	23

SPECIAL FEATURE

The preparation of industrial arts teachers has been an integral part of the School of Education program at Miami University since 1905. The department provides comprehensive courses in the following major areas: Arts and crafts, ceramics, drafting, plastics, graphic arts, electricity, metalworking, radio, transportation and power, and wood-working. Service courses are also provided for all major divisions of the University. Besides the industrial arts majors, there are 117 students who are minoring in industrial arts.

CENTRAL STATE COLLEGE**Wilberforce, Ohio**

Division of Industries, established 1928. Degree granted: BSE. 37 full-time majors.

STAFF: (8)

Prof. A. M. Chavous, Ph.D.	Instr. B. T. Schooler, B.S.
Assoc. Prof. L. A. Jackson, Ph.D.	Instr. W. C. Dungy, (n.d.)
Instr. J. R. Anderson, B.S.	Instr. T. B. Green, B.S.
Instr. C. Caliman, (n.d.)	Instr. C. T. Sampson, (n.d.)

Average years in teacher education, 13.8

Average years in public school teaching, (n.a.)

UNDERGRADUATE OFFERINGS

	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	8	700	\$ 500
Woods	6	2,700	4,500
Metals	9	6,750	15,000
Graphic Arts	5	2,400	12,500
Electricity (electronics)	6	1,000	250
Ceramics	3		
Transportation	9	1,700	1,300
Technical Problems	6		
IA Electives	16		
Total	68	15,250	\$34,050

WILMINGTON COLLEGE**Wilmington, Ohio**

Industrial Arts and Engineering Department, established 1946. Degrees granted: BSE, BSIE. 50 full-time majors, 50 part-time majors.

STAFF: (2)

Assoc. Prof. M. H. Stark, M.A.
Instr. R. A. Hussey, B.S.

Average years in teacher education, 4

Average years in public school teaching, 5.5

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	—	5,856	\$150,000
Mechanical Drawing	9		

UNDERGRADUATE OFFERINGS (cont'd)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Woods	9		
Metals	9		
Graphic Arts	8		
Electricity (electronics)	3		
Ceramics	3		
Transportation	6		
Farm Shop	3		
IA for Elementary Teachers	3		
Meth. & Org. of IA	2		
Total	55	5,856	\$150,000

SPECIAL FEATURE

We specialize in training teachers for the small one teacher General Shop. Our teachers are trained under the same conditions as they will find in the one or two teacher General Shop. We are starting a Co-Operative Program in Industrial Supervision. We also have provisions for students to "Earn While They Learn," by working for a local industry at standard pay rates paid to all regular employees.

EAST CENTRAL STATE COLLEGE**Ada, Oklahoma**

Industrial Arts Department, established 1910. Degree granted: BSE. 32 full-time majors, 2 part-time majors.

STAFF: (3)

Prof. & Director H. Norris, M.S. Asst. Prof. A. B. Dietrich, M.S.
Assoc. Prof. D. J. Floyd, M.S.

Average years in teacher education, 19.6

Average years in public school teaching, 2.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	27	1,200	\$ 3,000
Woods	20	4,150	20,000
Metals	8	4,150	18,000
Handicrafts	2		
Transportation	10		
Community Mechanics	3		
Rural Industrial Arts	2		
Wood & Metal Finishing	3		
Care of Shop Equipment	2		
Teacher's Course in IA	2		
Upholstery	2		
(Office Space)		900	850
Total	81	10,400	\$41,850

NORTHWESTERN STATE COLLEGE**Alva, Oklahoma**

Department of Industrial Arts Education, established 1908. Degrees granted: BS, BSE. 25 full-time majors, 10 part-time majors.

STAFF: (2)

Director & Prof. S. W. May, M.A.

Instr. G. Walters, M.A.

Average years in teacher education, 17

Average years in public school teaching, 9.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	24	1,157	\$ 2,500
Woods	26	2,628	8,019
Metals	6	700	600
Handicrafts	4		
Upholstery	2	300	650
Total	<u>62</u>	<u>4,785</u>	<u>\$11,769</u>

SPECIAL FEATURE

We have a new building for our Industrial Arts program to be occupied soon with approximately 3,200 square feet of space.

SOUTHEASTERN STATE COLLEGE

Durant, Oklahoma

Industrial Arts Department established 1912. Degree granted: BSE.

80 full-time majors, 20 part-time majors.

STAFF: (4)

Prof. & Dept. Head C. B. French, M.S. Asst. Prof. D. R. Enderby, M.S.

Assoc. Prof. C. R. Dyer, M.A. Instr. J. M. Weaver, B.S.

Average years in teacher education, 8.8

Average years in public school teaching, 3.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	18	3,000	\$ 5,000
Woods	23	6,600	15,500
Metals	12	2,000	21,000
Handicrafts	3		
Transportation	18	4,000	3,800
Total	<u>74</u>	<u>15,600</u>	<u>\$45,300</u>

CENTRAL STATE COLLEGE

Edmond, Oklahoma

Department of Industrial Arts, established 1904. Degrees granted: BAE, BSE. 60 full-time majors.

STAFF: (3)

Prof. & Chairman A. Smith, M.S. Instr. R. A. DeWeber, M.S.

Asst. Prof. S. O. Webster, M.S.

Average years in teacher education, 3.7

Average years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	25	800	\$ 1,000
Woods	26	3,200	20,000
Metals	14	3,000	28,000
Graphic Arts	4		
Electricity (electronics)	2		
Handicrafts	4		
Upholstery	2		
Finishing	3		
Total	80	7,000	\$49,000

SPECIAL FEATURE

Of the 36 hours required for a major, approximately 12 hours is completed in each of the three areas, woodworking, metalworking, and drafting.

PANHANDLE AGRICULTURAL AND MECHANICAL COLLEGE**Goodwell, Oklahoma**

Department of Industrial Arts Education, Division of Industrial Arts, established 1910. Degree granted: BA. 8 full-time majors.

STAFF: (3)

Director & Prof. M. L. Carter, M.S. Assoc. Prof. J. R. Suggs, M.S.
Prof. F. R. Hoy, M.S.

Average years in teacher education, 13.3

Average years in public school teaching, 4.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	10	600	\$ 750
Woods	16	2,160	7,000
Metals	8	5,400	10,000
Electricity (electronics)	4	2,800	500
Handicrafts	2		
Transportation	2		
Industrial Arts Design	2		
Methods of Teaching	2		
Total	46	10,960	\$18,250

SPECIAL FEATURE

We cater not only to the training of teachers, but to the training of farm boys and trade carpenters.

LANGSTON UNIVERSITY**Langston, Oklahoma**

Division of Mechanic Arts, established 1897. Degree granted: BSE. 96 full-time majors, 10 part-time majors.

STAFF: (6)

Prof. & Dir. E. A. Miller, M.S. Instr. C. Harkins, B.S.
Instr. M. A. Dillon, B.S. Instr. A. C. Hebert, B.S.
Instr. O. Gilyard, B.S. Instr. R. Walker, M.S.

Average years in teacher education, 10.8

Average years in public school teaching, .7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	20	1,500	\$ 2,000
Woods	25	2,400	12,500
Metals	6	700	3,500
Graphic Arts	4	500	1,500
Electricity (electronics)	10	1,500	10,000
Transportation	20	3,000	25,000
Plumbing & Steam Fitting	16		
Shoeshop & Leather Work	18		
Upholstering & Tailoring	20	2,000	1,000
Professional Courses	16		
Total	157	11,600	\$55,500

CAMERON STATE AGRICULTURAL COLLEGE Lawton, Oklahoma

Industrial Arts, Division of Engineering and Industrial Arts, established 1929. Degrees not granted - Junior College. 10 full-time majors.

STAFF: (3)

Division Head N. L. Tinsley, M.S. Instr. M. Oswalt, M.I.E.

Instr. C. Barbee, (n.d.)

Average years in teacher education, 4.5

Average years in public school teaching, 0

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	7	900	\$ 500
Woods	8	3,700	8,000
Metals	5	3,000	17,800
Electricity (electronics)	9		
Handicrafts	1		
Care of Shop Equipment (Storage & Office)	1	1,000	200
Total	33	8,600	\$26,500

UNIVERSITY OF OKLAHOMA Norman, Oklahoma

Industrial Education Department, College of Engineering, established 1938. Degrees granted: BSE, MIE. 35 full-time majors, 3 full-time graduate students, 18 part-time graduate students.

STAFF: (4)

Asst. Prof. & Chairman L. F. Jackson, M.S.

Prof. R. A. Hardin, Ph.D.

Instr. L. E. Dietrich, (n.d.)

Special Instr. R. C. Bowers, M.I.E.

Average years in teacher education, 11.1

Average years in public school teaching, none.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	6		
Woods	18	1,200	\$10,000
Metals	19	3,150	30,000
Plastics	2		
Handicrafts	2		
Upholstering	2	800	1,500
Principles of Trade & Ind. Teach.	2		
Total	54	5,150	\$41,500
GRADUATE OFFERINGS			
Foundations – IA & VE	2		
Test Development in IE	2		
Org. & Adm. of IE	2		
Problems in IE	2		
History of I & VE	2		
Curriculum Construction in IE	2		
Research Techniques in IE	2		
Special Research Problems	2		
Shop Org. & Mgt.	2		
Seminar in IE	2		
Research for Master's Thesis	1-4		
Total	24		

OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE

Stillwater, Oklahoma

School of Industrial Arts Education and Engineering Shopwork, Division of Engineering Instruction, established 1917. Degrees granted: BS, MS. 75 full-time majors, 16 full-time graduate students, 4 part-time graduate students.

STAFF: (5)

Head, D. Hunt, Ph.D.	Instr. H. Ikenberry, M.S.
Assoc. Prof. C. L. Hill, M.S.	Instr. J. B. Tate, M.S.
Asst. Prof. L. H. Bengtson, M.S.	

Average years in teacher education, 10.4

Average years in public school teaching, 12.8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4	2,700	\$ 3,000
Mechanical Drawing	8	1,500*	1,000*
Woods	18	8,900	41,500
Metals	15	15,348	117,500
Graphic Arts	2		
Plastics	2		
Handicrafts	1		
Industrial Arts Design	2		
Care & Installation of Equip.	2		
Elementary Industrial Arts	2		
Methods	2		
Methods	3		

Org. & Adm.	3		
IA Finishing	2	720	\$ 1,000
Practice Teaching (Projection Room)	6		
		540	500
Total	<u>70</u>	<u>29,708</u>	<u>\$164,500</u>

* Shared with another department.

GRADUATE OFFERINGS

Thesis or Research	1 to 6
Developing Tests for IAE	2
Curriculum Construction in IA	2.
Spec. Prob. in Teaching Begin- ning Courses in Woodworking	3
Spec. Meth. of Teaching IA	2
Spec. Prob. in Mach. Woodworking	3
Prob. of the General Shop	2
Spec. Prob. of the General Shop	3
Design & Construction in IA	2
Spec. Prob. in Ind. Drawing	3
Research in IAE	2
Spec. Prob. in Mach. Shop Prac.	3
Minor Problems in IAE	1 or 2
Total	<u>35</u>

SPECIAL FEATURE

The Department of Industrial Arts Education and Engineering Shopwork at the Oklahoma A. & M. College has four functions, namely: (1) to provide and administer all courses in shopwork required in the several engineering curricula; (2) to organize, direct and conduct all institutional offerings for the preparation of industrial arts teachers; (3) to offer such courses in shop practice as are requested for inclusion in other college curricula and (4) to offer those courses in industrial arts which will prove popular as elective courses for any college student. The faculty consists of ten full-time instructors and from two to five student assistants or graduate fellows.

Building, "The Industrial Building" was built in 1928 with a floor area of 58,320 sq. ft. and including 5 offices (12x14 avg. size) for the Industrial Arts Department.

NORTHEASTERN STATE COLLEGE

Tahlequah, Oklahoma

Industrial Arts Department, established 1911. Degree granted: BSE.
193 full-time majors, 1 part-time major.

STAFF: (5)

Assoc. Prof. & Chairman M. E. Franklin, M.S.	Instr. H. L. Helton, M.S.
Asst. Prof. B. F. Ferguson, M.S.	Instr. A. Vinyard, B.S.
	Instr. F. H. Stierwalt, B.S.

