

A COMPARATIVE STUDY OF THE PLAN OF STATE SUPERVISION  
FOR TRADE AND INDUSTRIAL EDUCATION IN THE STATES  
AND TERRITORY OF THE SOUTHERN REGION

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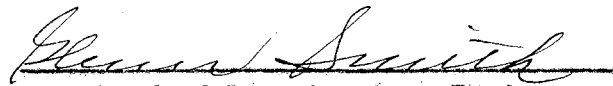
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## CHAPTER I

### FORMULATION AND DEFINITION OF THE PROBLEM

The supervision of vocational education is one of the most interesting and challenging phases of the whole vocational education program. This is especially true in the field of trade and industrial education since the training of teachers in this area is largely in-service in character and involves many original and unique administrative supervisory, and certification techniques and activities.

### PURPOSE OF THE STUDY

The major objectives of the study are: First, to analyze and compare the various plans for supervising trade and industrial education in the several states and territory of the southern region. Second, to suggest ways and means of utilizing the findings to formulate a set of policies to assist supervisors to improve and make supervision more practical and effective.

### SIGNIFICANCE OF THE PROBLEM

This study has been suggested by numerous inquiries from State Supervisors concerning the topics covered, and the apparent widespread interest in such a problem. The need is so keenly felt in the writer's

own state that the state supervisor requested that it be made and the findings used to formulate a manual for supervisors on the state and local level. The state staff agreed that the information such as this study should produce is most urgently needed at present.

#### NEED FOR THE STUDY

The importance of this study is further indicated by the fact that the vocational education program in America has grown very rapidly in recent years. While slightly over one million individuals enrolled in federally aided classes and schools in 1936, involving an annual expenditure of over \$30,000,000 from all sources<sup>1</sup>, in 1947 there were 2,508,618 individuals enrolled in vocational education courses of all kinds<sup>2</sup>. In 1947, \$83,252,082.84 were expended from Federal, State, and Local funds for vocational training.

While sections of the state plan and numerous memoranda are available on supervisory policies, an inspection of the Texas State files shows that nothing specific has been done to formulate and compile a concise statement of guiding policies and practices in promoting, organizing, and supervising trade and industrial classes.

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<sup>1</sup>V. O. Key, Jr., The Administration of Federal Grants to States, p. 15, Chicago, Public Administration Service, 1937.

<sup>2</sup>United States Office of Education, Digest of Annual Reports of State Boards for Vocational Education, p. 1, Washington, U. S. Government Printing Office, June 1947.

This investigation should fulfill a long-felt need on the part of state directors and state supervisors for adequate and compact reference material. It should also prove interesting and valuable to teacher trainers, local directors, vocational teachers and all those interested in vocational education of all types.

Trends In Enrollment. Reports to the office of education from states and territories for the year ending June 30, 1947, indicate an increasing demand for instruction in vocational classes and for service in the several fields of vocational education.

Enrollment in all types of federally aided vocational classes increased from 2,227,663 in 1946 to 2,508,618 in 1947, a total of 280,955. Enrollment in vocational classes by type of program as in Table I were as follows: Agriculture 584,533, an increase of 74,202; Distributive Occupations, 235,141, an increase of 60,469; Home Economics, 968,846, an increase of 57,030; and Trades and Industry, 720,098, an increase of 89,254<sup>3</sup>.

Figure 1 shows the enrollment in all types of federally aided vocational classes from the inception of the program in 1917 to 1948. Figure 2 shows the enrollment according to types of classes. Aside from a rapid increase in enrollment preceding and during the first years of World War II, the average enrollment has been a continuous increase.

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<sup>3</sup>Federal Security Agency, United States Office of Education, Digest of Annual Reports of State Boards for Vocational Education, p. 1, Washington, D.C., United States Government Printing Office, 1947.

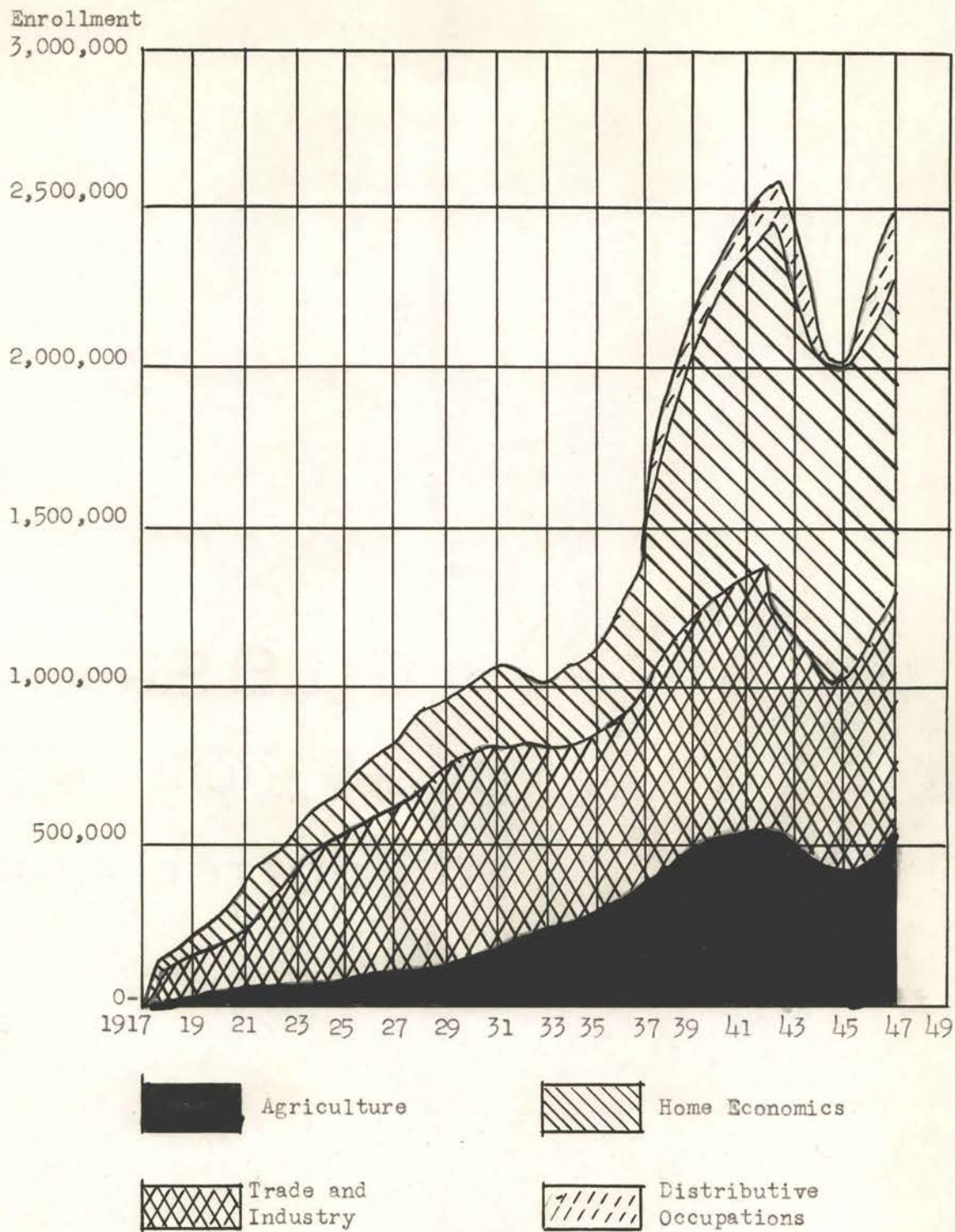


Figure 1. Enrollment in Vocational Classes by Type of Program.

Enrollment  
3,000,000

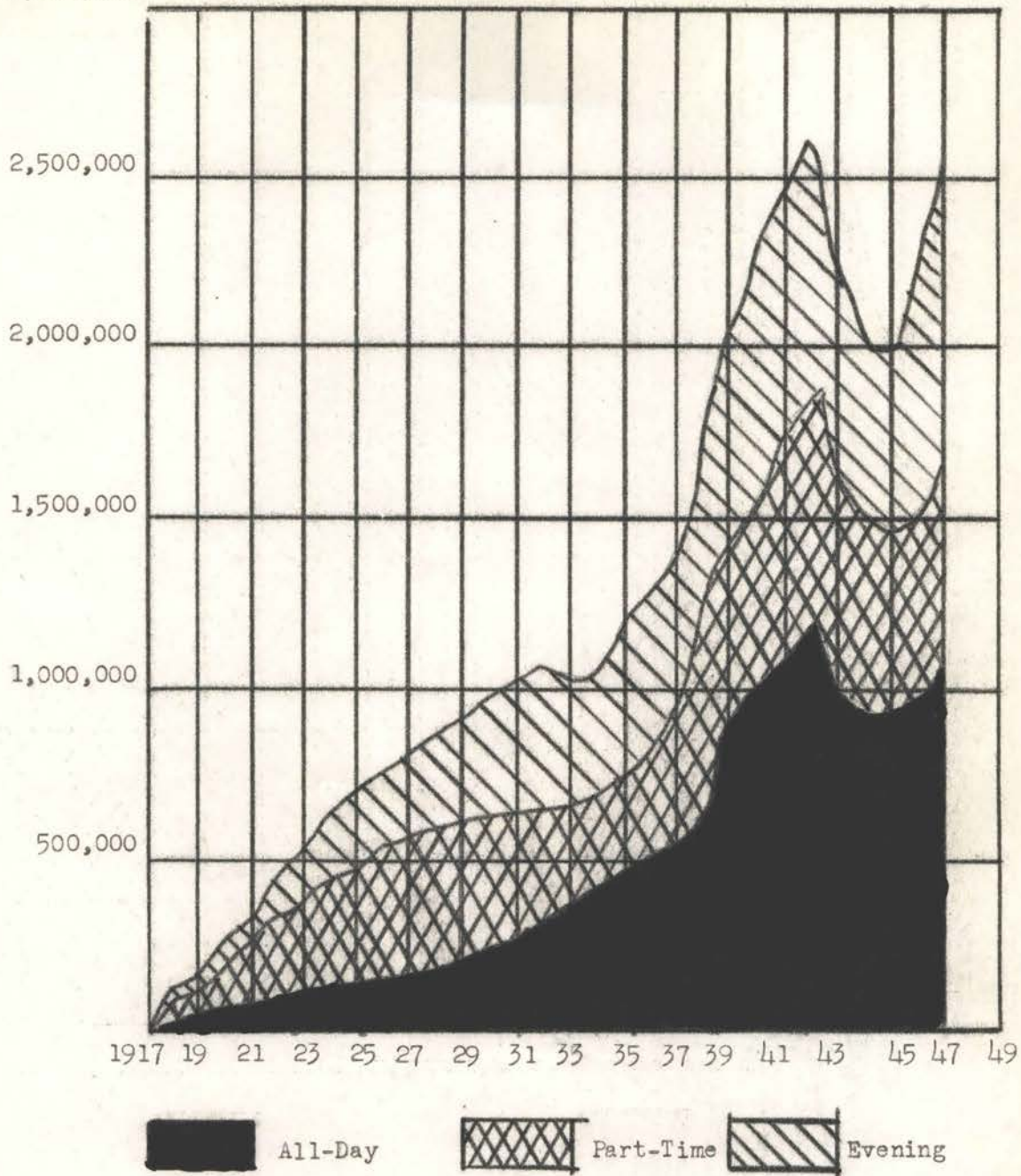


Figure 2. Enrollment in Vocational Classes by Type of Class.

Enrollment in distributive classes is not shown until 1937 since separate funds were not provided until the passage of the George-Deen Act, effective July 1, 1937. Distributive training was a part of trades and industries until that time.

Trends in Expenditures. The expenditure of \$83,252,083.84 for vocational education which met the standards set in the Smith-Hughes and George-Deen Acts included \$21,087,435.84 from Federal funds, \$22,180,073.71 from State funds, and \$39,984,573.29 from Local funds. (The George-Barden Act, approved August 1, 1946, superceded the George-Deen Act)<sup>4</sup>.

These expenditures are shown in Table II and represent an increase for the fiscal year 1947 of \$459,363.58 from Federal funds, \$3,642,222.37 from State funds, and \$6,343,665.98 from Local funds.

Figure 3 shows the expenditures of Federal, State, and Local funds for vocational education from 1917 to 1948.

Federal funds expended under the Smith-Hughes and George-Deen (George Barden after August 1, 1946) Acts had to be matched by the States and territories, dollar for dollar, with State or Local funds or both. This was the first year that the States were required to match expenditures of Federal funds under the George-Deen Act for purposes other than teacher training. During fiscal year 1947 the States contributed \$12.95 for every dollar of Federal funds expended for vocational education as

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<sup>4</sup>Ibid., p. 5.

shown in Table III. Expenditures of State and Local funds per dollar of Federal funds by type of program were as follows: Agriculture, \$2.32; Distributive Occupations, \$1.53; Home Economics, \$3.64; Trade and Industry, \$3.85; and Teacher Training, \$1.47<sup>5</sup>.

The writer wishes to explain, at this point, that data taken from, Digests of Annual Reports of State Boards for Vocational Education, United States Office of Education 1947, are not to be considered a part of the findings of this study.

The tables and figures of this chapter are included to further emphasize the significance of the problem and importance of the study by showing the trends in enrollment and expenditures for all types of federally aided vocational education in all the states and territories of the United States.

The findings of this study in Chapter III are concerned only with the supervision of trade and industrial education in the states and territory of the Southern Region.

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<sup>5</sup>  
Ibid., pp. 36-39.

Millions, '90

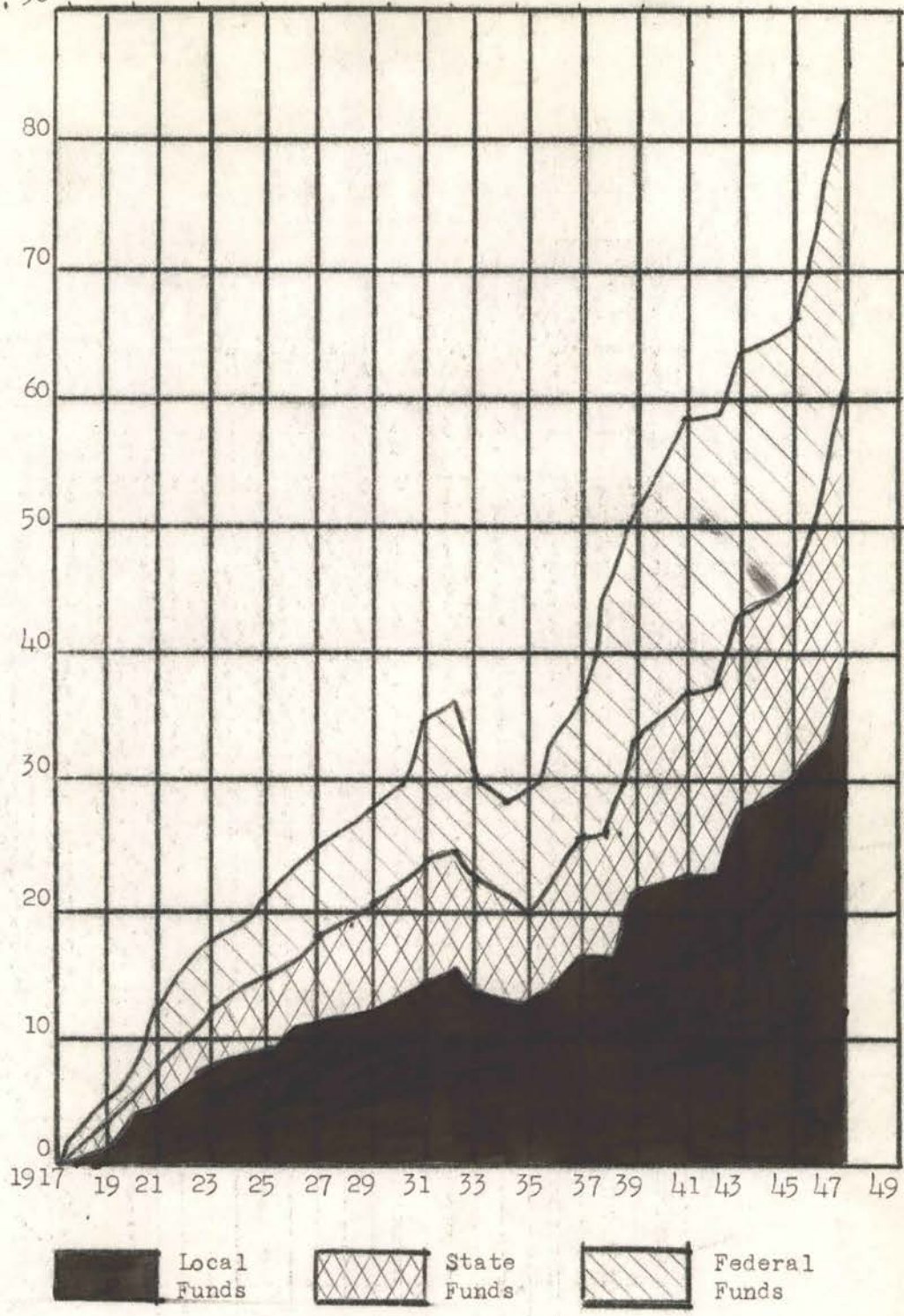


Figure 3. Expenditure of Federal, State and Local Funds for Vocational Education.



TABLE I

ENROLLMENT IN FEDERALLY AIDED VOCATIONAL  
CLASSES, BY TYPE OF PROGRAM, 1918-47

Year	Total	Type of Program			
		Agriculture	Distributive occupations	Home economics	Trade and industry
(1)	(2)	(3)	(4)	(5)	(6)
1947	2,508,618	584,533	235,141	968,846	720,098
1946	2,227,663	510,331	174,672	911,816	630,844
1945	2,012,931	446,953	152,781	890,464	522,733
1944	2,001,153	469,959	181,509	806,605	543,080
1943	2,281,743	491,967	297,534	873,771	618,471
1942	2,624,786	605,099	215,049	954,041	850,597
1941	2,429,054	596,033	156,615	871,891	804,515
1940	2,290,741	584,133	129,433	818,766	758,409
1939	2,083,757	538,586	88,429	741,503	715,239
1938	1,810,082	460,876	36,008	627,394	685,804
1937	1,344,728	386,302	-	377,436	580,990
1936	1,255,861	343,809	-	374,901	537,151
1935	1,178,896	325,685	-	349,346	503,865
1934	1,051,000	286,150	-	297,851	466,999
1933	1,034,110	264,131	-	280,079	489,900
1932	1,077,844	252,199	-	265,495	560,150
1931	1,047,676	235,153	-	220,248	592,275
1930	981,882	188,311	-	174,967	618,604
1929	886,849	168,444	-	154,890	563,515
1928	858,456	144,901	-	175,944	537,611
1927	784,986	124,937	-	164,420	495,629
1926	753,418	109,528	-	177,205	466,685
1925	676,687	93,125	-	154,491	429,071
1924	652,594	85,984	-	156,767	409,843
1923	536,528	71,298	-	139,341	325,889
1922	475,828	60,236	-	118,708	296,884
1921	324,247	43,352	-	63,395	217,500
1920	265,058	31,301	-	48,938	184,819
1919	194,895	19,933	-	39,414	135,548
1918	164,186	15,453	-	30,799	117,934

TABLE II

EXPENDITURE OF FEDERAL, STATE, AND LOCAL  
FUNDS FOR VOCATIONAL EDUCATION, 1938-47

Year	Total	Federal	State	Local
(1)	(2)	(3)	(4)	(5)
1947	\$83,252,082.84	\$21,087,435.84	\$22,180,073.71	\$39,984,573.29
1946	72,806,830.91	20,628,072.26	18,537,851.34	33,640,907.31
1945	65,641,640.50	20,004,573.38	15,347,766.10	30,289,301.02
1944	64,299,297.05	19,958,305.00	15,016,219.67	29,324,772.38
1943	63,488,251.13	20,306,645.17	14,210,234.57	28,971,371.39
1942	59,022,742.64	20,757,509.28	14,045,110.78	24,220,122.58
1941	57,705,117.32	20,546,607.13	12,920,546.01	24,237,964.18
1940	55,081,311.31	20,004,231.75	11,737,244.23	23,339,835.33
1939	52,668,491.11	19,434,553.96	10,947,861.93	22,286,075.22
1938	44,994,537.22	17,737,117.78	9,446,752.24	17,810,667.20

TABLE III

STATE AND LOCAL EXPENDITURES PER DOLLAR  
OF FEDERAL EXPENDITURES FOR VOCATIONAL EDUCATION, BY  
TYPE OF PROGRAM, 1938-47

Year	All programs	Agriculture	Distributive occupations	Home economics	Trade & industry	Teacher training
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1947	\$2.95	\$2.32	\$1.53	\$3.64	\$3.85	\$1.47
1946	2.53	1.99	1.31	3.23	3.16	1.34
1945	2.28	1.73	1.09	2.78	3.03	1.21
1944	2.22	1.78	0.97	2.57	2.96	1.18
1943	2.13	1.67	0.88	2.42	2.88	1.14
1942	1.84	1.66	0.75	2.03	2.27	1.13
1941	1.81	1.56	0.74	1.87	2.35	1.10
1940	1.75	1.53	0.71	1.73	2.28	1.13
1939	1.71	1.32	0.71	1.80	2.31	1.09
1938	1.54	1.23	1.88	1.49	2.00	1.09

TABLE IV

COMPARISON OF ENROLLMENT IN FEDERALLY AIDED  
VOCATIONAL TRADE AND INDUSTRIAL CLASSES, BY TYPE  
OF CLASS, FISCAL YEARS 1946 AND 1947

Type of Class	Enrollment			
	1947	1946	Increase or decrease	Percent of increase or decrease
(1)	(2)	(3)	(4)	(5)
All Types	720,098	630,844	+89,254	+14.1
Evening	116,781	94,503	+22,278	+23.6
Part-time trade extension	292,737	234,642	+58,095	+24.8
Part-time cooperative	23,721	23,036	+ 685	+ 3.0
Part-time general continuation	69,606	80,027	-10,421	-13.0
All-day	217,253	198,636	+18,617	+ 9.4

Enrollment in Trade and Industrial Classes. Table IV shows the comparative enrollment in federally aided vocational trade and industrial classes for the years 1946 and 1947. Evening classes increased from 94,503 to 116,781. Part-time trade extension classes increased from 234,642 to 292,737. Part-time cooperative classes increased from 23,036 to 23,721. Part-time general continuation classes decreased from 80,027 to 69,606, while All-day classes increased from 198,636 to 217,253<sup>6</sup>. Figure 4 shows the trend in enrollment in all type trade and industrial classes from 1917 to 1947.