Average years in teacher education, 8

Average years in public school teaching, 4.2

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8	1,500*	\$ 1,280
Mechanical Drawing	23	2,880	1,600
Woods	23	4,650	4,600
Metals	15	4,950	8,200
Graphic Arts	8	2,360	5,450
Electricity	2		
Handicrafts	6	1,870	560
Teaching Methods	2		
Total	87	18,210	\$21,690

* Also used by the Training School.

SPECIAL FEATURE

The department operates a vocational training class for veterans in institutional maintenance. The department is setting up an adult crafts program for adult Indians and others in cooperation with the Department of Indian Service in another shop not mentioned above. The two programs will occupy a temporary building of 3,360 sq. ft. of floor space.

MURRAY STATE SCHOOL OF AGRIC.

Tishomingo, Oklahoma

Industrial Arts Department, established 1924. Degrees not granted; Junior College. Number of students not available.

STAFF: (3)

Dept. Head M. C. Courtney, B.S. Instr. H. J. Winburn, B.S.

Instr. H. O. Johnson, B.S.

Average years in teacher education, (n.a.)

Average years in public school teaching, 14.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	1,728*	\$ 3,200*
Mechanical Drawing	11	1,900	2,080
Woods	14	3,600	13,500
Metals	5	4,100	121,000
Farm Shop	1		
Care of Shop Equipment	2		
Total	36	11,328	\$139,780

* Also used for Hand Woodwork.

CONNORS STATE AGRICULTURAL COLLEGE

Warner, Oklahoma

Department of Industrial Arts, established 1909. Degrees not granted; Junior College. 75 full-time majors, 3 part-time majors.

STAFF: (2)

Dept. Head B. C. Huckleberry, M.S.

Instr. C. Lombardi, B.S.

Average years in teacher education, 7.5
 Average years in public school teaching, 11.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	7	800	\$ 800
Woods	7	1,200	5,000
Metals	2	500	2,000
Ceramics	2	500	500
Weaving	2	800	300
Care of Shop Equipment (Store Rooms)	2	500	1,000
(Office Fixtures & Books)			500
Total	24	4,300	\$10,100

SOUTHWESTERN STATE COLLEGE Weatherford, Oklahoma

Department of Industrial Education, Division of Education, established 1905. Degree granted: BSE. 55 full-time majors, 4 part-time majors.

STAFF: (2)
 Dept. Head & Prof. J. L. Cermak, M.S.
 Instr. G. Hendrix, M.S.

Average years in teacher education, 7
 Average years in public school teaching, 8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	12	1,600	Not
Woods	19	3,960	
Metals	7		
Electricity (electronics)	2		Given
Handicrafts	4		
Teacher's Course	4		
Total	52	9,360	Not Given

EASTERN OKLAHOMA AGRIC. & MECH. COLLEGE (I.i.) Wilburton, Oklahoma

Division of Industrial Education. Degrees not granted – Junior College.

STAFF: (1)
 J. E. Cullers, M.A.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	4		
Woods	16		
Care of Shop Equipment	2		
Total	26	(n.a.)	(n.a.)

OREGON STATE COLLEGE**Corvallis, Oregon**

Department of Industrial Arts Education, School of Education, established 1915. Degrees granted: BSIAE, MSIAE. (Industrial Arts minors may be presented with: BSE, MED, DED.). 66 full-time majors academic year 1950-51, 35 SS 1950; 10 part-time majors; 15 full-time graduate students academic year 1950-51, 126 SS 1950; 2 part-time graduate students.

STAFF: (8)

Prof. & Dept. Head G. B. Cox, M.S.	Asst. Prof. A. A. Robley, B.S.S.
Asst. Prof. B. J. Hahn, M.S.	Asst. Prof. J. W. Smith, B.S.
Asst. Prof. M. F. Johnson, (n.d.)	Asst. Prof. R. W. Williamson, M.A.
Asst. Prof. E. D. Meyer, M.A.	Instr. R. C. Wilson, B.S.

Average years in teacher education, 12.9

Average years in public school teaching, 7.9

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	18*	3,000	\$ 4,200
Woods	28	6,000	15,500
Metals	27	16,300	146,100
Electricity (electronics)	3		
Plastics	3		
Ceramics	3*		
Handicrafts	18*	1,500	4,200
Transportation	12*		
Applied Design	12*		
(Seminar & Class Rooms, Store Rooms, etc.)		21,200	
Total	126	48,000	\$170,000

* Taught by other departments, except 6 hrs. Handicrafts & 3 hrs. Driver Education and Training.

GRADUATE OFFERINGS

IA Organization	3
Hist. of Manual & IE	3
Occupational Analysis	3
The Gen. Shop & Its Problems	2
Project Analysis & Contract Plan	2
Supervision of IA	2
Research	Var.
Thesis	Var.
Reading & Conference	Var.
Seminar	Var.
Shop Planning & Organization	3
Recreational Handicrafts	3
Metalcraft Problems	3
Total	24**

** Plus Variable credits

SPECIAL FEATURE

Oregon State College is the only school west of the Rocky Mountains

offering a coordinated program for industrial arts education at both the undergraduate and graduate levels, leading to the degrees of BSIAE and MSIAE. On both of these levels it is possible to present major work in Industrial Arts Education. At the doctorate level it is possible to present the first minor in Industrial Arts, with a major in Education and a second minor in another field.

Not every phase of Industrial Arts is represented. Graphic Arts is one area totally without representation in our program but in all respects facilities and personnel enable the candidate to pursue a degree program with emphasis on two or more areas of technical preparation sufficient for specialized applications; and with a lesser degree of emphasis from two to four additional areas sufficient for professional service in a general shop program consistent with the needs of the smaller secondary schools of the Pacific Northwest.

STATE TEACHERS COLLEGE AT CALIFORNIA **California, Pa.**

Industrial Arts Division, established 1930. Degree granted: BSE.
375 full-time majors, 25 part-time majors.

STAFF: (11)

Dir. S. L. Coover, Ed.D.	Instr. J. W. Neil, Ed.M.
Instr. W. A. Bowman, M.A.E.	Instr. I. J. Shutsy, M.Ed.
Instr. M. G. Campbell, Ed.M.	Instr. A. R. Smoyer, M.Ed.
Instr. R. F. Charney, B.S.	Instr. A. T. Stavaski, M.Ed.
Instr. A. H. Douple, M.Ed.	Instr. A. C. Wenzel, M.Ed.
Instr. A. J. Hoover, Ed.M.	

Average years in teacher education, 7.5
Average years in public school teaching, 7.9

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	20	3,894	\$ 2,500
Woods	12	3,300	12,000
Metals	32	4,680	35,500
Graphic Arts	12	3,300	25,000
Electricity (electronics)	12	1,848	15,000
Plastics	4	1,300*	1,500*
Ceramics	4	1,800	7,000
Handicrafts	4		
Jewelry	4		
	<u>104</u>	<u>20,122</u>	<u>\$98,500</u>

* Plastics & Jewelry use same shop.

CHEYNEY STATE TEACHERS COLLEGE **Cheyney, Pa.**

Division of Industrial Arts, established 1837. Degree granted: BSE.
35 full-time majors.

STAFF: (3)

Chairman R. C. Johnson, Jr., D.Ed. W. Wilson, M.Ed
L. G. Logan, A.B.

Average years in teacher education, 23

Average years in public school teaching, none

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	14	950	\$ 500
Woods	12	1,176	3,500
Metals	28	2,000	15,000
Graphic Arts	4		
Electricity (electronics)	8	1,000	5,000
Plastics	4	*	*
Total	70	5,126	\$24,000

* Plastics shares Woodshop.

SPECIAL FEATURE

Excerpt from catalog: The Cheyney State Teachers College . . . is a venerable institution, dating back to 1829, when Richard Humphreys, a Philadelphia Quaker, bequeathed \$10,000 for the establishment of a school for Negroes in which instruction would be offered in "the various branches of mechanic arts and trades . . . in order to prepare, fit, and qualify them to act as teachers." This bequest became available in 1837, five years after the death of the founder.

STATE TEACHERS COLLEGE

Millersville, Pa.

Department of Industrial Arts Education, established 1930. Degree granted: BSE. 175 full-time majors.

STAFF: (7)

Dir. B. N. Osburn, Ph.D. N. C. Pendered, Ed.D.
P. W. Eshelman, A.M. J. B. Shenk, M.S.
H. J. Kauffman, M.S. O. L. Yard, M.A.
U. L. Monical, A.M.

Average years in teacher education, 11.3

Average years in public school teaching, 7.4

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4	2,518	\$ 3,500
Mechanical Drawing	14	1,782	2,750
Woods	12	1,938	7,200
Metals	16	1,747	15,600
Graphic Arts	16	1,896	7,300
Electricity (electronics)	12	853	2,000*
Plastics	4		
Ceramics	12		
Handicrafts	16		

Prof. Prac. in Teaching IA	3		
Curriculum Construction	4		
Student Teaching & Conferences (Projection Room)	12	1,032	1,200
Total	<u>125</u>	<u>11,766</u>	<u>\$39,500</u>

* Plus large quantity of government surplus.

SPECIAL FEATURE

Practice Teaching done on the campus, under direction of 2 members of the staff, in drawing and a comprehensive general shop with junior high school pupils (and 6th grade). Followed by further teaching off-campus in public schools, supervised by a full-time staff member.

THE PENNSYLVANIA STATE COLLEGE **State College, Pa.**

Department of Industrial Education, School of Education, established 1944. Degrees granted: BSE, MS, MED, DEd, PhD. 96 full-time majors, 6 part-time majors, 5 full-time graduate students, 99 part-time graduates (includes summer session).

STAFF: (3)

Dept. Head & Prof. S. L. Land, Ph.D. Prof. R. O. Gallington, Ed.D.
Prof. J. F. Friese, M.S.

Average years in teacher education, 14.3
Average years in public school teaching, 7.3

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	13		
Woods	8	3,600*	\$ 8,000
Metals	14	10,800*	100,000
Graphic Arts	2	**	**
Electricity (electronics)	4	1,000%	10,000%
Handicrafts	2	1,000	10,000
(2 Demonstration Rooms)		800*	2,000*
Professional IA	10		
IA Practice Teaching	9		
Total	<u>62</u>	<u>17,200</u>	<u>\$130,000</u>

* Shops used jointly by industrial arts and industrial engineering (wood almost entirely by industrial arts.) Teachers are industrial arts men, and courses are set up by industrial arts and bear that designation.

** Shares General Shop listed for Handicrafts.

% General Shop listed for Electricity also used by Sheet Metals.

GRADUATE OFFERINGS

IA Education	2-3
Curriculum Materials in IA	2-3
Prob. in Sr. High School IA	2-3
Hist. & Phil. of IA	2-3
Prob. in IAE	2-3

GRADUATE OFFERINGS (Con't.)	Semester Hours
Supv. & Adm. of IAE	2-3
Testing in IA	2-3
Research in IA	1-18
Master's Thesis in IA	1-6
Seminar in IA	2-9
Total	<u>54</u>

SPECIAL FEATURE

The undergraduate and graduate programs in Industrial Arts Education are administered by the Department of Industrial Education which administers separate undergraduate and graduate programs in Vocational Industrial Arts Education. While there is coordination of the two programs in Industrial Arts Education and Vocational Industrial Education on both the undergraduate and graduate levels, both are administered as separate and distinct programs.

THE CLEMSON AGRICULTURAL COLLEGE (I. i.)**Clemson, South Carolina**

Industrial Education, Wood Shop Department, School of Education.
Degree granted: BS.

STAFF: (1)

Head & Assoc. Prof. J. L. Marshall, B.S.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	10		
Woods	6		
Metals	6		
Spec. Methods in IA	2		
Construction Materials	4		
IE Laboratory	4		
Total	<u>32</u>	<u>(n.a.)</u>	<u>(n.a.)</u>

STATE AGRICULTURAL AND MECHANICAL COLLEGE (I. i.)**Orangeburg, South Carolina**

Division of Industrial Education, School of Engineering & Industrial Education. Degrees granted: BS, MS.