<sup>6</sup>Ibid., pp. 36-39

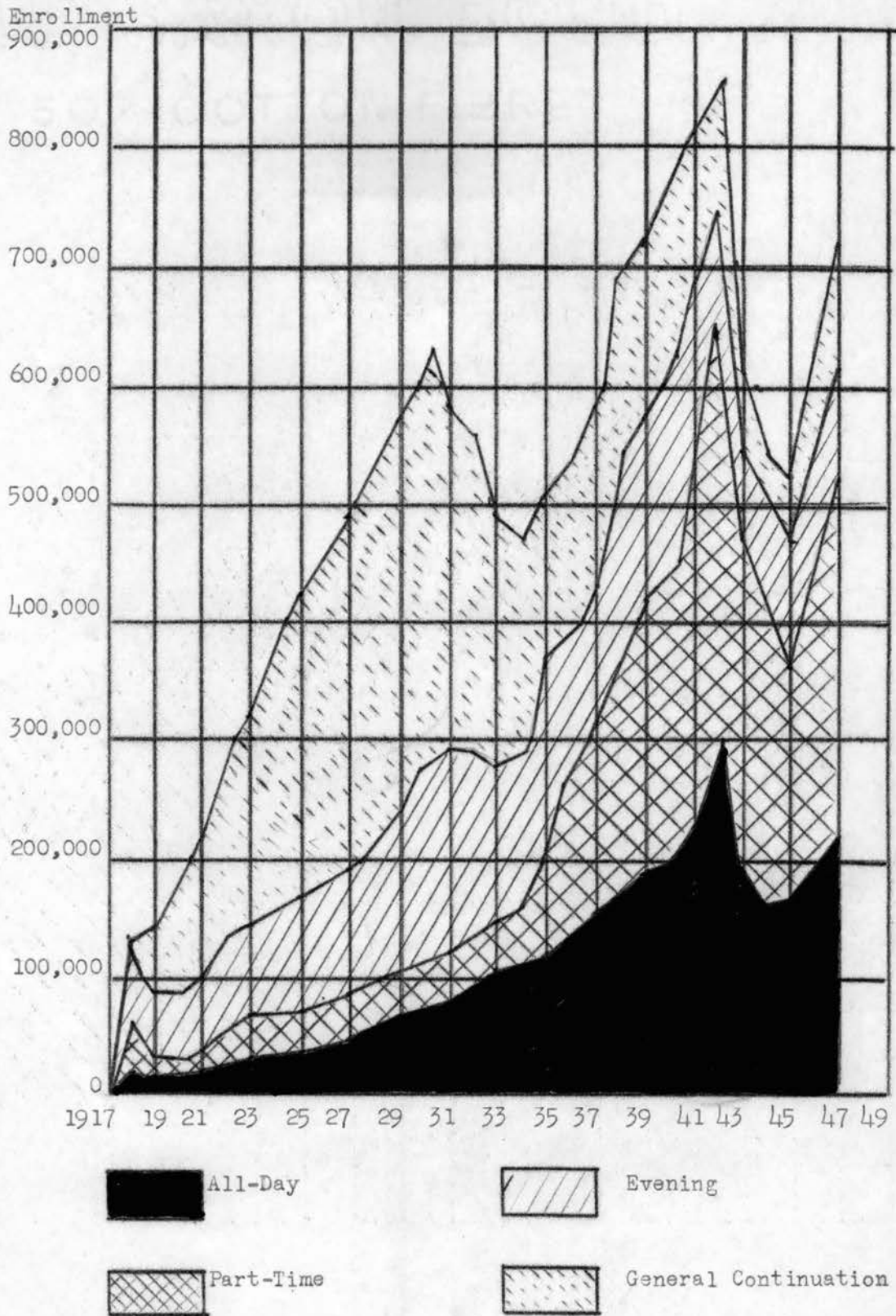


Figure 4. Enrollment in Trade and Industry Classes by Type of Class.

## DEFINITION AND CLARIFICATION OF TERMS

In order to better understand the limitation of the study and terminology used, the following terms are defined:

Supervision. All efforts of designated school officials directed toward providing leadership to teachers and other educational workers in the improvement of instruction involves the stimulation of professional growth and development of teachers, the selection and revision of educational objectives, materials of instruction, and methods of teaching, and the evaluation of instruction<sup>7</sup>.

Supervision of Schools, State. The overseeing of schools within the State by persons vested with authority by the State may involve qualification and certification of teachers, maintenance of adequate opportunities for all pupils, judicial powers, and various other responsibilities related to a State program of education<sup>8</sup>.

Supervision Duties. Supervision duties are promoting, certifying, inspecting, and instructing<sup>9</sup>. A portion of their instructional duties has to do with teacher training courses; a part of their promotional and inspectional duties concerns the appointment of qualified teachers.

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<sup>7</sup>Carter V. Good, Dictionary of Education, New York, McGraw-Hill Book Company, p. 400.

<sup>8</sup>Ibid., p. 401.

<sup>9</sup>Cecelia Ruth Earhart, Requirements for Vocational Teacher Training and Certification in Trades and Industries in the Various States and Territories, Pittsburg, Kansas, State Printer, p. 34.

Trade and Industrial Education. A phase of vocational education, of less than college grade, suitable to the needs of prospective and actual workers in the fields of manufacturing, industry, and trades<sup>10</sup>.

Vocational Industrial Education. Vocational industrial education is intended to mean that Federally aided trade and industrial training that will enable individuals to enter or progress in an industrial pursuit, skilled or semi-skilled trade, craft, or occupation which directly functions in the designing, producing, processing, assembling, maintaining, servicing, or repairing of any manufactured product<sup>11</sup>.

While manual training, industrial arts, laboratories of industry and manual arts are closely allied to trade and industrial education and are making a definite contribution in acquainting students with industrial products and processes, they are to be considered as non-vocational and a part of general education in this study.

Southern Region. For purposes of carrying out the provisions of the Vocational Arts in trade and industrial education, the United States was divided into four regions as follows<sup>12</sup>:

- Region No. 1 - North Atlantic, 13 states
- Region No. 2 - Southern, 12 states
- Region No. 3 - Central, 12 states
- Region No. 4 - Pacific, 11 states

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<sup>10</sup>Carter V. Good, op. cit., p. 427

<sup>11</sup>Federal Security Agency, Representative Advisory Committee for Trade and Industrial Education, Washington, D. C., Office of Education, April 1948, p. 7.

<sup>12</sup>Theodore Struck, Foundations of Industrial Education, New York, John Wiley and Sons, Inc., 1930, p. 150.

This study is limited to Region Number 2 and is referred to as the Southern Region. It consists of the following states; Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. With the passage of the George-Reed Act in 1929, extending the benefits of federal aid for vocational education to the territories, Puerto Rico, because of its proximity to Region Number 2, became a part of the Southern Region.

#### A PREVIEW OF THE REMAINDER OF THE THESIS

The remainder of Chapter One contains a brief review of previous investigations of other studies and their relation to the present study. It also defines the limitations of the study along with the source of data, investigational procedure and treatment of the findings.

Chapter Two presents the historical background of Federal Vocational Education Legislation, with policy interpretations essential for the complete understanding of the study. It briefly outlines each Federal Act and its provisions for aid to vocational education from 1861 to present.

Chapter Three contains an analysis of the comparative study of the plan used by different states in supervising trade and industrial classes. From this analysis a representative set of supervisory practices are listed as to the promotion, evaluations, improvements, and certification of personnel for trade and industrial classes.

Chapter Four briefly summarizes the material in the previous chapters. It also presents conclusions and recommendations that have been developed as a result of the study.



## RELATED STUDIES

With the exception of a few brief federal bulletins, all material located regarding supervision in the field of trades and industries have been very limited. Furthermore, there is little in the way of research or thesis studies in the field of vocational supervision that contains detailed analysis of responsibilities in supervising trade and industrial classes. Thus, while there is a regrettable limited amount of materials dealing with comparisons of methods and techniques of all phases of supervision, the related studies outlined below do throw some light on the present problem.

In 1939, Paine made a study of the state boards for vocational education in trades and industries in Wisconsin and Ohio<sup>13</sup>. This report is not particularly concerned with the supervision of vocational programs, but it did compare the different types of state certification and administration procedures, in order to disclose the advantages and disadvantages of the different systems and to develop from such a study suggestions for improvements in state administration and supervision of vocational education.

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<sup>13</sup>Harry W. Paine, A Study and Comparison of the State Boards for Vocational Education and the Programs of Vocational Education in the Field of Trades and Industries in Wisconsin and Ohio, Toledo, University of Toledo Press, 1939, p. 56.

DeForest made a study of the organization, administration, and sources of funds for vocational education in the states of Ohio and New York, but said little about supervision in these two states<sup>14</sup>.

Whitney reported, in a small federal bulletin, that he had written to 33 individuals who were responsible for supervision and teacher training. He summarized his replies from 26 individuals. Whitney concluded that<sup>15</sup>, "No teacher is so well trained that he does not need further training on the job. The growth of teachers in service involved a return to industry periodically in order to keep up to date".

The local supervisor, where one exists, is the most important individual in the continued growth of the local teaching staff. The state supervisor or teacher trainer is able to further the growth of the teachers in service in certain definite ways, but can neither take the place nor accept the responsibilities of the local supervisor in this respect.

Recognition, such as is involved in a degree, is becoming more and more important, although it should not be allowed to interfere with basic skill on the teaching job. Rather, it should be thought of as raising the status of a good well-prepared teacher to a higher power. Finally, as the vocational school becomes a more and more important

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<sup>14</sup>F. Ray DeForest, A Comparison of the New York and Ohio Systems of Vocational Education, Ames, Iowa State College Press, 1931, p. 24.

<sup>15</sup>G. D. Whitney, "Upgrading Vocational Teachers in Service", Vocational Teacher Training in the Industrial Field, pp. 1-8. Vocational Education Bulletin No. 172, Trades and Industrial Series No. 50, Washington, D. C., Government Printing Office, 1934, pp. 1-34.

part of the public school program, there will be a demand for objectives and measures of success; also, the teacher who merely teaches the skill and technique of a trade will be challenged to improve his practice to include training for citizenship and other broad educational objectives which are now coming to loom so large in the public eye.