STAFF: (6)

Dean & Prof. H. W. Crawford, M.A.

Instr. A. H. Holmes, B.S.

Assoc. Prof. E. M. Adams, M.S.

Instr. R. Jones, (n.d.)

Instr. R. C. Clagett, (n.d.)

Instr. H. F. Watterman, (n.d.)

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6		
Woods	24		

Metals	24		
Electricity (electronics)	24		
Transportation	24		
Professional Courses	27		
Masonry	24		
Tailoring	24		
Painting	24		
Plumbing	24		
Total	225	(n.a.)	(n.a.)

GRADUATE OFFERINGS

History & Philosophy of IE	3
Prob. & Practice in VE	3
Meth. of Teach. for T & I Teachers	3
Human Relations in Industry	3
The Making & Utilization of Trade & Job Analyses	3
Super. & Adm. of T & IE	3
Prob. & Prac. of the Coordinator	3
Total	21

NORTHERN STATE TEACHERS COLLEGE Aberdeen, South Dakota

Division of Industrial Arts, established 1905. Degree granted: BSE.
20 full-time majors.

STAFF: (2)

Prof. & Chairman H. P. Gerber, M.S.

Asst. Prof. C. R. Wells, M.S.

Average years in teacher education, 21.5

Average years in public school teaching, 10.5

UNDERGRADUATE OFFERINGS

	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	23	1,200	\$ 2,000
Woods	23	2,500	6,700
Metals	20	4,480	33,000
Concrete	4		
Organization of IA	5		
Methods in IA	4		
Ind. Arts Design (Office & Library)	2	200	1,000
Total	95	8,380	\$42,700

SOUTH DAKOTA STATE COLLEGE

Brookings, South Dakota

Industrial Arts, Division of Engineering, established (date not available). Degree granted: BAE. 21 full-time majors.

STAFF: (4)

Assoc. Prof. & Dept. Head

Instr. H. Svec

R. D. Anderson, B.S.

Instr. G. H. Wakeman

Asst. Prof. R. D. Herold, M.S.

Average years in teacher education, 11.5

Average years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	4		
Woods	12	4,800	\$12,000
Metals	12	7,550	75,000
Graphic Arts	6		
Ceramics	2		
Handicrafts	2		
Transportation	2		
Total	40	12,350	\$87,000

GENERAL BEADLE STATE TEACHERS COLLEGE

Madison, South Dakota

Industrial Arts Department, Division of Fine and Applied Arts, established 1919. 3 students minoring in IA; major in IA discontinued.

STAFF: (1)

Dean of Student Affairs & Instr. in IA L. N. Pease, B.S.

Years in teacher education, 32

Years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	16	720	\$ 590
Woods	14	1,200	3,160
Metals	2	792	750
Graphic Arts	12		
Ceramics	2		
Handicrafts	14		
IA in Education	2		
Servicing Tools & Machinery	2		
Teacher's Course in IA	2		
Total	66	2,712	\$4,500

SOUTHERN STATE TEACHERS COLLEGE Springfield, South Dakota

Department of Industrial Arts and Trades, established 1900. Degree granted: BSE. 25 full-time majors, 50 part-time majors.

STAFF: (3)

Dept. Head O. J. House, M.A.

Instr. G. G. Niessner, B.S.

Instr. J. J. Alt, B.S.

Average years in teacher education, 14.7

Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	30		
Woods	26		
Metals (Gen. Metals Bldg.)	8	2,000	\$ 2,000

Handicrafts (Arts Dept.)	2		
Ornamental Cement & Concrete	2		
Building Construction	6		
Methods & Organization	2		
Teaching Procedures in IA	2		
Basic Art (Art Dept.)	3		
(Industrial Arts Bldg.)		9,900	20,000
Total	81	11,000	\$22,000

SPECIAL FEATURE

Twelve hours of Trade Education can be substituted on the major in Industrial Arts.

UNIVERSITY OF SOUTH DAKOTA

Vermillion, South Dakota

Industrial Arts Education, School of Education, established 1948.
Degree granted: BSE. 6 full-time majors, 1 full-time graduate student.

STAFF: (1)

Assoc. Prof. M. S. Foor, M.Ed.

Years in teacher education, 5

Years in public school teaching, 13

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	4		
Woods	4	1,200	\$ 2,500
Metals	6	4,200	8,500
Electricity	2		
Industrial Arts Design	3		
Shop Management (Gen. Shop)	3		
Teaching Industrial Arts	3		
Total	25	5,400	\$11,000

GRADUATE OFFERINGS

Teaching Industrial Arts	3
Industrial Arts Problems	3
History of Industrial Ed.	3
Total	9

AUSTIN PEAY STATE COLLEGE

Clarksville, Tennessee

Industrial Arts Department, established 1943. Degree granted: BSE.
14 full-time majors.

STAFF: (1)

Assoc. Prof. G. R. Wallace, M.S.

Years in teacher education, 8

Years in public school teaching, 25

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	9	3,500	\$ 8,000
Mechanical Drawing	27	500	1,000
Woods	27		
Industrial Arts Methods	6		
Supervised Teaching	6		
Shop Maintenance	3		
Agricultural Eng. (Shop)	9		
(Storage)		1,000	
Total	87	5,000	\$ 9,000

TENNESSEE POLYTECHNIC INSTITUTE Cookeville, Tennessee

Department of Industrial Arts, School of Engineering, established 1916.
Degree granted: BSIA. 60 full-time majors.

STAFF: (3)

Asst. Prof. & Dept. Head W. H. Lewis, M.S. (on leave)

Instr. & Act. Dept. Head J. H. Moore, M.S.

Asst. Prof. W. Tucker, M.S.

Average years in teacher education, 6.3

Average years in public school teaching, .7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	4,500	\$ 7,500
Mechanical Drawing	9		
Woods	21	5,580	8,500
Metals	18	6,500	78,000
Electricity (electronics)	12		
Shop Planning	3		
Fund. of Combustion Engines	3		
Home Planning	3		
Building Materials	3		
Architectural Problems	3		
(Office & Classroom Space)		10,144	
Total	78	26,724	\$100,000

SPECIAL FEATURE

One of the most unique phases of our program is a strong departmental club. This organization is one of the most active on the campus and enrolls more than seventy-five per cent of the I. A. majors each quarter. The club's activities are many and varied but one of the most important is the annual publication of a booklet containing pictures and personal information on each graduating senior. These booklets are mailed to several hundred prospective employers all over the country. These include school officials, business men, industrial plants, etc.

EAST TENNESSEE STATE COLLEGE Johnson City, Tennessee

Department of Industrial Arts, established (date not available). Degree granted: BSE. 150 full-time majors.

STAFF: (4)

Assoc. Prof. & Chmn. L., D. Wallis, M.A. Critic Teacher R. L.

Asst. Prof. G. C. Jordan, M.A. Shadoan, M.A.

Instr. H. E. Marshall, M.S.

Average years in teacher education, 3.2

Average years in public school teaching, 7.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	48	1,466	\$ 4,975
Woods	24	2,800	11,500
Metals	33	4,200	33,400
Electricity (electronics)	3	720	100
Plastics	3	*	*
Handicrafts	3		
Transportation	6	4,000	10,500
Upholstery	3	*	*
IA for Elementary Teachers	3		
Industrial Arts Education (Lecture Room)	11	456	400
(Projection room)**		1,440	1,000
Total	137	15,082	\$61,875

* Plastics use wood shop and upholstery uses electric shop.

** Projection room and equipment shared with other departments.

UNIVERSITY OF TENNESSEE Knoxville, Tennessee

Department of Industrial Education, College of Education, established 1928. Degrees granted: BSE, MSE. 16 full-time majors, 4 full-time graduate students, 8 part-time graduate students.

STAFF: (1)

Prof. C. H. Wilson, M.S.E.

Years in teacher education, 38

Years in public school teaching, 6

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	27		
Woods	18		
Metals	18		
Handicrafts	9		
Transportation	3		
Total	75	*	*

* No laboratories or shops devoted exclusively to Industrial Arts. Those used by students include 3 drafting rooms, machine shop, farm carpentry shop, automotive repair shop, 2 handicraft shops, woodwork, art metal, weaving shop. Floor space and equipment value are not readily accessible.

GRADUATE OFFERINGS (cont'd)	Quarter Hours
Adm. & Supv. of IA	6
Master's Thesis in IA	9
Special Problems in IA Ed.	9
Total	<u>24</u>

SPECIAL FEATURE

The shop and drafting courses available for Industrial Arts students are not administratively under the Department of Industrial Education, but are departmental offerings under College of Engineering, Agriculture, and Home Economics. The Head of Department of Industrial Education advises students in scheduling programs of shop concentration which will secure state certification.

MEMPHIS STATE COLLEGE**Memphis, Tennessee**

Department of Industrial Arts, School of Education, established 1918.
Degree granted: BSE. 140 full-time majors, 530 part-time majors.

STAFF: (5)

Prof. & Head R. J. Coltharp, M.S.	Instr. D. P. Nave, M.S.
Assoc. Prof. C. M. Street, M.S.	Instr. D. D. Simmons, M.S.
Instr. W. A. Brotherton, M.A.	

Average years in teacher education, 5.6

Average years in public school teaching, 8

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	1,520	\$ 4,000
Mechanical Drawing	36	1,200	6,000
Woods	18	3,200	15,000
Metals	22	2,400	25,000
Graphic Arts	4	900	3,000
Electricity (electronics)	12	1,200	5,000
Ceramics	4		
Handicrafts	6		
Materials and Methods	3		
Materials of Industry	6		
Analysis	6		
Tools and Maintenance	3		
Total	<u>126</u>	<u>10,420</u>	<u>\$58,000</u>

SPECIAL FEATURE

1. Emphasis on consumer values.
2. Strength of architectural and electrical experiences and knowledges.
3. Integration of offerings with community, resources, as evidenced by displays of building materials of all types.
4. Research work in local clay deposits.

5. Strong Industrial Arts Club:
 - a. Christmas toy project
 - b. Bi-monthly news letter
 - c. Extra curricular shop activities, averaging two nights a week
6. General desire of department to contribute fully to general education

MIDDLE TENNESSEE STATE COLLEGE Murfreesboro, Tennessee

Industrial Arts, The Arts Department, established 1911. Degrees granted: BS, MA. 133 full-time majors, 42 part-time majors, number of graduate students not specified.

STAFF: (6)

Prof. & Dept. Head O. L. Freeman, M.S. Asst. Prof. P. H. Dalton, M.S.
 Assoc. Prof. S. R. Woods, M.S. Instr. C. Lyell, B.S.
 Assoc. Prof. D. A. Dyke, M.S. Instr. E. S. Voorhies, B.S.

Average years in teacher education, 5.3

Average years in public school teaching, 6

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	36	8,250	\$ 10,000
Woods	33	3,550	75,000
Metals	48	10,700	250,000
Electricity (electronics)	24	4,000	100,000
Plastics	2	*	*
Handicrafts	2	2,000	25,000
Adm. & Meth. in IA Teaching	3		
Shop Problems	3		
Building Materials	3		
Gas Engines	6		
(Office Space, etc.)		2,950	10,000
Total	163	31,450	\$470,000

* Plastics & Crafts use same shop.

GRADUATE OFFERINGS

Org. & Teaching the Gen. Shop	3
Teach. of IA in the Sec. Sch.	3
Hist. & Philosophy of IE	3
Trends in IA	3
Adm. & Supv. of IA	3
Curriculum Building in IA	3
Problems in IA Education	9
Total	27

SPECIAL FEATURE

New buildings, large modern equipped shops, plenty of natural light throughout the entire Industrial Arts plant. Air conditioned drawing building, and excellent office space.

GEORGE PEABODY COLLEGE FOR TEACHERS (I.i.)**Nashville, Tennessee**

Industrial Education, Department of the Arts. Degrees granted: BS, BA.

STAFF: (3)

Prof. L. L. Gore, Ed.D.

Instr. M. P. Burrough, M.A.

Asst. Prof. K. Reed, M.A.