Cecelia Ruth Earhart, in her study of vocational teacher training and certification, concluded that<sup>16</sup>, "Little has been done on a national scale in compiling and analyzing material dealing with the selection and certification procedures for many types of vocational personnel, including state and local supervisors and teachers of trade and industrial classes".

There exists great variations in the amount of trade experience, general and professional education, and other qualifications required for the vocational trade and industrial personnel of the different states.

Much apparently remains to be done in standardizing the certification requirements of supervision in the trade and industrial field.

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<sup>16</sup>Cecelia Ruth Earhart, Requirements for Vocational Teacher Training Certification in Trades and Industries in the Various States and Territories, Topeka, The Kansas State Teachers College Bulletin, 1946, p. 130.

### LIMITATIONS OF THE STUDY

This study has been limited to supervisory practices in trades and industries, as fostered by the Smith-Hughes, George-Deen and George-Barden Acts. Because of their similarities in location, natural resources and industrial growth, only the states and territory of the southern region are included in the study. It does not deal with supervision in agriculture, homemaking or distributive education except as they may overlap in practices.

### SOURCE OF DATA

The data for this study were secured from many sources. The historical material was gathered from reference and text books on Federal educational legislature acts that have furnished federal aid to educational activities throughout the nation.

It was necessary to review the Trade and Industrial section of State Plans for Vocational Education to secure information on certification requirements and type classes offered.

Federal and state bulletins on supervision and various printed statements of policies were consulted. Bulletins from the United States Office of Education and from several libraries were examined for thesis or dissertations bearing on administration and supervision of trades and industries.

Texts on the history and philosophy of vocational education were reviewed, as well as texts and federal bulletins on the organization and administration of vocational education.

Correspondence, interviews, and conferences with many state supervisors and teacher-trainers, as well as vocational teachers, local directors, coordinators, and vocational school principals contributed much valuable information that has amplified the data found in the state plans and bulletins. In addition, materials and information pertinent to the study were obtained from current magazine articles and federal reports.

#### INVESTIGATIONAL PROCEDURE

Approach. After the problem was selected and outlined, a list of state supervisors of trade and industrial education of all the states and territory of the southern region was secured from the Texas office of the Trade and Industrial Division of the State Board for Vocational Education in Austin, Texas. Letters were written to each state supervisor requesting the trade and industrial section of their State Plan. Copies of their promotional publicity such as, pamphlets, folders, leaflets, bulletins, brochures, and other printed materials that explained the organization and operation of classes were requested. A questionnaire was sent to each state supervisor requesting information as to the number of individuals assigned to supervising duties on the state level, the number of districts and supervisor headquarters in each state, and the plan of assigning supervisors, as to the occupations, type of classes, or districts they supervise. Information was also requested on teacher training duties, plan of promotion, certification requirements and inspectional procedures in each state. Provisions were

made for the reporting of the advantages and disadvantages of the supervisory plan used by each state.

Documents relating to the various federal and state laws and policies were consulted. Federal and state bulletins were secured, examined, and compared for similarities or differences in supervisory practices and requirements. Pertinent texts were studied. Course outlines, printed forms, and instructional materials were secured from several states and many personal contacts were made with state supervisors and teacher trainers to secure information for this study.

Treatment of the Findings. As the state plans were received, they were indexed and listed in a separate section in the bibliography entitled "State Plans". They were examined carefully for similarities and differences in the section on supervision for certification procedures of the trade and industrial division, and tables were formulated according to the findings.

As the federal and state bulletins were collected and examined, they also were listed in the bibliography under the captions "Federal Bulletins" and "State Bulletins", respectively. These materials were carefully reviewed and the pertinent information analyzed.

Visitation check sheets were also summarized as to the items they evaluated and the use that was made of the information that was secured from the evaluation.

Number of Cases Studied. The number of cases studied were the twelve states of the Southern Region; Alabama, Arkansas, Florida,

Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and the territory of Puerto Rico.

Returns and Follow-Up. The first letter resulted in thirteen replies from thirteen inquiries, or 100 per cent returns on the questionnaire. Eight trade and industrial sections of State Plans were received. Ten state supervisors sent visitation check sheets and publicity. The information from the questionnaire was tabulated as it was received.

It was necessary to write a second letter to four states to secure certification requirements. All responded but did not furnish parts of their State Plan because it was either being re-written or re-printed at present.

## SUMMARY

This chapter has set forth the significance of the problem, need, and purpose of the study along with trends in enrollment and expenditures for vocational education.

Terms were defined and clarified in an effort to assist the reader in better understanding the study. The remainder of the thesis was previewed.

Previous studies were reviewed and little was found on the plans of supervising trade and industrial classes at the state level.

A pronounced interest was manifested in the study by a 100 per cent return on questionnaires. Eight of the thirteen states submitted trade and industrial sections of their State Plan as a result of the first letter. The remaining five expressed a willingness to answer questions and did furnish information on certification requirements upon second contact. Ten of the thirteen states furnished visitation check sheets and publicity.

Therefore, it is hoped that the present study will serve as a helpful contribution and basic reference for persons desiring information concerning the practices followed by various states in supervising trade and industrial education.



## CHAPTER II

### FEDERAL VOCATIONAL LEGISLATION AND POLICY INTERPRETATIONS ESSENTIAL FOR THE STUDY

In order to understand the vocational trade and industrial program and its supervision, it is necessary to understand the historical legislative background that made possible the establishment of vocational education on a nation-wide basis. This chapter presents a brief history of the legislation and interpretation of policies as to the types of trade and industrial training that may be offered as a result of these acts.

#### FEDERAL EDUCATIONAL LEGISLATION PRECEDING THE SMITH-HUGHES ACT

The First Morrill Act. On July 2, 1862, Congress passed the famous Morrill Act<sup>1</sup> to encourage education in agriculture and mechanic arts in the United States. It provided for the donation of public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts. This law provided grants to each state of 30,000 acres of land for each senator and representative in Congress.

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<sup>1</sup>F. Theodore Struck, Foundations of Industrial Education, New York, John Wiley and Sons, Inc., 1930, p. 131.

As we see how these colleges were conceived, endowed, and organized, we can understand how the federal congress was trying to help meet the various educational needs of the people in the different states. This type of legislation undoubtedly paved the way for the vocational education acts that followed.

The Hatch Act. This act was passed in 1887<sup>2</sup>. It appropriated \$15,000.00 annually to each state for the establishment and operation of agriculture experiment stations in connection with land-grant colleges and to provide funds for acquiring and diffusing practical information to the people on subjects connected with agriculture and scientific investigations.

The Second Morrill Act. The second land grant act was passed on August 30, 1890<sup>3</sup>. It provided additional funds for these colleges for resident instruction in agriculture, English, mathematics, and physical, natural, and economic sciences. Special reference was made to the application of these subjects in industries of life, and to the subjects thought of as applied science, applied English, and applied mathematics.

The Adams Act. In accordance with the provisions of this act the original \$15,000.00 to each state provided by the Hatch Act was increased to \$30,000.00<sup>4</sup>.

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<sup>2</sup>Ibid., p. 131.

<sup>3</sup>Ibid., p. 131.

<sup>4</sup>Ibid., p. 132.

The Agricultural Extension Act. This act passed in 1914 is commonly known as the Smith-Lever Act<sup>5</sup>. It provided cooperative extension in agriculture and home economics for the farm and home through practical demonstrations, field work, and publications. It defines the latter as follows in Section 2:

"That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and importing to such persons information on said subjects through field demonstrations, publications, and otherwise."

A detailed report was to be made to Congress by the Secretary of Agriculture, showing that the legislature, of the states benefited, had matched funds allocated to each state, and that these funds had been spent according to specifications in the Smith-Lever Act.

It can be seen that all the preceding acts were loosely drawn and were related to education on the college level. The Smith-Lever Act was much more specific with respect to expenditures and reports than previous legislation. It brought the college to the home and farm rather than requiring the home and farm students to study their problems in colleges. It was the recognition of the fact that one can learn to do by doing, by applying one's instruction, knowledge, and skills to practical life situations. Furthermore, it clearly established the right of Congress to maintain a continuous check on the way its educational appropriations were being handled. It was an example of the changing trend in attitude toward public responsibility for vocational education of less than college grade.

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<sup>5</sup>Ibid., p. 132.

## THE SMITH-HUGHES ACT

The Smith-Lever Act, since it was much more specific as to expenditures and reports than any of the previous acts, undoubtedly formed the pattern and affected the plans and policies of administration for vocational education as established by the passage of the Smith-Hughes Act.

On February 13, 1917, Congress passed the National Vocational Education Act, better known as the Smith-Hughes Act<sup>6-7</sup>, which is one of the basic laws in the background of the present study. This act provided for the promotion of vocational education in cooperation with the states and territories in agriculture, trade and industries, and home economics; it also provided for the cooperation of the states and territories in the preparation of teachers of vocational subjects and for the appropriation of money to regulate the expenditures of the program. The expenditures included; funds for the payment of salaries of teachers, supervisors, and directors of vocational education in the fields of agriculture, home economics, and trades and industries, as well as funds for teacher training programs in these fields.

Since the present investigation is limited to the field of trades and industries, the areas of agriculture, home economics, and distributive education will not be touched upon, except as it is necessary to show similarities or to make comparisons.

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<sup>6</sup>Ibid., pp. 135-136

<sup>7</sup>See also, Prosser and Allen, Vocational Education In A Democracy, Chapter XVI, for an excellent presentation of the subject.

## UNDERLYING PRINCIPLES OF THE NATIONAL VOCATIONAL ACTS

Students of educational legislation will be particularly interested in the progress made in the provisions of the Smith-Hughes Act over those incorporated in the federal grants made between 1862 and up to 1917. The National Vocational Act has shown the advantages of principles such as the following contained in it<sup>8</sup>:

"Federal Partnership - The act does not take away rights or privileges from any state. It does not seek to usurp state authority, nor to control the states. What it does seek to do is to set up a mutually satisfactory and mutually necessary and helpful arrangement.

"Respects State's Rights - The provisions of the act are not obligatory upon any state. Every state had the right to accept or reject the proposition; every state has a right to accept the provisions for specified types of vocational education, at the same time it does not need to meet the requirements of other types. For example, one state will include provisions for the general industrial school in its state plan whereas another will not do so, preferring to use its federal aid upon other types of industrial education.

"The State Provides the Plan - It is not a case of the federal government drawing up a plan or program for every state to follow. Each state draws up its own state plan. Fortunately, the federal act has set forth a number of minimum standards that must be met if the state desires federal subsidy under the act. But probably no two state plans are exactly alike and there is often great difference in them. This is exactly as it should be. Such an arrangement permits flexibility, encourages initiative and stimulated growth.

"Proper Expenditures Safeguarded - Under the act, for the first time in the history of federal educational grants, there were set up fairly adequate conditions safeguarding the proper expenditures of the money for the purposes for which it was appropriated.

"Efficiency Safeguarded - The provisions of the act are such that a reasonable, minimum efficiency is safeguarded. Thus, there are certain minimum standards for teachers, courses of study, length of the school day, and of the school term all of which affect the efficiency of the program.