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	12		
Mechanical Drawing	24		
Woods	4		
Metals	12		
Graphic Arts	8		
Ceramics	12		
Handicrafts	28		
Materials & Meth. of Teaching IA	4		
Total	108	(n.a.)	(n.a.)

GRADUATE OFFERINGS

Laboratory Planning	2
Lab. Org. & Maintenance	2
Investigations in IAE	4
Adm. of IAE	4
Thesis	6
Total	18

TENNESSEE AGRICULTURAL & INDUSTRIAL STATE COLLEGE**Nashville, Tennessee**

Department of Industrial Education, Division of Engineering & Industrial Education, reorganized 1945. Degrees granted: BSE, MEd. No. of students not available.

STAFF: (18)

Professor & Dept. Head

Asst. Prof. C. M. Ryan, M.S.

W. V. Harper, M.S.

Asst. Prof. J. G. Saunders, B.S.

Prof. L. W. McKissack, B.S.

Asst. Prof. H. W. Taylor, B.S.

Assoc. Prof. M. L. Fields, B.S.

Asst. Prof. L. J. Young, M.S.

Assoc. Prof. E. H. Gray, (n.d.)

Instr. E. Mabins, B.S.

Assoc. Prof. P. E. Stewart, M.S.

Sr. Technician D. S. Crowder, (n.d.)

Asst. Prof. L. C. Clark, M.S.

Sr. Technician E. L. Gary, (n.d.)

Asst. Prof. L. C. Farbes, B.S.

Sr. Technician H. Jones, (n.a.)

Asst. Prof. H. E. Lash, M.S.

Sr. Technician D. R. Washington,

Asst. Prof. H. M. Howard, B.S.

(n.a.)

Average years in teacher education, 5.8

Average years in public school teaching, 2.8

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	18		
Mechanical Drawing	54	3,000	\$ 4,000

TENNESSEE

125

Woods	36	7,200	\$ 27,000
Metals	108	13,000	113,000
Graphic Arts	36		
Electricity (electronics)	72	5,225	16,500
Transportation	72	9,000	62,000
Masonry	36	2,000	3,000
Plumbing	36	2,500	3,000
Leather Trades	36	1,440	5,250
Total	<u>504</u>	<u>43,365</u>	<u>\$233,750</u>

GRADUATE OFFERINGS

Adm. & Supv.	9
Special Problems	9
Methods & Research	9
Improving Teachers in Service	3
Advisory Cons. & Apprentice Tr.	3
Voc. School Adm. & Mgmt.	3
Total	<u>36</u>

SUL ROSS STATE COLLEGE

Alpine, Texas

Industrial Education Department, established 1920. Degrees granted: BS, BSE, BA, BAE. 37 full-time majors, 4 full-time graduate minor students.

STAFF: (2)

Prof. & Head of Department V. J. Smith, M.A.
 Assoc. Prof. T. W. Barrow, M.A.

Average years in teacher education, 16
 Average years in public school teaching, 4.5

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	21	1,640	\$ 1,500
Woods	6	1,056	5,500
Metals	6	2,624	13,200
Graphic Arts	*		
Electricity	*		
Plastics	*		
Ceramics	6	** 900	** 2,500
Handicrafts	10	200	800
Transportation	*		
Communication	2		
Driver Education	3		
Methods of Teaching IA	3		
Farm Shop (General)	3	570	500
Photography	3	146	200
Vocational Guidance	3		
(Departmental Library & Conf. Room)		264	500
Total	<u>69</u>	<u>6,500</u>	<u>\$22,200</u>

* These subjects included with other units of work.
 ** Ceramics laboratory belongs to the Art Department.

GRADUATE OFFERINGS (Minor only for Education Majors)	Semester Hours
IA for Elementary Teachers	3
Practical Arts Curr. Studies	3
Arch. Dwg. & Specifications	3
The General Shop	3
Vocational Guidance	3
Total	<u>15</u>

SPECIAL FEATURE

Unusual contributions to service lines: Agriculture (Farm Shop); Geology (Topographical Drawing); Education (Industrial Arts for Grades); some 60 buildings and structures on campus which were designed (Plans and Specifications for contract) and supervised by the Department.

Arrangements for observation of IA programs in cities and smaller schools by visitation of senior IA students for week.

ARLINGTON STATE COLLEGE**Arlington, Texas**

Industrial Education Division, Engineering Department, established 1936. 6 full-time majors.

STAFF: (1)

Asst. Prof. B. J. Armstrong, B.S.

Average years in teacher education, 3.5

JUNIOR COLLEGE OFFERINGS	Semester Hours	*Floor Area (Sq. Ft.)	*Equipment Value
General Shop	9		
Mechanical Drawing	14		
Woods	12	3,500	\$ 13,000
Metals	13	6,300	99,000
Electricity	3	4,200	75,000
Plastics	2		
Ceramics	1		
Total	<u>54</u>	<u>14,000</u>	<u>\$187,000</u>

* Space and Equipment belong to Engineering Department and is available on a part-time basis to the Industrial Education Department.

SPECIAL FEATURE

Arlington State College operates as a Junior College under the A. & M. College of Texas.

WEST TEXAS STATE COLLEGE**Canyon, Texas**

Department of Industrial Arts, The Professional and Vocational Group, established 1915. 115 full-time majors, 16 part-time majors, 6 part-time graduate students. Degrees granted: BAE, BSE, (MAE, IA Minor).

STAFF: (2)

Prof. & Head of Department J. A. Gillis, M.A.

Asst. Prof. S. P. Burgess, M.A.

Average years in teacher education, 13.5

Average years in public school teaching, 7.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	650	\$ 900
Mechanical Drawing	12	1,900	30,000
Woods	12	900	3,000
Graphic Arts	9		
Plastics	1	500	1,800
Watch Repair	3		
Leather	1		
Jewelry and Lapidary	1		
Upholstery and Refinishing	3	1,050	1,300
Theory	3		
Design	3		
Total	54	5,000	\$37,000
GRADUATE OFFERINGS			
Problem Courses – Interpreting & Planning IA Facilities	3		
Problem Course – The Development & Influence of IAE	3		
Total	6		

THE AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS

College Station, Texas

Industrial Education Department, School of Engineering, established 1917. Degrees granted: BS, MS, MEd. 191 full-time majors, 12 part-time majors, 18 full-time graduate students, 7 part-time graduate students, 43 summer session graduate students.

STAFF: (15)

Prof. & Dept. Head C. H. Groneman, D.Ed.

Prof. J. G. McQuire, M.S. Asst. Prof. L. E. Stark, B.S.

Assoc. Prof. D. W. Fleming, M.Ed. Asst. Prof. W. E. Wright, M.S.

Assoc. Prof. G. T. Wilcox, M.S. Instr. J. D. Chaney, B.S.

Asst. Prof. R. L. Barton, M.Ed. Instr. B. C. Doggett, M.Ed.

Asst. Prof. R. W. Downard, (n.d.) Instr. J. W. Hill, (n.d.)

Asst. Prof. L. B. Hardeman, M.Ed. Instr. E. C. McLarty, M.Ed.

Asst. Prof. H. P. Rigsby Instr. M. W. Watson, (n.d.)

Average years in teacher education, 8.5

Average years in public school teaching, 3.2

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2	5,100	\$ 36,000
Mechanical Drawing	13	13,200*	74,000*
Woods	9	9,600*	58,000*
Metals	13	19,200*	186,000*
Graphic Arts	3	2,700*	8,000*

* Belong to various dept. but are used 20 to 50% of the time for instruction of Ind. Ed. students.

UNDERGRADUATE OFFERINGS (cont'd)	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Electricity (electronics)	3		
Plastics & Ceramics	2		
Handicrafts	3		
Transportation	2		
Development of IE	2		
Meth. of Teaching	3		
Meth. of Teach. Drawing	2		
Design of Arts & Crafts	2		
Course Making	2		
Upholstery	2		
Visual Aids	2		
Voc. Guidance	2		
Supervised Teaching	8		
Seminar	1	3,000	
Total	76	8,100**	\$36,000**

** \$362,000 in equipment and 49,800 sq. ft. of lab. and shop space (plus 3000 sq. ft. for classrooms and offices) available for Industrial Education Dept.

GRADUATE OFFERINGS	Semester Hours
Visual Aids for Ind. Subj.	2
History of Ind. Ed.	2
Guidance Proc. & Tech.	6
Analysis Procedure	2
IA & VIE Adm. & Supv.	4
Ind. Programs for Jr. College	2
Prob. in Ind. Safety	2
Org. of IA & VIE Depts.	4
Methods of Teaching Dwg.	6
Problems	4
Tests & Measurements	2
Rel. Subj. in Part-Time Coop Prog.	2
Philosophy of IA & VE	4
Seminar in IA & VIE	2
Classroom Management	2
Auto Mech., Elec., Cab. Making, Mach. Shop, Orn. Iron	10*
Research	8
Total	64

* Each graduate student is allowed to take no more than four semester hours of skills work.

SPECIAL FEATURE

Opportunity for student to major in industrial arts teacher education or industrial technology (220 students are now enrolled under this option) or if he has trade experience to qualify him for T & I teaching, he may take that option to graduation (13 students are now enrolled under this option.)

EAST TEXAS STATE TEACHERS COLLEGE Commerce, Texas

Department of Industrial Education, established 1917. Degrees granted: BA, BS, MA, MEd. 400 full-time majors, 10 full-time graduate students.

STAFF: (6)

Prof. & Dept. Head J. G. Grove, M.S. Asst. Prof. B. R. Daniel, M.S.
 Assoc. Prof. L. D. Keaton, M.A. Instr. J. W. Berry, M.S.
 Assoc. Prof. G. W. Kibler, M.A. Instr. C. H. Connally, M.S.

Average years in teacher education, 17.3

Average years in public school teaching, 4.2

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	21	2,400	
Woods	12	4,500	
Metals	15	4,500	Not
Graphic Arts	21	3,000	Itemized
Electricity (electronics)	3	2,400*	
Handicrafts	9	*	
Transportation	6	1,500	
Farm Shop	6	2,300	
(Office, Storage, Lecture Room)		3,900	
Total	93	24,500	\$175,000

* Electricity and Handicrafts use same shop.

GRADUATE OFFERINGS

	Semester Hours
Elementary IA	6
Crafts - Methods	3
Electricity - Methods	3
Industrial History	3
Org. & Equipment	3
House Planning & Architecture	6
Teaching General Metal	6
Total	30

SPECIAL FEATURE

We try to train master Industrial Arts teachers. Some of our majors specialize in one division and go into industry, some set up a small industry for themselves. Most of them teach Industrial Arts in the High Schools.

NORTH TEXAS STATE COLLEGE**Denton, Texas**

Department of Industrial Arts, School of Education, established 1910.
 Degrees granted: BSIA, MSIA. 215 full-time majors, 7 full-time graduate students.

STAFF: (15)

Dir. & Prof. S. A. Blackburn, Ph.D. Instr. A. M. Erickson, M.S.
 Assoc. Prof. C. C. Davis, M.S. Instr. W. R. Erwin, M.S.
 Asst. Prof. E. B. Blanton, M.S. Instr. D. P. Hollis, M.S.
 Asst. Prof. J. D. Hall, M.S. Instr. F. D. Roberson, M.S.
 Asst. Prof. J. C. McCain, M.S. Instr. J. D. Rowlett, M.S.
 Asst. Prof. H. E. Money, M.S. Instr. L. E. Sorrels, M.S.

STAFF (cont'd)

Asst. Prof. A. F. Nelson, M.S. Instr. A. M. White, M.S.
Instr. D. W. Duncan, M.S.

Average years in teacher education, 7.2

Average years in public school teaching, 3.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	30	2,160	
Woods	24	6,383	
Metals	30	5,760	
Graphic Arts	12	*2,000	Not
Electricity (electronics)	3		
Handicrafts	6	2,000	
Transportation (Safety)	3		Given
Shop Care Management	3		
Industrial Arts Design	3		
Shop Mathematics	3		
(Demonstration School Shop)		2,000	
(Classroom & Offices)		1,380	
Total	117	21,683	\$109,648

* Estimated

GRADUATE OFFERINGS

Industrial Arts Design	3
Adv. General Welding	3
Adv. General Mach. Shop	3
Upholstery & Finishing	3
Philosophy of Ind. Arts	3
Supv. & Adm. of Ind. Arts	3
Jr. High Sch. Prob. in IA	3
Sel. & Org. of Sub. Matter for Jr. & Sr. High Schools	3
A Study of Tools & Materials of Industry	3
Research Course	3
The Dev. of Shop Proj. & Ind. Aid	3
Design & Const. of Shop Tools & Equipment	3
Industrial Plant Experience	6
Special Problems	6
Thesis Seminar in IA	6
Total	54

THE TEXAS STATE UNIVERSITY FOR NEGROES (I.i.)