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<sup>8</sup>Theodore Struck, op. cit., p. 135.

"Federal Money Matched - By requiring that the federal dollar be matched by state or local funds at least equal in amount there has been incorporated into the act a fundamental principle. State or local effort must be put forth to equal federal effort -- a principle now well recognized in public as well as in private grants in aid.

"Reimbursement - Payments to the states are made in the form of reimbursement for funds already lawfully spent, rather than being made for expenditures that are not yet contracted."

#### LEGAL REQUIREMENTS OF THE ACT

These are so well set forth in the First Annual Report of the Federal Board (1918) that they are summarized here in substantially the same language<sup>9</sup>:

- I. As to the expenditure of appropriations. They must
  1. Be devoted exclusively to the maintenance of teacher training, and to the payment of salaries of teachers, supervisors or directors of agricultural subjects, and of teachers of trade, home economics and industrial subjects, having the minimum qualifications set up by the State Board with approval of Federal Board.
  2. Be met by equal appropriation from State or local community or both.
  3. Be withheld whenever it shall be determined that such moneys are not being expended for the purposes and under the conditions of the Act.
  4. Not be applied directly or indirectly to the purchase, erection, preservation or repair of any building or buildings or equipment or for the purchase or rental of lands or for the support of any religious or privately owned or conducted school or college.

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<sup>9</sup>Charles A. Prosser and Charles R. Allen, Vocational Education in a Democracy, New York, The Century Co., pp. 429-430-431, Citing First Annual Report of Federal Board, 1918.

II. Upon the State - In order to receive federal moneys for vocational education, the State must first

1. Accept through its legislature the provisions of the Act.
2. Designate or create, through the legislature, a State board consisting of not less than three members having necessary power to cooperate with the Federal board in the administration of the Act.
3. Appoint, through legislative authority, as custodian for appropriations allotted its State treasurer who shall receive and provide for the proper custody and disbursements of all money paid to the State from Federal appropriations.

III. Upon the State Board - The State Board shall as a general prerequisite

1. Prepare plans showing: a. The kinds of vocational education for which it is prepared that the appropriation shall be used; b. the kinds of schools and equipment; c. the courses of study and the methods of instruction; and d. the qualifications of teachers.
2. Submit such plans to the Federal board for approval.
3. Make an annual report to the Federal board on or before September 1 of each year on the work.

IV. As to the trade, home economics, and industrial subjects - In order to secure the benefit of the fund for these subjects, the State board must include in its general plan these standards and requirements.

1. Education will be given in schools or classes under public supervision or control.
2. The controlling purpose of the education shall be to fit for useful employment.
3. The education shall be of less than college grade.
4. The education shall be designed to meet the needs of persons over 14 years of age who are preparing for a trade and industrial pursuit or who have entered upon the work of a trade or industrial pursuit.

5. The State or local community, or both, shall provide the necessary plant and equipment determined upon by the State Board, with the approval of the Federal board as the minimum requirement in such State for education for any given trade or industrial pursuit.
  6. The total amount expended for the maintenance of such education in any school or class receiving the benefit of such appropriation shall be not less annually than the amount fixed by the State board, with the approval of the Federal board, as the minimum for such schools or classes in the State.
  7. Schools or classes giving instruction to persons who have not entered upon employment shall require that at least one-half of the time of such instruction be given to practical work on a useful or productive basis, such instruction to extend over not less than nine months per year and not less than 30 hours per week.
  8. At least one-third of the sum appropriated to any State for salaries shall be applied to part time schools or classes for
  9. Part time schools or classes shall provide for not less than  $1\frac{1}{4}$  hours of class room instruction per year.
  10. Evening industrial schools shall fix the age of 16 years as a minimum entrance requirement and shall confine instruction to that which is supplemental to the daily employment.
  11. The teachers of any trade or industrial subject in any State shall have at least the minimum qualifications for teachers of such subject determined upon for such State by the State Board, with the approval of the Federal board.
  12. Cities and towns of less than 25,000 population, the state board, with approval of the Federal board, may modify conditions as to length of course and hours of instruction per week for schools and classes giving instruction to those who have not entered upon employment, in order to meet the particular needs of such cities and towns.
- V. As to teacher training - In order to secure the benefits of the fund for the training of teachers, the State board shall include in its general plan these standards and requirements.



1. Training shall be carried on under the supervision of the State board.
2. Training will be given in schools or classes under public supervision or control.
3. Training will be given only to persons who have had adequate vocational experience or contract in the line of work for which they are preparing themselves as teachers, supervisors, or directors, or who are acquiring such experience or contact as a part of their training.
4. The State board, with the approval of the Federal board, shall establish minimum requirements for such experience or contact for teachers, supervisors, or directors of agricultural subjects and for teachers of trade, industrial and home economics subjects.

Grants In Perpetuity. The National Vocational Act of 1917, the Smith-Lever Act of 1914, and other earlier Acts are grants in perpetuity<sup>10</sup>. That is, they are endless, continuing on year after year, unless they should be revoked in a legal manner. Members of the 1929 legislative committee of the American Vocational Association found in Congress a changed point of view concerning this feature of grants. There is reluctance to make grants in perpetuity. Instead, it is considered better practice to make definite allotments for shorter time, such as five years, and then to base future grants upon conditions as they will then exist.

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<sup>10</sup>Theodore Struck, op. cit., p. 135.

FEDERAL EDUCATION LEGISLATION BETWEEN THE  
SMITH-HUGHES ACT AND THE GEORGE-BARDEN ACT

No doubt the Smith-Hughes Act was prompted by World War I, partly because of tests that emphasized illiteracy in the United States and showed the need for training of individuals in the methods of earning a living, and partly, as in World War II (1941-45), because of the immediate need for skilled workmen who could be prepared by education of less than college grade.

During both these periods great impetus has been given to the vocational education movement. If it had not been for the wise promotion of vocational education in peace time, it is almost certain that our country would not have been so well prepared to take over the tremendous task with which they were faced when the United States entered World War II.

The Smith-Sears Act. After the Smith-Hughes Act had been in effect almost a year and a half, the Smith-Sears Act<sup>11</sup> was passed by Congress on June 27, 1918. This act was designed to provide for vocational rehabilitation and return to civil employment of disabled persons discharged from military or naval forces of the United States.

The Smith-Bankhead Act. With the passage of the Smith-Sears Act to care for persons disabled in military service, preliminary plans

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<sup>11</sup>Cecelia Ruth Earhart, Requirements for Vocational Teacher Training and Certification in Trades and Industries in the Various States and Territories, Topeka, Fred Vailand, Jr., p. 26., citing Statutes of the United States, Vol. 40, pp. 617-620.

were established for the care of disabled persons in general, and Congress passed the Smith-Bankhead Act<sup>12</sup> on June 2, 1920, to promote the vocational rehabilitation of persons disabled in industry or otherwise, and to facilitate their return to civil employment.

The George-Reed Act. The first of the acts to supplement the basic Smith-Hughes Act on a national basis was the George-Reed Act<sup>13</sup>, passed by Congress on February 5, 1929. It authorized, on an increasing scale for a period of four years, appropriations for agriculture and home economics education, in addition to the appropriations already established by the Smith-Hughes Law and extended the benefits of federal aid for vocational education to the territories. This appropriation was primarily for salaries of teachers, supervisors, and directors, and for the development of home economics subjects. It had nothing to do with teacher-training or other activities in the field of trades and industries.

The George-Ellzey Act. This act was passed by Congress on May 21, 1934<sup>14</sup>. It passed shortly before the expiration of the George-Reed Act. In addition to replacing the George-Reed Act it supplemented the Smith-Hughes Act and provided increased aid to trade and industrial education. It was not until the passage of the George-Deen Act in 1936 that increased

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<sup>12</sup>Ibid., p. 26.

<sup>13</sup>Ibid., p. 27.

<sup>14</sup>Ibid., p. 27.

appropriations for all activities under the Smith-Hughes Act, and some additional ones, were authorized on a permanent basis.

The George-Deen Act. The permanent expansion of activities and funds for the major act in the background of this study was finally established under the George-Deen Act<sup>15</sup>, passed by Congress on June 8, 1936, to become effective July 1, 1937. The law authorized, on a permanent basis, increased appropriations to the states and territories for vocational education in the fields already aided and in addition authorized appropriations for use in the field of distributive occupations. It was also specified in this act that the District of Columbia should be included within the meaning of the term "States and Territories", to receive the benefits of the provisions for vocational education.

The George-Barden Act. The last of the vocational acts to date was the George-Barden Act<sup>16</sup>, passed by Congress August 1, 1946. It amended and superceded the George-Deen Act. The moneys expended under the provisions of the George-Barden Act must be matched on the same basis as under the Smith-Hughes Act<sup>17</sup>. Possible amounts of Federal funds available to the several States for vocational education are:

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<sup>15</sup>Ibid., p. 28.

<sup>16</sup>Federal Security Agency, Representative Advisory Committee for Trade and Industrial Education, p. 6., Misc. 3280, Washington, D.C., Office of Education, April 1, 1947.

<sup>17</sup>Ibid., p. 6.

## 1. Under provisions of Smith-Hughes Act.

Agriculture.....	\$3,000,000
Trade and Industries and Home Economics...	3,000,000
Teacher Training.....	1,000,000
	<u>7,000,000</u>

## 2. Under provisions of the George-Barden Act.

Agriculture .....	\$10,000,000
Home Economics .....	8,000,000
Trades and Industries.....	8,000,000
Distributive Occupations.....	2,500,000
	<u>28,500,000</u>
	<u>35,500,000</u>

Figure 5 on the following page shows the comparison of appropriations of the Smith-Hughes and George-Barden Acts. The increase to Agriculture was 333%, Trade and Industries 533%, and Home Economics 533%. The total increase to all vocational education was 417%.

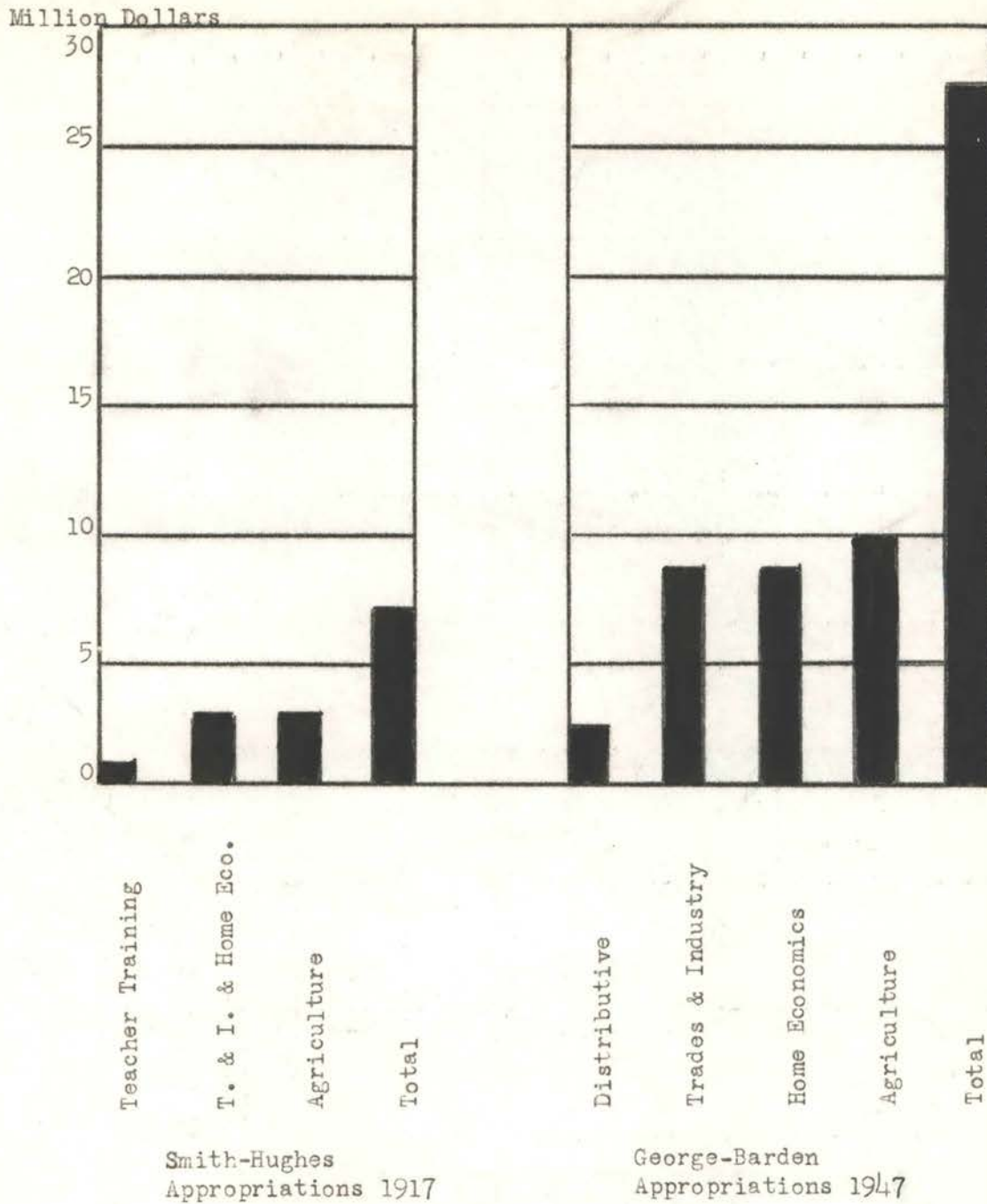


Figure 5. Comparison of Appropriations of the Smith-Hughes and George-Barden Acts.

## POLICY INTERPRETATIONS

Trade and Industrial Education Service. The major objectives of trade and industrial education are: (1) To provide instruction of an extension or supplemental type for the further development of skills, technical knowledge, related information, and safety practices for persons already employed in trade and industrial pursuits, and (2) To provide instruction of a preparatory type including basic manipulative skills, technical information, safety practices, and related information to fit persons for useful employment in trades and industrial pursuits. These objectives are attained through various types of classes designed to serve the training needs of individual workers engaged in occupations which are classified as trade and industrial pursuits.

Trade and Industrial Pursuits. Training programs may be organized to provide instruction for<sup>18</sup> any industrial pursuit -- skilled or semi-skilled trade, craft, or occupation which directly functions in the designing, production, processing, assembling, maintaining, servicing, or repairing of any manufactured product. It may be organized for any public or other service trades or occupations which are not classified as agriculture, business, professional, or homemaking. It may be organized for training in domestic or personal service for needs in homes or other establishments. It may also be organized for other occupations which are usually considered as technical and in which workers such as

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<sup>18</sup>Ibid., p. 18.

nurses, laboratory assistants, draftsmen, and technicians are employed.

Groups Served. Instruction is provided for four general groups<sup>19</sup>. It may be provided for journeymen and other industrial workers who need further instruction to extend their skills or knowledge of technical related subjects. It may be offered to apprentices or others who need training and work experience coordinated by public school authorities to fit them for useful employment. It may also be given to in-school youth and adults who select an occupation and who need training for entrance into a trade or industrial pursuit.

#### TYPES OF PROGRAMS, SCHOOLS, AND CLASSES

The Evening Trade Extension Schools or Classes. The evening trade extension school or classes may be established and maintained in any community for the purpose of giving instruction of less than college grade in a particular trade to persons over 16 years of age who have entered upon employment, and may be given at any time when the group may meet, depending upon their hours of work.

The Part-time Trade Extension Schools or Classes. The part-time trade extension school or classes may be established and maintained in any community for the purpose of giving instruction of less than college grade to persons from 14 to 18 years of age who have entered upon the work of a trade or industrial pursuit. This instruction is to

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<sup>19</sup>Ibid., pp. 7-8.



give further preparation to persons for useful employment in the trade or industrial pursuit in which they are employed, and must be given for not less than 11¼ clock hours per year. This instruction may be the same as that offered in the evening class, except that it is given during the hours of work and is considered a part-time instruction.

The Part-time Trade Preparatory Schools or Classes. The part-time trade preparatory schools or classes may be established and maintained in any community for the purpose of giving instruction of less than college grade to persons 14 to 18 years of age who have entered upon employment. The instruction is designed to fit such persons for useful employment in a trade or industrial pursuit other than the one in which they are employed. These classes must also be given for not less than 11¼ clock hours per year.<sup>20</sup> This plan is different from the part-time trade extension, in that it prepares a person for a different job and serves as an entering wedge to be followed later by part-time trade extension work.

The Part-time General Continuation Schools or Classes. The part-time general continuation schools or classes may be established and maintained in any community for persons 14 to 18 years of age who have entered employment and wish to take subjects to enlarge their civic or vocational intelligence. These classes must be given for not less than 11¼ clock hours per year. This type of school is intended to meet the needs of employed minors who do not belong in the trade extension or trade preparatory type of school and yet must comply with the com-

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<sup>20</sup>

Ibid., pp. 9.

pulsory attendance law. The principal objectives are:

1. Employment adjustment.
2. Vocational and educational guidance.
3. Social adjustment.

Special classes may include office and store workers. These classes may be part-time trade extension or part-time trade preparatory for some of these persons.

The Day Trade and Industrial Schools or Classes, Type A. The day trade and industrial school or classes, Type A, may be established and maintained in any community for the purpose of fitting persons over 14 years of age for useful employment in a particular trade or industrial pursuit.<sup>21</sup> This school must:

1. Extend over a period of not less than nine months (36 weeks per school year).
2. Give not less than half of the time to practical work on a useful or productive basis.
3. Operate not less than 30 clock hours per week.

Those who are over 14 years of age, and not yet employed, may attend an all day school for the purpose of preparing for entrance into a trade, when the instruction in both shop and related class work is based solidly upon the needs of that particular trade.

The Day Trade and Industrial Schools or Classes, Type B. The general industrial school or classes, Type B, may be established and maintained in any city or town of less than 25,000 population, for persons over 14 years of age, for the purpose of fitting them for useful employment in trade and industry. The school must give not less

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<sup>21</sup>

Ibid., pp. 9.

than half the time to practical work on a useful or productive basis. It is designed to meet the needs of particular cities or towns as an alternative to the establishment of a unit trade school. These classes receive shop and related technical instruction as nearly like that of the day trade school, Type A, as is possible under the conditions. However, many states do not recognize this type of school in their state plans.

#### ADMINISTRATIVE

Relationship Between The United States Office of Education, State Board for Vocational Education, and Local Board of Education. All official dealings relative to vocational education must be between the Office of Education and the State Boards for Vocational Education. Each state is responsible for the use of the federal funds apportioned to it. In carrying out the legal responsibility imposed on it by the basic provisions of the Federal Acts to "ascertain whether the several states are using, or are prepared to use, the money received by them in accordance with the provisions of this Act", the Office of Education deals with State Boards through its authorized representative only, and not with individual schools or institutions.<sup>22</sup>

All arrangements and agreements of any kind, relating to the operation of federally-aided programs of vocational education or the use of Federal vocational education funds between the Office of Education and the State Board or its agent, must be mutual understanding and a record available for reference. The Office of Education reserves the

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<sup>22</sup>

Ibid., pp. 12.

right to visit from time to time schools and classes in which Federal vocational education funds or matched funds are used. All visits to schools and classes are made under the arrangement with representatives of the State Board.

The State Board for Vocational Education deals with Local Boards of Education in the same manner through their authorized representatives. The State Board enters into a written contractual agreement with Local boards as to the use of Federal or State matched funds. The State Board reserves the right to visit from time to time any schools and classes in which Federal vocational education or matching State or Local funds are used. All visits are made under arrangements with representatives of the Local Board of Education, usually the superintendent of schools, principal of a school, or local director or supervisor of vocational education.

#### OPERATIONAL

Office of Education. The Office of Education, Division of Vocational Education, does not have any operational functions in connection with the establishment and conduct of schools and classes. It does, however, maintain a staff of specialists and consultants in each of the several fields of vocational education for the purpose of assisting -- through any by request of State Boards -- in further developing and improving programs.<sup>23</sup>

State Boards for Vocational Education. The State Boards for vocational education maintain a staff of specialists in each of the

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<sup>23</sup>

Ibid., pp. 18.

several vocational education fields who under the direction of the board carry out administrative, supervisory, and operational functions pertinent to the State-wide program. In cooperation with the local communities, they make studies and plan for the further development and improvement of the program.

Local Boards of Education. Local boards of education have the responsibility of operating schools and classes in vocational education. The planning, establishing, administering, and supervising programs are operational functions of the board of education in the local community.

The Federal Vocational Education Acts require that all schools and classes receiving the benefits of the appropriations be under public supervision or control.<sup>24</sup>

#### ADVISORY

Office of Education. The Division of Vocational Education receives counsel and advice from representative advisory committees concerning the over-all national program of vocational education.

State Boards for Vocational Education and Local Boards of Education. State boards for vocational education have representative advisory committees which provide advice and counsel regarding the over-all State program. In the local communities, advisory committees are maintained to advise and assist in developing, planning, and establishing schools and classes to meet the vocational training needs.

Figure 6 shows the Organization Chart for Vocational Education.

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<sup>24</sup>

Ibid., pp. 18.