Houston, Texas

Industrial Education, School of Vocational & Technical Education.

Degrees granted: BA, BS.

STAFF:

Director B. A. Turner, Ed.D. (Plus Trade Instructors.)

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9		

Woods	*		
Metals	*		
Graphic Arts	*		
Electricity (electronics)	*		
Transportation	*		
Communication	*		
*Selected Shop Practice	27		
Orientation	1		
Foremanship Fundamentals	2		
Occupational Analysis & Course Planning	2		
Meth. of Teaching Ind. Subjects	2		
Shop Planning & Mgt.	2		
Intro. to VE	3		
Voc. Guidance	3		
Observation & Practice Teaching	6		
Total	57	(n.a.)	(n.a.)

UNIVERSITY OF HOUSTON**Houston, Texas**

Department of Industrial Education, College of Education, established 1940. Degrees granted: BAE, BSE. 70 full-time majors, 30 part-time majors.

STAFF: (4)

Chairman L. E. Freeman, M.S. Instr. L. H. Cargol, Sr., M.Ed.
Asst. Prof. A. L. Chovanec, M.A. Instr. B. Fraser, M.Ed.

Average years in teacher education, 5

Average years in public school teaching, 8

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	9		
Mechanical Drawing	12		
Woods	12		
Metals	12	5,000	\$10,000
Graphic Arts	8	17,500	56,000
Plastics, Ceramics & Handicrafts	9		
Methods - Shop	3		
Methods - Drawing	3		
Methods - General	3		
History & Philosophy	3		
Auto Mechanics	8		
Total	82	22,500	\$66,000

SAM HOUSTON STATE TEACHERS COLLEGE **Huntsville, Texas**

Department of Industrial Arts, established 1910. Degrees granted: BSE, MAE, MEd. 50 full-time majors, 16 full-time graduate students.

STAFF: (3)

Prof. & Director V. Randel, M.A. Prof. J. B. Snodgrass, M.Ed.
Prof. W. Gintz, M.A.

Average years in teacher education, 17

Average years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	9		
Mechanical Drawing	9		
Woods	6	6,000	\$ 7,000
Metals	6	8,000	16,000
Electricity (electronics)	3		
Plastics	3		
Handicrafts	3		
(Other)		2,000	3,000
Total	<u>39</u>	<u>16,000</u>	<u>\$26,000</u>

GRADUATE OFFERINGS

Advanced Furniture Making	3
Shop Work for Jr. High School	3
The History of Manual and IE	3
Organization & Adm. of IA	3
Tests & Measurements in IA	3
Problems in IE	3
Industrial Resources of Texas	3
Thesis	6
Seminar	3
Supervised Research	6
Total	<u>36</u>

TEXAS COLLEGE OF ARTS AND INDUSTRIES Kingsville, Texas

Industrial Arts Education Department, established 1945. Degrees granted: BSE, MAE. 96 full-time majors, 2 full-time graduate students, 14 part-time graduate students.

STAFF: (2)

Chairman & Prof. A. F. Gross, M.A. Instr. R. F. McEowen, M.S.

Average years in teacher education, 4

Average years in public school teaching, 11.5

UNDERGRADUATE OFFERINGS	Semester Hours	*Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	2,500	\$ 5,000
Mechanical Drawing	3	800	2,000
Woods	3	2,500	8,000
Metals	3	2,500	25,000
Graphic Arts	3	1,200	5,000
Plastics	3	2,500	12,000
Ceramics	3	1,600	10,000
Handicrafts	3		
Transportation	3		
Communication	3		
Lapidary & Sterling Technique	3	400	2,000
Total	<u>33</u>	<u>*10,000</u>	<u>\$69,000</u>

* There is some overlapping of floor areas given, but the total floor area is 10,000 square feet.

GRADUATE OFFERINGS	Semester Hours
Woods	3
Metals	3
Ceramics	3
Machine Shop	3
Photography	3
Plastics	6
Arts & Crafts	2
Special Methods in IA	3
Leather	3
Lab. Layout & Equipment Selection	3
Adv. Arts & Crafts	3
Professional Conference	2
History of IA Education	3
Prof. Problems in IA Education	3
Advanced Problems in Ceramics	3
Advanced Problems in Photography	3
Individual Problems in IA	3
Total	52

SPECIAL FEATURE

Our program may be classified as a typical Liberal Arts type of program, leaning heavily toward the cultural phase, or perhaps to the Arts and Crafts end of Industrial Arts Education.

We are extremely interested in the student, not so terribly interested in the material the student uses in his various Industrial Arts courses. In other words, our emphasis is upon training young men and women and adults to enjoy the fruits of industry through a cultural horn-of-plenty. One may consider our adult program as outstanding, since we have classes ranging in enrollment from 80 to 110 persons, all trying their hands in such subjects as ceramics, photography, sterling silver technique, leather carving, woodwork, art metals, and plastics.

We extend a cordial invitation to anyone to criticize this program so that we may improve it through constructive criticism.

PRAIRIE VIEW AGRICULTURAL AND MECHANICAL COLLEGE

Prairie View, Texas

Department of Industrial Education, School of Engineering, established 1897. Degrees granted: BSIE, MEd, MSIE. 173 full-time majors, 7 part-time majors, 1 full-time graduate student, 7 part-time graduate students.

STAFF: (25)

Dean C. L. Wilson, M.S.	Instr. D. N. Herndon, B.S.
Prof. T. L. Holley, M.E.	Instr. J. L. Hill, B.S.
Assoc. Prof. W. H. Stickney, (n.d.)	Instr. E. B. Johnson, B.S.
Assoc. Prof. A. I. Thomas, M.S.	Instr. E. J. Johnson, (n.d.)
Asst. Prof. H. S. Houston, B.S.	Instr. W. J. Jollie, (n.d.)
Asst. Prof. L. B. James, B.A.S.	Instr. N. A. Jones, (n.d.)
Asst. Prof. D. W. Martin, B.S.	Instr. L. W. Martin, (n.d.)

STAFF (cont'd)

Instr. R. E. Bailey, (n.d.)	Instr. L. R. McNeely, (n.d.)
Instr. W. J. Bell, (n.d.)	Instr. L. J. Mitchell, B.S.
Instr. A. G. Cleaver, (n.d.)	Instr. T. G. Porter, (n.d.)
Instr. S. R. Collins, B.S.	Instr. H. G. Washington, (n.d.)
Instr. (Miss) H. T. Farrell, B.S.	Instr. J. M. Wilson, B.S.
Instr. W. J. Hall, M.S.	

Average years in teacher education, 13.7

Average years in public school teaching, none

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	25		
Woods	30	3,000	\$ 8,000
Metals	66	8,050	32,093
Graphic Arts	50	3,150	31,762
Electricity (electronics)	60	2,540	5,249
Transportation	30	3,900	7,900
Masonry	30	1,300	551
Painting & Decorating	30	1,550	721
Plumbing	30	2,400	3,486
Shoe Repair & Leather Work	30	1,325	5,698
Tailoring	30	1,800	5,169
Broom & Mattress Making	30	3,100	2,206
Dry Cleaning	30	900	12,000
Laundrying	30	6,000	30,601
Professional IE	15		
Total	516	39,015	\$145,436

GRADUATE OFFERINGS

Curr. Const. & Course Making	2-3
Test & Meas. in IE	3
Inst. Meth. in IE	3
Trade & Job Analysis	2-3
The General Shop	3
IA for Elem. School	3
Audio & Visual Education	3
Philosophy of IE	3
Adm. & Supv. of Voc. IE	3
Adm. & Supv. of IA	3
History of IE	3
Total	31-33

SOUTHWEST TEXAS STATE TEACHERS COLLEGE

San Marcos, Texas

Department of Industrial Arts, established 1911. Degrees granted: BSIA, MAE, MEd. 140 full-time majors, 20 full-time graduate students, 15 part-time graduate students.

STAFF: (4)

Prof. & Director V. L. Bowers, Ph.D. Asst. Prof. D. W. Harris, M.A.
 Assoc. Prof. W. L. Deck, M.A. Instr. J. M. Branom, M.Ed.

Average years in teacher education, 10

Average years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3		
Mechanical Drawing	9	2,880	\$ 3,500
Woods	9	2,600	12,000
Metals	13	4,484	24,500
Graphic Arts	9	3,508	16,000
Electricity (electronics)	6	1,960	1,000
Laboratory Planning	3		
Principles & Methods	3		
Elem. IA	3		
(Student Teaching Gen. Lab.)		2,800	5,000
Total	58	18,232	\$62,000
GRADUATE OFFERINGS			
Research Problems in IA	3		
Technical Problems in IA	3-6		
Modern Industry	3		
Workshop in IA	3		
Thesis	6		
Evolution of IA Concept	3		
Total	24		

SPECIAL FEATURE.

As is indicated by the name of the college, this school and the Industrial Arts Department is essentially engaged in the training of teaching personnel for the Texas public schools. Other functions though important, are minor in scope.

We trust our undergraduate program reflects current thinking in the Industrial Arts Teacher Education field relative to staff, curriculum, and laboratory facilities.

Our graduate program is pointed toward the improvement of the Industrial Arts teacher.

TARLETON STATE COLLEGE**Stephenville, Texas**

Department of Industrial Arts, established 1920. Degrees granted:

None - Junior College. 100 full-time majors.

STAFF: (2)

Prof. E. A. Blanchard, M.A. Assoc. Prof. C. H. Dawson, B.S.

Average years in teacher education, 27.5

Average years in public school teaching, 0

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	5		
Woods	12	3,000	\$ 6,000
Metals	18	4,000	5,000
Total	35	7,000	\$11,000

UTAH STATE AGRICULTURAL COLLEGE**Logan, Utah**

Industrial Arts Education Department, School of Engineering & Tech-

nology, established 1939. Degrees granted: BSIE, MSIE. 107 full-time majors, 6 full-time graduate students, 2 part-time majors, 4 part-time graduate students.

STAFF: (3)

Prof. & Dept. Head E. C. Jeppsen, M.S. (on leave)

Prof. & Act. Dept. Head W. E. Mortimer, M.S.

Instr. C. W. Hailes, B.S.

Average years in teacher education, 6

Average years in public school teaching, 9.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area ** (Sq. Ft.)	Equipment Value
Mechanical Drawing	21		
Woods	60		
Metals	75		
Electricity	50		
Plastics	3		
Ceramics	2		
Handicrafts	6		
Communication	20		
(General or Multiple Activity Shop)		3,000	\$10,000
Total	237*	3,000	\$10,000

* This credit offering may appear to be extremely high, but that is due to the fact that nearly all this work is taught in separate departments. All of this work is available to Industrial Arts students, although most of them take about the amounts required in the Industrial Arts curriculum.

** The Industrial Arts Shop is used only for some special courses which are taught in the Industrial Education Department and for a special teacher training course called Curriculum Prob. in Industrial Arts, which is given in the Senior year of the student's program. For the basic courses listed here, the students take courses in these departments in unit shops.

GRADUATE OFFERINGS	Quarter Hours
Instructional Aids	3
Occupational Analysis	3
Prin. & Obj. of IE	3
Course of Study Bldg. in IE	5
Shop Org. and Management	3
The General Shop	3
Personnel Relations	3
Methods in IE	3
Curriculum Problems in IE	6
History of IE	3
Measurements in IE	3
Special Problems in IE	//
Administration of IE	3
Supervision of IE	3
Coordination in IE	//
Techniques in Writing Instruction Sheets	3
Plan. & Equip. IE Bldgs	3
Diversified Occupations	3
Part-time Education	3
Supervisory Personnel Development Institute	3
Evening School Programs	3
Conference Leading	3

Apprenticeship	3
Related Instruction	3
Reading & Conference	//
Research & Thesis Writing	//
Advanced Study Under Plan 'B'	3
Total	<u>74</u> Plus (//) "credit arranged" courses

SPECIAL FEATURE

Because of criticism leveled at the teacher training program that Industrial Arts teachers did not know what to teach in the public schools, a new course was started in 1946 called Curriculum Problems in Industrial Arts. It is the purpose of this course to assist prospective teachers in selecting and organizing the fundamental operation and informational topics out of their basic shop courses, so that they will know what to teach and how to teach it in the public schools.

BRIGHAM YOUNG UNIVERSITY

Provo, Utah

Industrial Arts Department, College of Applied Science, established 1883. Degree granted: B.S. 20 full-time majors, 15 part-time majors.

STAFF: (2)

Prof. and Head of Dept. W. H. Snell, B.A.

Inst. L. V. Gamett, B.S.

Average years in teacher education, 19.5

Average years in public school teaching, 6.5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	57	3,680	\$ 5,375
Woods	36	4,000	15,000
Metals	15	4,000	29,500
Plastics	2		
Handicrafts	4		
Shop Planning & Organization (Instrument Room)	3		
		280	3,000
Total	<u>117</u>	<u>11,960</u>	<u>\$52,875</u>

DIXIE COLLEGE

St. George, Utah

Industrial Arts Department.

STAFF:

E. B. Cotton, B.S.

E. C. Sneed, B.S.

W. R. McConkie, B.S.

(Full information not received)

UNIV. OF VERMONT AND STATE AGRICULTURAL COLLEGE

Burlington, Vermont

Department of Industrial Education, College of Education & Nursing,

established 1947. Degree granted: BSE. 20 full-time majors, 3 part-time majors.

STAFF: (4)

State Teacher Trainer N. B.

Instr. J. Lance, (n.a.)

Perkins, B.Ed.

Instr. G. A. Marshall, B.S.

Instr. F. D. Havens, (n.a.)

Average years in teacher education, 1

Average years in public school teaching, 1.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	1,484*	\$2,800*
Mechanical Drawing	9		
Woods	6	1,484*	2,500*
Metals	6	2,518**	?
Transportation	6	2,520%	500%
Principles of IE	3		
Methods of IE	3		
Dev. of Instructional Materials	3		
Teach. Ind. & Related Subjects	3		
IE Survey	3		
Total	48	6,522	\$3,300

* Same shop and equipment.

** The Machine Shop we use is that of the Department of Mechanical Engineering.

% We make use of the Burlington Trade School's Auto Shop. The \$500 equipment value is for individual tool kits for the use of students enrolled in our curriculum. All the other equipment is that which belongs to the Trade School.

VIRGINIA POLYTECHNIC INSTITUTE

Blacksburg, Virginia

Industrial Arts Education, Department, Academic Science Division, established 1946. Degree granted: BSIA. 62 full-time majors, 4 part-time majors.

STAFF: (3)

Dept. Head J. A. Schad, M.S.

Asst. Prof. R. G. Louis, B.S.

Asst. Prof. W. L. Griggs, B.S.

Average years in teacher education, 4

Average years in public school teaching, 10.3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	40	2,800	\$20,000
Mechanical Drawing	9		
Metals	9		
Graphic Arts	3*		
Transportation	3		
Design	6		
Home Equipment	3		
Total	73	2,800//	\$20,000//

* Photography only.

//In addition to General Shop, we use equipment & space belonging to the Department of Vocational Education.

SPECIAL FEATURE

Students receive most of their basic and advanced manipulative training through a comprehensive general shop. This, we feel, is highly desirable because many of our graduates will have to teach in either general unit or comprehensive general shops. Furthermore, we feel, that students should be trained in the type of environment in which they are expected to teach.

In our comprehensive general shop students obtain basic and advanced experiences in handwoodworking, machine woodworking, bench metal work, sheet metal work, art metal work, ornamental iron work, plastics, leatherwork, home mechanics (includes plumbing and pipe fitting), ceramics, textiles, letterpress printing, silk screen process printing, bookbinding, dry point etching, linoleum block printing, consumer electricity and DC and AC electricity.

HAMPTON INSTITUTE

Hampton, Virginia

Industrial Arts Education Department, College of Education, established 1932. Degrees granted: BSE. MAE. 20 full-time majors, 10 full-time graduate students.

STAFF: (16)

- | | |
|--|--|
| Chairman & Assoc. Prof. B. S. Proctor, Ph.D. | Sr. Instr. W. J. Tyger, M.A. |
| Assoc. Prof. J. L. Frank, M.A. | Assoc. Sr. Instr. G. A. Cooke, B.S. |
| Asst. Prof. J. W. Gilliard, B.S. | Assoc. Sr. Instr. R. C. Crutchfield, Jr., B.S. |
| Sr. Instr. J. M. Adams, M.A. | Assoc. Sr. Instr. I. B. Perry, B.S. |
| Sr. Instr. J. A. Cotton, M.A. | Instr. E. T. Lipscombe, B.S. |
| Sr. Instr. J. W. Lewis, B.S. | Instr. R. A. Rice, B.S. |
| Sr. Instr. J. A. Moore, B.S. | Instr. W. L. Thompson |
| Sr. Instr. J. A. Russell, Jr., M.S. | Instr. R. P. Wolf |

Average years in teacher education, 14.1

Average years in public school teaching, .5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	1,800	\$4,000
Mechanical Drawing	6		
Woods	6		
Metals	15		
Graphic Arts	3		
Electricity (electronics)	3		
Ceramics	3		
Communication	3		
Photography	3		
Aeronautics	3		
Automechanics	3		
Cement Work & Plastering	3		
Painting & Decorating	3		
Textiles	3		
Total	60	1,800	\$4,000

Graduate Program will be discontinued.

SPECIAL FEATURE

Most of the courses are conducted in the Unit Shops which are allocated to the Division of Trades and Industries.

VIRGINIA STATE COLLEGE (I.i.)

Petersburg, Virginia

Department of Industrial Education & Industrial Management. Degree granted: BS.

STAFF: (10)

Director & Assoc. Prof. G. W. Davis, M.S.	Instr. L. K. Chavis, B.S.
Assoc. Prof. H. E. Fauntelroy, M.S.	Instr. H. W. Griffin, Jr., B.S.
Assoc. Prof. F. T. Greene, M.S.	Instr. T. V. P. Meekins, B.S.
Asst. Prof. W. N. Cooper, M.Ed.	Instr. C. B. Powell, (n.d.)
Instr. W. K. Baker, B.S.	Instr. F. R. Wood, B.S.

UNDERGRADUATE OFFERINGS

	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	20		
Woods	48		
Metals	48		
Electricity (electronics)	48		
Transportation	48		
Communication	30		
Masonry	48		
Orientation	1		
Industrial History	2		
Industrial Hygiene	2		
VE & Its Adm.	3		
Shop Computations	3		
Trade Analysis	2		
Methods of Shop Instruction	4		
Voc. Psychology & Guidance	2		
Meth. of Conducting Conferences	2		
Labor in Industry	2		
Plane Surveying	2		
Directed Teaching	6		
Total	321	(n.a.)	(n.a.)

WESTERN WASHINGTON COLLEGE OF EDUCATION

Bellingham, Washington

Industrial Arts Department, established 1912. Degrees granted: BE, MEd. 49 full-time majors, 9 full-time graduate students.

STAFF: (4)

Assoc. Prof. and Chairman C. M. Rice, M.A.	Asst. Prof. E. Channer, M.A.
	Instr. R. A. Schwalm, M.S.
Asst. Prof. D. J. Burrell, M.A.	

Average years in teacher education, 6.6
 Average years in public school teaching, 12.8

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	3	5,760	Not Itemized
Mechanical Drawing	24	864	
Woods	12		
Metals	12		
Graphic Arts	9	2,028	
Electricity	6		
Ceramics	3	900	
Handicrafts	3		
Transportation and Power	5		
Communication	3		
General Industrial Arts	5	1,458	
IA in Elementary School	5	1,558	
IA in Secondary School	2		
General Photography	3	2,270	
Constructing & Use of Visual Aids	3	330	
Driver Education for Teachers	3		
General Safety Problems	3		
Special Problems (Office, Storage & Auxiliary Space)	2-3		
Total	<u>107</u>	<u>21,297</u>	<u>\$50,000</u>

GRADUATE OFFERINGS

Special Problems	1-5	
Problems in Drafting & Planning	3	
Construction Design	3	
Historical Development of IA & VE	3	
Typography	5	
Silk Screen Printing	5	
Advanced Bookbinding	5	
Problems in Metalwork	3	
Problems in Woodworking	3	
Small Boat Building	3-5	
Seminar in Industrial Arts	Var.	
Shop Planning and Equipment	3	
IA Tool & Equip. Maintenance	3	
Course Org. & Teach. Tech. in Wood	3	
Reading & Conference in IA	Var.	
Total	<u>49 Plus</u>	

SPECIAL FEATURE

Perhaps the most unique or outstanding phase of our program is our concern with general education and the development of work for the individual needs of each student. We have a modern plant completed last summer (1950).

EASTERN WASHINGTON COLLEGE OF EDUCATION

Cheney, Washington

Industrial Arts Department, Division of Applied Science & Art, established 1898. Degrees granted: BAE, MEd. 68 full-time majors, 3 full-time graduate students.

STAFF: (3)

Dept. Head & Assoc. Prof. E. L. Dales, B.S.

Assoc. Prof. J. S. Lane, M.S. Asst. Prof. L. W. VandeBerg, M.S.

Average years in teacher education, 22

Average years in public school teaching, 8.7

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	4		
Mechanical Drawing	12	1,200	\$ 3,500
Woods	24	3,000	29,000
Metals	8	1,800	31,500
Electricity (electronics)	2		
Plastics	2		
Handicrafts	4		
IA Tests & Measurements	2		
IA Instruction Sheets	2		
IA Publications	2		
General Shop Organization	2		
Philosophy of VE	2		
History of IA	3		
IA Curriculum	2		
Organization of IA	3		
Seminar in IA	2		
(Office & Shop Library, 1900 Vol. IA books)		300	7,500
(Annex: Office, Finishing Room, Lecture Room)		2,100	3,000
Total	76	8,400	\$74,500
GRADUATE OFFERINGS			
Graduate Study	4		
Total	4		

WALLA WALLA COLLEGE (l.i.)**College Place, Washington**

Industrial Arts Department. Degrees granted: BA, BS.

STAFF: (4)

Instr. O. H. Lee, B.S.

Industrial Superintendent of Press

Instr. J. J. Walcker, B.S.

R. L. Collins, (n.a.)

Mr. Cowin, (n.a.)

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9		
Woods	39		
Metals	30		
Graphic Arts	18		
Transportation	18		
Building Techniques	27		
Machine and Tool Maintenance	3		
Spec. Prob. in IA	Var.		
Spec. Prob. in IA Lab.	Var.		
Shop Administration	3		

Methods of Teach. Ind. Subject	3		
Course Construction	3		
Total	<u>153</u>	plus	(n.a.)
	Var.		(n.a.)

CENTRAL WASHINGTON COLLEGE OF EDUCATION**Ellensburg, Washington**

Department of Industrial Arts, Division of Fine and Industrial Arts, established 1910. Degrees granted: BAE, MAE. 35 full-time majors, 150 part-time majors, 2 full-time graduate students.

STAFF: (3)

Assoc. Prof. & Chairman H. G. Hogue, B.A.

Assoc. Prof. G. L. Sögge, M.A. Asst. Prof. W. Bakke, M.S.

Average years in teacher education, 19.3

Average years in public school teaching, 5.3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	6		
Woods	10	2,400	\$ 4,000
Metals	10	2,000	6,000
Graphic Arts	6*	1,500	3,000
Electricity (electronics)	3		
Plastics	3		
Ceramics	10	1,500	2,000
Handicrafts	10	1,500	1,000
Methods & Allied Courses	10		
Total	<u>68</u>	<u>8,900</u>	<u>\$16,000</u>

* Photography only.