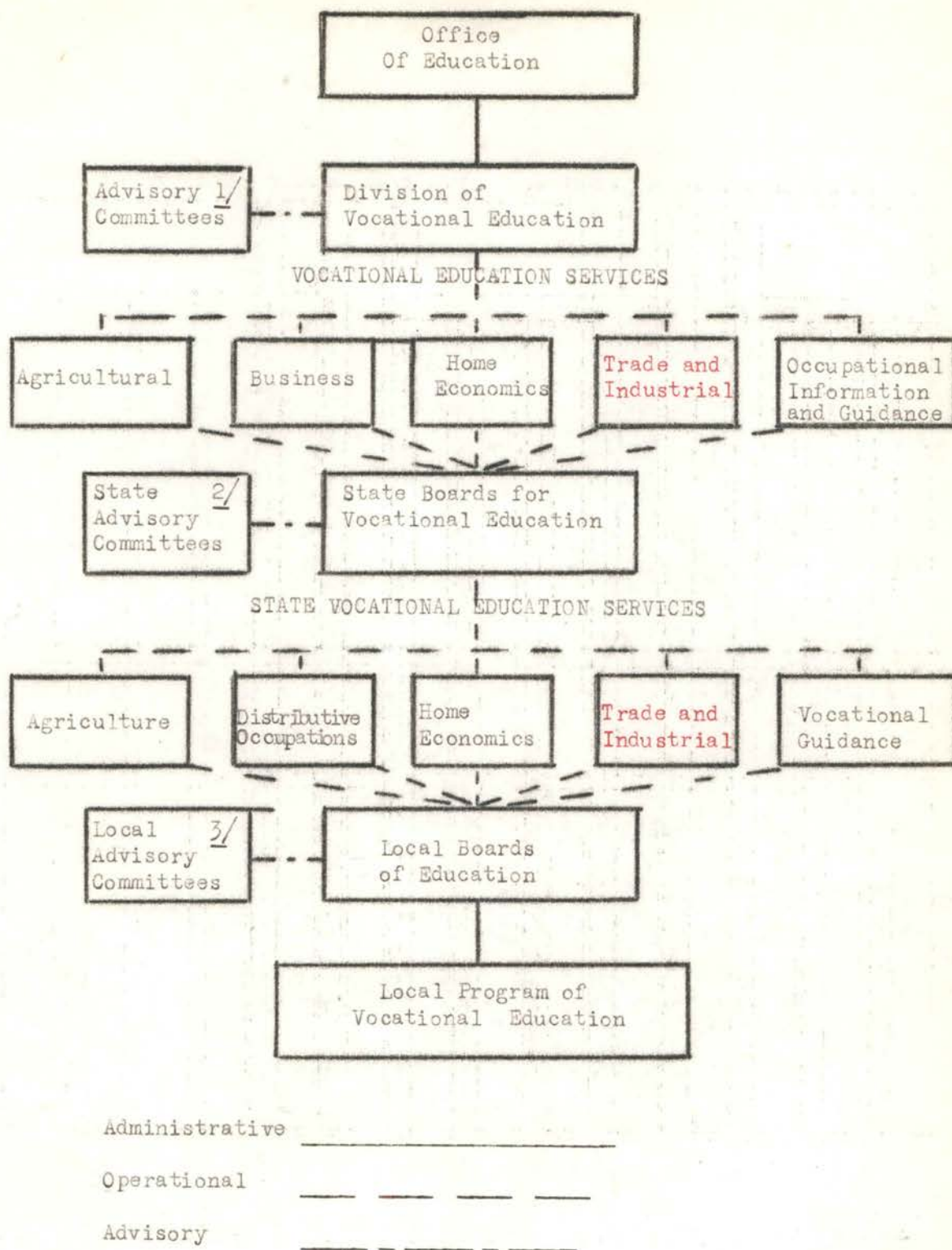


Figure 6. Organization Chart For Vocational Education

## SUMMARY

This chapter has reviewed the historical background of federal legislation for aid to vocational education, with brief summaries of each congressional act that preceded and followed the Smith-Hughes Act of 1917.

The philosophy of vocational education was stated as instruction of less than college grade for persons over 14 years of age, to fit for useful employment, to increase skills and related knowledge of employed workers, and to increase the vocational and civic intelligence of young workers.

The type of schools and classes that are provided for in these acts are: Evening Classes, Part-time Classes, and All-Day Trade Classes.

The material presented is intended to assist the reader to understand the analysis and comparisons of supervisory practices in the following chapter.

For three quarters of a century the people of the United States definitely have been vocationally minded, but only during the last quarter of a century, including the period between the First World War (1917) and the Second World War (1941), has the real significance of vocational education been demonstrated.

## CHAPTER III

### COMPARATIVE ANALYSIS OF STATE STAFFS, PROMOTIONAL PUBLICITY, CERTIFICATION REQUIREMENTS, TEACHER TRAINING RESPONSIBILITIES, AND EVALUATION PROCEDURES IN STATE SUPERVISION OF TRADE AND INDUSTRIAL EDUCATION

In this chapter, analyses are made of state staffs as to the number of supervisors and supervisory responsibilities in each state.

Comparisons are made of the various type of publicity used in promoting and expanding programs and classes.

State plans are analyzed to disclose the qualifications of supervisors and teachers of the six types of vocational trade and industrial classes described in the preceding chapter.

Inspection check sheets are compared to determine the evaluation procedure used in each state.

Standardized Form of Analysis Charts. After preliminary analyses had been made of state staffs, publicity, personnel qualifications, and evaluation check sheets, an attempt was made to devise a standardized form. This standardized form made it possible to present a direct comparison of the findings and to draw logical conclusions.

A complete explanation of the use of this form precedes each table that is presented in the remainder of this chapter.



## STATE STAFFS

For state staffs, data were collected under the following headings:

1. Total number of supervisors on state level.
2. Total number of supervisory districts.
3. Total number of supervisory headquarters.
4. Number of supervisors of womens training.
5. Number of combination supervisor - teacher trainers.
6. Approximate percentage of time given to teacher training by combination personnel.
7. Number of supervisors assigned according to districts.
8. Number of supervisors assigned according to type of classes supervised.
9. Number of supervisors assigned according to trades supervised.
10. Number of supervisors of training for negro and other minority groups.
11. Number of full-time teacher trainers.
12. Number of teacher training institutions.

The above headings proved very satisfactory for listing data on supervisory personnel and responsibilities, however, different headings were required for analyzing publicity, certification requirements and evaluation checking procedures.

The following is a summary of Table V.

Size of State Staffs. The size of state staffs varied from ten in Alabama to two each in Arkansas and Louisiana. The average or central tendency<sup>1</sup>, is indicated by an asterisk. The average size state staff for states of the Southern Region is five.

A summary of supervisory staffs by numbers of states follows:

<u>Number of States</u>	<u>Number of Supervisors</u>
2	2
3	3
1	4
3	5*
1	7
2	9
1	10

Supervisory Districts. Most of the states are one district states, however, five states reported more than one district. A summary of supervisory districts by members of states follows:

<u>Number of States</u>	<u>Number of Districts</u>
8	1*
1	3
2	4
2	5

Supervisory Headquarters. The number of supervisory headquarters in each state ranged from one to eight. One state reported supervisors working out of eight different centers while five states reported supervisors working out of only one center.

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<sup>1</sup>Carter V. Good, Dictionary of Education, pp. 62-260.

<u>Number of States</u>	<u>Number of Headquarters</u>
6	1
1	2*
2	3
1	4
1	5
1	8
1	No Data

Supervisors of Training For Women. Five states reported having a supervisor for training of women. Five states indicated that they had no supervisor of this type. Three states listed no data. A summary of supervisors of training for women by numbers of states follows:

<u>Number of States</u>	<u>Number of Supervisors</u>
5	0
5	1*
3	No Data

Combination Supervisor Teacher Trainers. One state reported ten staff members with combination duties of supervision and teacher training. Three states reported one staff member with combination duties. Two of these were designated as negro personnel. A summary of supervisor - teacher trainers by number of states follows:

<u>Number of States</u>	<u>Number of Supervisor-Teacher Trainers</u>
3	1
1	2
3	3
1	4*
4	5
1	10

Ratio of Time on Supervision to Teacher Training. A considerable variation of time was reported on supervision and teacher training. This

is undoubtedly caused by the fact that the responsibilities of these individuals differed greatly in various states, also because of the inevitable overlapping duties of supervisors and teacher trainers in helping to improve instruction.

In some states a separate staff of teacher trainers are employed who spend all their time on teacher training duties. In other states one person may discharge all the duties of both the teacher trainer and the state supervisor.

It was the intention of the writer to secure information as to the number of individuals designated as both teacher trainer and supervisor.

A summary of the percentage of time spent on teacher training by supervisors by numbers of states follows:

<u>Number of States</u>	<u>Percentage of Time on Teacher Training</u>
1	5
1	20
1	33*
1	33½
4	50
1	80
3	No Data

Supervisory Assignments. A diversity of plans were reported for assigning supervisors on the state level.

In some states supervisors are assigned according to areas or districts. In these cases the individual becomes a general supervisor of all trade and industrial training in his area or district.

In other states, assignments are made according to types of

classes that one individual supervises. In these states an individual is assigned to work on a state wide basis with either all day, part-time, or evening classes.

A third plan was reported by which supervisors are assigned on a state wide basis to work with classes in either single trades or groups of trades such as metal trades, building trades, petroleum trades, or needle trades.

The remainder of the states reported some combination of the above plans for supervising their trade and industrial classes.

All plans reported could be classified as either general supervision, special supervision, or a combination of both.

The advantages of general supervision on an area or district basis are that it usually requires less travel and permits the supervisor to follow a regular schedule of itinerant work with teacher and classes.

The disadvantages of general supervision are that it is extremely difficult for one individual to become sufficiently conversant with all the occupations and trades represented in his district to do a thorough job of supervising and helping teachers and classes with whom he works. This would also be true of special supervisors who are assigned according to types of classes. The diversity of occupations would require more versatile supervision even though the problems involved are closer related by virtue of all classes being either day trade, part-time, or evening.

This plan has merit from a specialist's standpoint, but it would not be the most economical because duplicate and even triplicate

personnel, work, and travel would be required where more than one type of class is being operated in a center.

The third plan of assigning supervisors according to trades or occupations reaches an even higher degree of specialization in that one individual would work with training in only one occupation or family of trades. A comprehensive supervisory program of this type would no doubt require a large staff and duplicate travel and work where a diversity of training is operated in the same state.

The most satisfactory plan of state supervision seems to be a combination of general and special supervision. In larger states commuting problems practically dictate the assignment of general supervisors to designated districts.

Recognizing the inability of any one individual to become a specialist in detail supervision in a great many fields of training, it seems not only desirable but necessary to have specialists to assist in the organization, operation, and supervision of training in special fields, such as nursing, ship building, aircraft construction, and petroleum production and processing. These special supervisors should be assigned on a state or district basis according to the location of training that they are to supervise and should work in close cooperation with the general district supervisors.

A summary of assignments by districts by members of states follows:

Number of StatesNumber of Supervisors  
Assigned According to Districts

1	2
3	3
1	4*
3	5
5	No Data

A summary of supervisors assigned according to type of classes by numbers of states follows:

Number of StatesNumber of Supervisors  
of Type Classes

1	1
1	3
1	5*
1	7
1	9
8	No Data

A summary of supervisors assigned according to occupations or trades by numbers of states follows:

Number of StatesNumber of Supervisors  
By Occupation or Trades

3	1*
1	5

Three states reported full time supervisors of negro and minority group training. One state reported that a supervisor of this type was pending.

Because of the closely allied work of teacher training to supervision, information was also gathered on the number of teacher trainers and teacher training institutions in each state. It was the writer's belief that this information would have some relation to the number and method of assigning supervisors.