GRADUATE OFFERINGS

Arts & Crafts	5
Adv. Photography	3
Adv. Creative Crafts	5
General Metals	5
Engineering Drawing	3
Adv. Furniture Construction	5
Adv. Pottery	5
IA Design	2
IA Education	2
Gen. Shop Planning & Org.	2
Planning Instructional Material	2
Seminar in IA	<u>2-6</u>
Total	<u>45</u>

PACIFIC LUTHERAN COLLEGE**Parkland, Washington**

Industrial Arts Department, established 1949. Degree granted: BAE. 12 full-time majors, 6 part-time majors.

STAFF: (1)

Instr. & Dept. Head R. I. Johnson, M.Ed.

Years in teacher education, 2.5

Years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
(General Shop)	—		
Mechanical Drawing	6	1,500	\$7,000
Woods	5		
Metals	3		
Electricity (electronics)	5*		
Plastics	1		
Ceramics	1		
Handicrafts	5		
Hist., Phil., Ed. Prin. of IA	2		
Independent Study in Spec. Prob.	4-8		
Total	36	1,500	\$7,000

* 3 Sem. Hrs. Electronics taught by Dept. of Science.

SPECIAL FEATURE

Training teachers for general certification in Industrial Arts is the principal feature of the program at P.L.C. Of special interest in the craft-arts offering for all teachers in training. This is visualized as preparation for the teaching of correlated work of Industrial Arts kind through all twelve years of school, preceding and paralleling the regular Industrial Arts program usually reserved for boys at the Junior-Senior High School levels.

STATE COLLEGE OF WASHINGTON

Pullman, Washington

Industrial Arts Department, School of Education, established 1891. Degrees granted: BSIA, MAIA. 80 full-time majors, 10 full-time graduate students, 20 part-time graduate students.

STAFF: (3)

Chairman U. G. Whiffen, M.S.

Instr. R. C. Doane, M.S.

Asst. Prof. C. A. Hudson, M.S.

Average years in teacher education, 9.7

Average years in public school teaching, 3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	2		
Woods	14	2,592	\$ 20,500
Metals	6	8,750	252,000
Electricity	6	2,400	10,000
Plastics	2		
Handicrafts	6		
Communication	2		

WASHINGTON

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Auto Mechanics	4	8,000	15,000
(Offices & Aux. Space)		2,710	3,000
Total	44	24,452	\$300,500

GRADUATE OFFERINGS

IA Problems	2
Tests & Measurements in IA	2
Trade Analysis	2
The General Shop	2
IA Curriculum Prob.	2
Org. & Adm. of IA	2
Hist. & Phil. of IA	2
IA Research	2
Thesis	2
Total	18

SEATTLE PACIFIC COLLEGE

Seattle, Washington

Department of Industrial Arts, College of Education, established 1946.
Degree granted: BAE. 15 full-time majors, 2 full-time graduate students, 10 part-time majors.

STAFF: (1)

Asst. Prof. and Dept. Head W. F. Trepus, B.S.

Years in teacher education, 4

Years in public school teaching, 7

UNDERGRADUATE OFFERINGS

	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8		
Mechanical Drawing	9	*750	\$ 1,600
Woods	14	2,000	3,000
Metals	15	1,500	12,000
Plastics (Under Art)			
Ceramics (Under Art)			
Handicrafts (Under Art)			
Photography	3		
Total	49	*4,250	\$16,600

* Includes Office Space

UNIVERSITY OF WASHINGTON

Seattle, Washington

Division of Industrial Education, College of Education, established 1949. Degrees granted: BAE, BSE. 50 full-time majors.

STAFF: (2)

Assoc. Prof. A. R. Baily, Ed.D.

Supv. of IA Lab. C. W. Horst, M.A.

Average years in teacher education, 2

Average years in public school teaching, 5

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	8	1,300	\$15,000
Mechanical Drawing	10		
Woods	7		
Metals	5		
Plastics (part of GS)	—		
Tools & Materials for IE Teachers	2		
Spec. Prob. in IE	5		
Sel. & Org. of IE Subject. Matter	3		
IE for Elem. Teachers	5		
Directed Teaching (Classroom & Finishing Room)	8	1,700	2,000
Total	53	3,000	\$17,000

GRADUATE OFFERINGS

We hope to have the graduate program under way this winter (1951-52).

SPECIAL FEATURE

The program has just started and our shop is set up as a model that can be followed by the small high school. Many superintendents have visited it and requested information as to machines, etc. It is painted with the "Color Dynamic" scheme. Ceramics, photography, welding, foundry, machining of metals are taught in the Mechanical Engineering shops and Ceramics Engineering shops at the University.

FAIRMONT STATE COLLEGE**Fairmont, West Virginia**

Industrial Arts Department, established 1947. Degrees granted: BA, BS. 70 full-time majors, 15 part-time majors.

STAFF: (3)

Chairman C. W. Johnson, A.M.

Instr. K. G. Wise, M.A.

Instr. H. M. Carmichael, M.S.I.E.

Average years in teacher education, 4

Average years in public school teaching, 6.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	1,950	\$ 3,000
Mechanical Drawing	16	1,950	4,000
Woods	12	3,150	9,000
Metals	18	3,550	32,000
Graphic Arts (Projected for development 1951-53)			
Electricity	4		
Plastics	6		
Handicrafts	4		
Building Construction & Carpentry	8		
Professional	7		
Total	81	10,600	\$48,000

SPECIAL FEATURE

All student practice teaching is done on the Cadet System, where the

the students are engaged in the schools for a period of nine full weeks. Each student is expected to participate in the school's activities in exactly the same manner as a regularly employed teacher. This program involves not less than 250 clock hours of observation and directed class teaching. Credit for this program is six (6) semester hours. Supervision for the program is a joint responsibility between the Education Department and the Industrial Arts Department. Participating schools have given excellent cooperation, and have expressed a high regard for the effectiveness of the program.

WEST VIRGINIA INSTITUTE OF TECHNOLOGY

Montgomery, West Virginia

Department of Industrial Arts Education, established 1925. Degree granted: BS. 76 full-time majors.

STAFF: (4)

Asst. Prof. H. Butcher, M.A. Instr. B. W. Crane, (n.d.)
Asst. Prof. J. F. Garber, M.Ed. Instr. J. M. Proppos, (n.d.)

Average years years in teacher education, 4.7

Average years in public school teaching, 4.7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	6	2,584	\$ 20,000
Mechanical Drawing	3	1,368	5,000
Woods	12	3,232	35,000
Metals	12	1,332	12,500
Graphic Arts	6	*	*
Electricity (electronics)	3		
Plastics	6	1,656**	8,000**
Ceramics	6	1,064	10,000
Handicrafts	3		
Transportation	14		
Communication	2		
Freehand Drawing (in Fine Arts)	3		
Industrial Arts Design (Projection Room)	3	468	10,000
(Lecture Room)		156	5,000
Total	79	11,860	\$105,000

* In Dept. of Printing & Publishing.

** Shared with Art Metal.

WEST VIRGINIA UNIVERSITY

Morgantown, West Virginia

Industrial Arts Education, College of Education, established 1920. Degrees granted: BSE, MAE. 25 full-time majors, 12 part-time majors, 20 full-time graduate students, 5 part-time graduate students.

STAFF: (5)

Prof. & Head H. B. Allen, Ph.D Instr. C. L. Delaney
Instr. T. A. Bolyard, M.A. Instr. A. D. Modi, M.A.
Instr. T. J. Brennan, M.A.

Average years in teacher education, 10

Average years in public school teaching, 7

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	25	1,800	\$ 5,000
Mechanical Drawing	8	3,600*	40,000*
Woods	12	6,400**	12,000**
Metals	32	15,400*	255,000*
Graphic Arts	6		
Electricity (electronics)	10	1,800**	8,000**
Plastics	3		
Ceramics	3	1,500**	6,400**
Handicrafts	9	? *	9,000*
Transportation	3	3,200**	5,000**
Communication (Unit Shop)	6		
	—	1,500	4,000
Total	117	35,200	\$344,400

* Used in part for Industrial Arts, but belong to other parts of the University.

** Used in part for Industrial Arts, but belong to local High School.

GRADUATE OFFERINGS

Advanced Crafts Work	Up to 9
Industrial Experience	Up to 6
Maintenance of IA Equip.	2
Rural Electrification	3
Ceramics	Up to 6
Coal Mining	Up to 6
Advanced Wood Construction	2 to 6
Adv. Meth. in Teaching IA	2
Principles of Supervision	2
Total	42

SPECIAL FEATURE

A flexible graduate study program — one-third Industrial Arts Education — one-third integrative general education — one-third Advanced courses in arts of industry.

Bids are currently being received on a new building 96 x 100 for exclusive use in IA teacher training. Hope to be completed in September.

THE STOUT INSTITUTE

Menomonie, Wisconsin

Division of Industrial Education, established 1893. Degrees granted: BSIE, BSVE, MSIE, MSVE. 441 full-time majors, 20 full-time graduate students.

STAFF: (24)

Pres. Verne C. Fryklund, Ph.D.	Assoc. Prof. R. F. Kranzusch, M.S.
Dean of Div. & Prof. C. A. Bowman, M.S.	'Assoc. Prof. H. C. Milnes, M.S.
Prof. F. Keith, M.S.	Assoc. Prof. J. E. Ray, Ed.D.
Prof. R. A. Wigen, M.A.	Assoc. Prof. C. L. Rich, Ph.M.
Assoc. Prof. D. D. Chinnock, M.A.	Assoc. Prof. E. W. Siefert, M.Ed.
Assoc. Prof. H. M. Hansen, M.A.	Asst. Prof. S. Anderson, Ph.D.
	Asst. Prof. D. P. Barnard, M.S.

Asst. Prof. R. E. Betterly, M.S.	Instr. H. Anderson, M.A.
Asst. Prof. J. A. Jarvis, M.Ed.	Instr. R. W. Blaesing, M.S.
Asst. Prof. K. T. Olsen, M.S.	Instr. M. Reneson, M.A.
Asst. Prof. E. J. Rawson, M.E.	Instr. P. W. Ruehl, M.S.
Asst. Prof. G. A. Soderberg, M.A.	Instr. R. S. Swanson, M.S.
Asst. Prof. L. Whydotski, A.M.	

Average years in teacher education, 13

Average years in public school teaching, 5.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	16	10,050	\$ 31,185
Mechanical Drawing	28	3,646	6,500
Woods	40	12,250	34,500
Metals	34	8,900	131,837
Graphic Arts	26	4,400	25,000
Electricity	12	1,020	6,500
Plastics	2		
Ceramics	2		
Handicrafts	2		
Fin. & Paint. & Decorating	4	1,800	800
Bricklaying & Concrete	6	672	800
Photography	2	1,100	3,000
Total	<u>174</u>	<u>43,938</u>	<u>\$240,122</u>

GRADUATE OFFERINGS

Administration	2
Area Vocational Schools	2
Curriculum Procedures	2
Labor & Industrial Relations	2
Occupational Hygiene & Safety	2
Prob. in Adm. of Voc. Education	2
Prob. in Apprentice Training	2
Prob. in Audio-Visual Education	2
Prob. in Coordination	2
Prob. in Graphic Arts	2
Prob. in Industrial Education	2
Prob. in Supervision	2
Prob. in Technical Fields	2
Survey Procedures	2
Total	<u>28</u>

SPECIAL FEATURE

The only college in the United States devoted solely to the preparation of teachers in Home Economics and Industrial Education.

PLATTEVILLE STATE TEACHERS COLLEGE Platteville, Wisconsin

Division of Industrial Arts Education, established 1910. Degree granted: BS. 90 full-time majors.

STAFF: (4)

Director H. A. Pederson, M.A.	Instr. E. W. Manzer, M.S.
Instr. C. S. Johnson, M.A.	Instr. H. C. Olson, M.S.

Average years in teacher education, 6.5

Average years in public school teaching, 12.5

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2	900	\$ 1,000
Mechanical Drawing	10	1,470	2,000
Woods	10	2,700	15,000
Metals	16	5,200	20,000
Graphic Arts	6	1,500	10,000
Plastics	2		
Handicrafts	2		
(Library; Classroom, Office)		3,430	10,600
Total	48	15,200	\$58,600

SPECIAL FEATURE

Small Classes. Students spend a great deal of time in the shops outside of regular scheduled classes. Industrial arts library is in the Industrial Arts Building.

SUPERIOR STATE COLLEGE

Superior, Wisconsin

Industrial Arts Department, established (date not available). Degrees not granted; no major offered in department.

STAFF: (3)

Prin. of Training School H. H. Whitney, M.S. Prof. S. E. Wright, M.A.
Prof. M. Palmer, (n.a.)

Average years in teacher education, 13

Average years in public school teaching, 11.3

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	9	750	\$ 1,000
Woods	6	5,050	16,500
Plastics	1		
Total	16	5,800	\$17,500

SPECIAL FEATURE

We do not train industrial arts teachers as such. We only enrich the program of teachers specializing in other fields or take care of a part of the required shop and drawing work for students of engineering.

UNIVERSITY OF WYOMING

Laramie, Wyoming

Department of Vocational and Industrial Arts, College of Education, established 1945. Degrees granted: BAE, BSE, MEd. 35 full-time majors, about 100 (variable) part-time majors, 6 full-time graduate students, 6 part-time graduate students.

STAFF: (3)

Dept. Head & State Teacher Trainer Instr. P. F. Christianson, M.S.
 F. A. Holmes, M.Ed. Instr. B. N. Seibert, (n.a.)

Average years in teacher education, 10.7

Average years in public school teaching, 5.3

UNDERGRADUATE OFFERINGS	Quarter Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	9		
Mechanical Drawing	12		
Woods	9	1,000	\$12,000
Metals	18	2,700	30,000
(Misc.)		1,700	3,000
Total	<u>45</u>	<u>5,400</u>	<u>\$45,000</u>

GRADUATE OFFERINGS

Prin. of VE & IA	3		
Phil. of VE & IA	3		
IA Design	3		
Seminar	3-5		
Special Problems in IA	3-5		
Thesis	0-10		
Total	<u>29</u>		

ADDENDA

LONG BEACH STATE COLLEGE (I.i) Long Beach, California

Industrial Arts Education, Division of Natural Science. Degrees granted: BA, BS.

STAFF: (1)

Assoc. Prof. W. D. MacQuarrie, Ph.D.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
General Shop	2		
Mechanical Drawing	7		
Woods	7		
Metals	11		
Electricity (electronics)	7		
Graphic Arts	5		
Transportation	2		
Experimental Shop	2		
Const. Tech. for Elem. Teachers	2		
Meth. in Teach. IA	2		
Curr. Dev. in IA	2		
School Shop Revision & Plan.	2		
Prob. in Teach. I & VE	2		
School Shop Proj. Dev.	3		
School Shop & Society (Seminar)	2		
Total	63		

NORTHERN OKLAHOMA JUNIOR COLLEGE (I.i.)

Tonkawa, Oklahoma

Industrial Arts Department. Degrees not granted: Junior College.

STAFF: (3)

Instr. B. Lewis, (n.d.)

Instr. V. L. Sternitzke, B.S.

Instr. L. C. Sale, B.S.

UNDERGRADUATE OFFERINGS	Semester Hours	Floor Area (Sq. Ft.)	Equipment Value
Mechanical Drawing	17		
Woods	36		
Metals	32		
Graphic Arts	16		
Transportation	17		
Total	118	(n.a.)	(n.a.)

SPECIAL FEATURE

A new Industrial Arts Building embodies the latest innovations in shop construction. The wood shop, metal shop, and printing shop together with the drafting department, are housed in this modern building.

ABBREVIATIONS

A.B.	Bachelor of Arts	Cap.	Capacity
Adm.	Administration	Cer.	Ceramics
Adv.	Advanced	Const.	Construction
Ag.	Agricultural	Curr.	Curriculum
A.M.	Master of Arts	D.Ed.	Doctor of Education
Anal.	Analysis	Dept.	Department
Arch.	Architecture, Architectural	Des.	Design
Arr.	Arrangement	Dev.	Development
Assoc.	Associate	Devel.	Development
Asst.	Assistant	Div.	Division
Aud.	Audio	Draft.	Drafting
Avail.	Available	Dwg.	Drawing
B.A.	Bachelor of Arts	Ed.	Education or Educational
B.A.E.	Bachelor of Arts in Education	Ed.D.	Doctor of Education
B.Ed.	Bachelor of Education	Ed.M.	Master of Education
Bldg.	Building	Elec.	Electricity
B.S.	Bachelor of Science	Elem.	Elementary
B.S.E.	Bachelor of Science in Education	Eng.	Engineering
B.S.I.A.	Bachelor of Science in Industrial Arts	Equip.	Equipment
B.S.I.A.E.	Bachelor of Science in Industrial Arts Education	Exh.	Exhibit
B.S.I.E.	Bachelor of Science in Industrial Education	Fabr.	Fabrication
B.S.V.E.	Bachelor of Voca- tional Education	F. & P.A.	Fine and Practical Arts
		Fram.	Framing
		Furn.	Furniture
		Gen.	General
		G.S.	General Shop
		Hist.	History
		H.S.	High School

I.A.	Industrial Arts	M.S.I.A.E.	Master of Science in Industrial Arts Education
I.A.E.	Industrial Arts Education		
I.A. & V.E.	Industrial Arts & Vocational Education	M.S.V.E.	Master of Science in Vocational Education (not available)
I.E.	Industrial Education	(n.a.)	(no degree)
Imp.	Improvement	(n.d.)	Office
Ind.	Industry or Industrial	Off.	Organization
Indi.	Individual	Org.	Bachelor of Philosophy
Inst.	Instruction	Ph.B.	Doctor of Philosophy
Instr.	Instructor	Ph.D.	Philosophy
Instrs.	Instructors	Phil.	Master of Philosophy
Intro.	Introduction	Ph.M.	Planning
I. & V.E.	Industrial and Vocational Education	Plan.	Plastics
Jr.	Junior	Plas.	Practice
Lab.	Laboratory	Prac.	Prevention
(l.i.)	(limited information)	Prev.	Principles
Lib.	Library	Prin.	Program
M.A.	Master of Arts	Pro.	Problems
M.A.E.	Master of Arts in Education	Prob.	Professor
M.A.I.A.	Master of Arts in Industrial Arts	Prof.	Project
Maint.	Maintenance	Proj.	Selection
M.D.	Mechanical Drawing	Sel.	Special
M.E.	Mechanical Engineer	Spec.	Sq. Ft.
M.Ed.	Master of Education	Sq. Ft.	Supervision
Mech.	Mechanical	Super.	Supervisor
Mchn.	Machine	Supv.	Teaching
Meth.	Methods	Teach.	Technical or Technique
M.F.A.	Master of Fine Arts	Tech.	Training
Mgt.	Management	Tr.	Typographical
M.I.E.	Master of Industrial Education	Typog.	T. & I.
Misc.	Miscellaneous	T. & I.	Trade and Industry
Mod.	Modern	T. & I.E.	Trade and Industrial Education
M.S.	Master of Science	Var.	Variable
M.S.E.	Master of Science in Education	V.E.	Vocational Education
		Vis.	Visual
		Voc.	Vocational

CHANGES IN CHAIRMANSHIP FOR 1951-52

GEORGIA

Georgia Teachers College, Collegeboro, Division of Fine and Practical Arts, Acting Chairman J. H. Erickson, M.Ed. Effective June 1951.

NEBRASKA

Nebraska Wesleyan University, Lincoln, Department of Industrial Arts, Asst. Prof. N. C. Slack, M.A. Effective September 1951.

NORTH DAKOTA

University of North Dakota, Grand Forks, Industrial Arts Department, School of Education, Acting Head R. E. Bergstrom, B.S. Effective September 1951.

OHIO

Ohio Northern University, Ada, Industrial Arts Department, College of Liberal Arts, Dept. Head & Asst. Prof. D. R. Lowman, M.A. Effective September 1951.

TENNESSEE

Tennessee Agricultural and Industrial State College, Nashville, Department of Industrial Education, Division of Engineering & Industrial Education, Assoc. Prof. & Supervisor of Industrial Education P. E. Stewart, M.S. Effective August 1951.

WASHINGTON

Western Washington College of Education, Bellingham, Industrial Arts Department, Chairman A. R. Pawelek, Ph.D. Effective October 1951.

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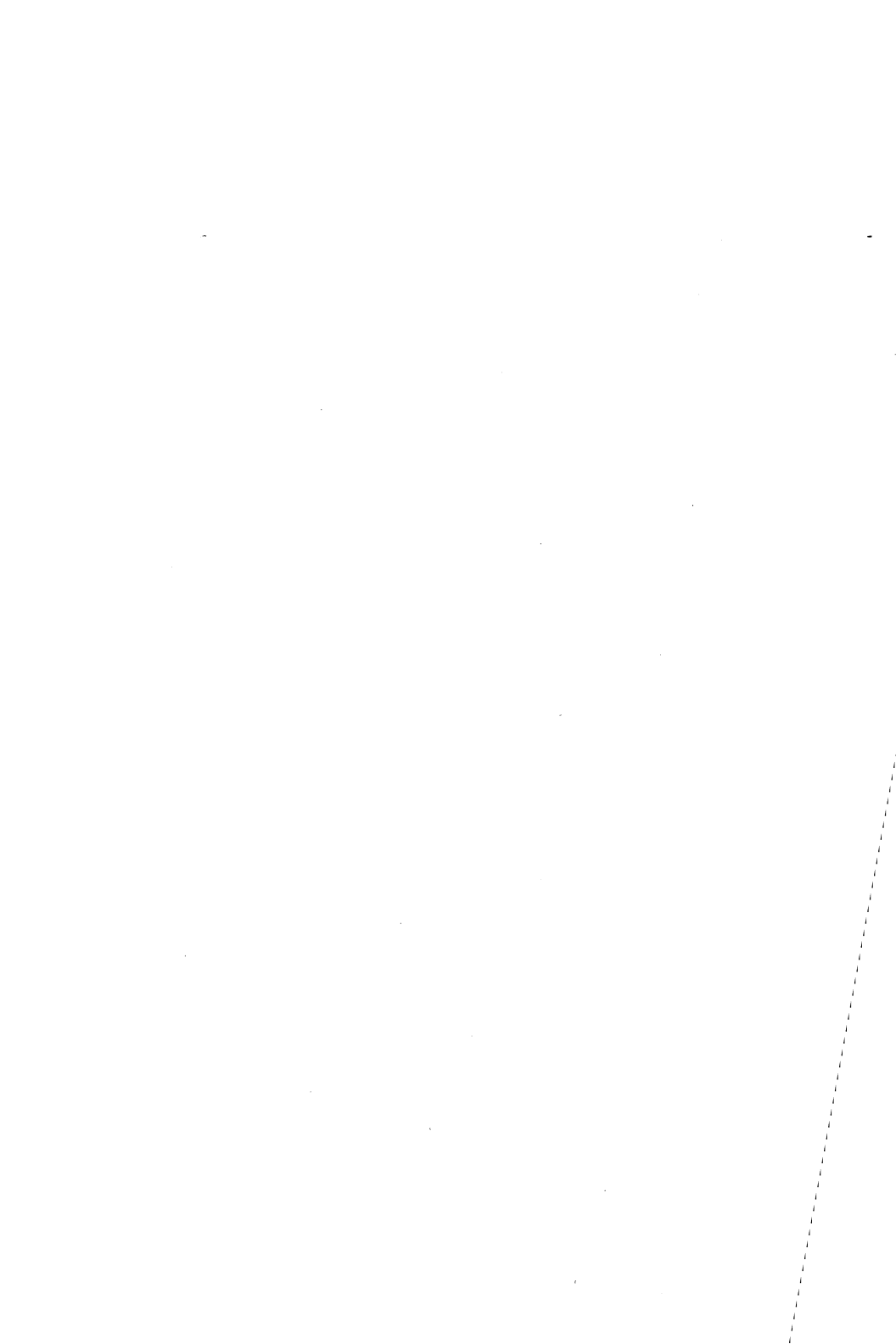
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