TABLE V

COMPARATIVE ANALYSIS OF STATE STAFFS, DISTRICTS,  
SUPERVISORY ASSIGNMENTS, AND TEACHER-TRAINER ASSISTANCE

STATES	Total Number of Supervisors On State Level	Total Number of Supervisory Districts	Total Number of Supervisor Headquarters	Number of Supervisors of Womens Training	Number of Combination Supervisor-Teacher-Trainer	Approximate Percentage of Time To Teacher-Trainer	Number of Supervisors Assigned According to Dists.	Number Supvs. Assigned According Type Classes Spv'd.	Number Supvs. Assigned According Trades Supervised	No. Supvs. of Negroe & Other Minority Groups Training	Number of Teacher-Trainers	Number of Teacher-Training Institutes
Alabama	10	5	1	0	10	80	5	---	5	---	2	1-1*
Arkansas	2	1	1	---	2	---	2	---	---	---	*1-1	1-1*
Florida	9	1	8	1	5	50	---	9	---	P	*1-2	12-3*
Georgia	7	1	2	0	3	-	-	7	-	-	*1-2	1-1 <sup>1</sup> / <sub>2</sub> *
Louisiana	2	1	1	0	1	20	-	1	1	-	---	3-1*
Mississippi	3	1	1	0	1*	50	3	---	---	1	---	---
North Carolina	5	3	3	---	5	50	3	-	-	1	---	1
Oklahoma	3	1	1	0	3	-	-	3	-	-	*1-2	1-1
South Carolina	4	4	4	1	4	-	4	-	-	-	---	---
Tennessee	3	4	3	---	3	33-1/3	3	---	---	---	*1-1	1-1*
Texas	9	5	5	1	1*	50	5	---	1	1	*1-8	2-1*
Virginia	5	1	1	1	5	5	5	---	---	---	---	---
Puerto Rico	5	1	---	1	5	33	---	5	---	---	---	---

Space Left Blank Means State Reported But Made No Listing

- States Not Reporting

\* Negro Personnel and Institutions

P-Pending



A summary of teacher trainers by numbers of states follows:

<u>Number of States</u>	<u>Number of Teacher Trainers</u>
2	0
4	1
1	2 $\frac{1}{2}$
1	3
5	No Data

A summary of the number of teacher training institutions by numbers of states follows:

<u>Number of States</u>	<u>Number of Teacher Training Institutions</u>
1	1
4	2
2	3
1	4
5	No Data

#### PROMOTION

In the same manner that each state may accept or reject all or any part of the federal plan and subsidy for operating vocational programs, each center within the states may exercise the same prerogative in operating local program of vocational education.

An Analysis of publicity used in promoting vocational industrial programs is contained in Table VI.

A summary of publicity by numbers of states follows:

TABLE VI

COMPARATIVE ANALYSIS OF PUBLICITY USED IN  
PROMOTING VOCATIONAL INDUSTRIAL PROGRAMS

STATES	Bulletins	Leaflets	Pamphlets	Circulars	Brochures	Booklets	Radio	Television	NEWS PAPER	
									Feature Stories	Paid Advertisement
Alabama	Y	Y	Y	Y	Y	Y	Y	---	Y	---
Arkansas	Y	---	Y	---	---	---	---	---	Y	---
Florida *	---	Y	---	---	Y	---	Y	---	Y	---
Georgia	---	---	---	Y	Y	---	Y	---	Y	---
Louisiana	Y	---	---	---	---	---	Y	---	Y	---
Mississippi	---	Y	---	---	---	Y	Y	---	Y	---
North Carolina*	Y	Y	---	---	---	---	---	---	---	---
Oklahoma*	Y	Y	Y	Y	Y	Y	Y	---	Y	---
South Carolina	Y	Y	Y	---	Y	---	---	---	Y	---
Tennessee	Y	Y	Y	Y	Y	Y	Y	---	Y	---
Texas	Y	Y	Y	Y	Y	Y	Y	YL	---	YL
Virginia*	Y	Y	Y	---	Y	---	Y	---	Y	---
Puerto Rico	Y	Y	---	Y	---	---	Y	---	Y	---

Space Left Blank Where State Reported But Made No Listing

- States Not Reporting

Y Yes They are Used

YL Used Locally Only

N Not Used

\* Sponsors State Club Organization

<u>Number of States</u>	<u>Types of Publicity</u>
11	Newspaper
10	Bulletins
10	Leaflets
10	Radio
8	Brochures
7	Pamphlets
6	Circulars
5	Booklets

Use of Publicity. Various states reported using this material in different ways. In some cases it was mailed with other correspondence.

One state reported using television for promotion and one state reported one local center using paid newspaper advertisements in promoting their veterans training.

Promotional publications were secured from different states and carefully examined. An analysis of this material showed the following features to be most common in these publications:

1. An explanation of the type of training offered.
2. A picture of a student or students at work.
3. The entrance requirements of trainees.
4. An explanation of the objective of the training.
5. Who sponsors the training.
6. Where it will be offered.
7. The cost of enrollment.
8. The certificate award upon completion.

Use of Publicity. Various states reported using this material in different ways. In some cases it was mailed with other correspondence

as an insert. In case of bulletins and brochures, they were mailed under separate cover as well as passed out directly to individuals.

Texas reported the use of small pamphlets that were designed for banquets, business meetings, and other educational gatherings. These pamphlets were well illustrated and contained an explanation of the various vocational services of the state.

Texas also reported the use of mimeographed material on all types of training represented in the State Plan. These sheets are used in replying to inquiries from schools and industrial officials on possible training that may be offered. This type of material would probably classify as promotional information rather than promotional publicity.

This material explains the following items:

1. The type of training that may be offered.
2. When, where, and how classes may be organized.
3. Cost of the course to the school and students.
4. Qualifications of the students.
5. Qualifications and certification of the teacher.
6. Equipment, maintenance, and reimbursement.

This mimeographed material contained information on the above items for trade preparatory classes, apprentices training classes, trade extension training, and industrial cooperative training.

QUALIFICATIONS AND CERTIFICATION REQUIREMENTS  
FOR TRADE AND INDUSTRIAL PERSONNEL

The various state plans are analyzed and compared to disclose the qualifications of the state supervisors, as well as the qualifications and certification requirements for shop teachers, related subjects teachers, and local supervisors of the six types of vocational trade and industrial schools and classes that were described in the preceding chapter.

For supervisors and teachers, data were collected under the following headings:

1. Minimum Age at Entrance.
2. Trade Experience.
3. General Education.
4. Professional Education.
5. Teaching Experience.
6. Personal Qualities.

The various column headings used in all tables that follow are self-explanatory. However, the reader will encounter various notations in the "trade experience" column of these tables that may need some additional clarification. In this column, a number appearing alone indicates years of "trade experience" only. If the number is followed by the letter "a", apprenticeship is an added requirement. The term apprenticeship is indicated in the State Plan. A second number discloses the required years of apprenticeship included in the total years of trade experience. If the trade experience number for any state is

followed by "4" a learning period, not necessarily apprenticeship, is an added requirement. Numbers in parenthesis, such as (3-9), indicate a desirable range of required trade experience. It should be kept in mind that all data presented in chart form are representative of the entrance requirements of the vocational personnel in the various categories studied. For example, "age" means entering age. Furthermore, it should be kept in mind that these tables are condensations of the complete data.

The term "minimum entrance requirements" was used because most states list the certification requirements of beginning teachers and supervisors. The term "temporary certificate" means the first certificate labeled in various states as "first certificate", "temporary certificate", "provisional certificate", "vocational certificate", and the like.

"Renewal" or "term certificates" are provided in the different states for various periods of time. Periods of three, four, five, and eight years duration appear frequently under the renewal caption of the various states.

A "life" or "permanent certificate" is indicated as (CP) "conditional permanent", (P) "permanent", and (L) "life".

A special certificate is indicated as (S) and appeared under all three captions.

Qualifications of State Supervisors. The state supervisor is directly responsible for his own trade and industrial program and is looked to for leadership in all phases of this program in his state.

The qualifications necessary for one to hold this responsible position are represented in Table VII.

Alabama listed maturity as an entrance requirement. Arkansas listed a minimum entrance age of thirty-one years. The remainder of the states listed no age entrance requirements for state supervisors.

The minimum trade experience required was two to seven years. Louisiana stated that two years beyond a four year apprenticeship was required. Texas listed three years beyond an apprenticeship as a requirement.

Teaching experience requirements ranged from two to five years. Required supervisory experience varied from three to five years. Four states required the Bachelor's degree, while five stated that the Bachelor's degree must be technical. Four states required the Master's degree for state supervisors.

Eight states listed 540 clock hours of professional education as a requirement, one state 432 hours, one state 360 hours, one state 288 hours, and one state listing only 80 hours. A condensed analysis of these requirements may be found on the following page.

In addition to being a mature individual with a required amount of education and experience, a supervisor must have certain personal qualities that will fit him for this type of educational work.

Admittedly, the following ideas are largely those of the writer, however, they are based on experience and study in the field of supervision.

TABLE VII  
QUALIFICATIONS OF STATE SUPERVISORS

STATES	Minimum Entrance Age	Trade Experience Years	Teaching Experience Years	Supervisory Experience Years	General Evaluation				Professional Education in Clock Hours
					High School Years	Bachelor's Degree	Engineering or Technical	Master's Degree	
Alabama	M	2-a	2	3		C	C	C	360
Arkansas	30	5	3	5				C	540
Florida		3	2	3		C		C	-
Georgia		3	5	3			C		540
Louisiana		6-4	5	3		C		C	432
Mississippi		3	5	3		C	C		540
North Carolina		3	2	3		C			540
Oklahoma		3	3	3		C	C		540
South Carolina		4	2	3		C			80
Tennessee		4	2	3		C			540
Texas		7-4	3	3		C			288
Virginia		6	2	3		C	C		540
Puerto Rico		3	3	3		C	C		540

C Completed

a Beyond Apprenticeship

M Mature

/ Beyond Learning Period

- Not Listed

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.



The Ideal Supervisor. The ideal supervisor is a versatile person. He is a composite of all the finest qualities of supervisors who have ever served the schools. Above all he has a sincere belief in the importance of his unique educational functions. His work, his training, and his personality are geared not only to the local and immediate problems of pupils, teachers, and administrators, but to the many social problems of the era in which we live. He is a progressive thinker; a philosopher whose enthusiastic faith in democracy as a way of life is contagious. He is a man of action, working consistently in the classrooms, shops, and laboratories. He is a friend, discovering in each individual with whom he works a personality worthy of recognition and understanding. He is a student of the social sciences, noting and seeking to understand the trends of civilization.

The ideal supervisor-leader is a dynamic person with sufficient force to influence other people. He has enough vitality and energy to work through the hours and over the wide areas through which he must travel. He inspires those with whom he works, with a like faith in the destiny of education for useful and democratic living.

The ideal supervisor-leader recognizes creative ability in others. He is an analyst. He senses human needs and problems and seeks to fulfill and correct them. He has deliberately cultivated within himself a sensitivity to new ideals. He is creative enough to constantly reorganize his experience and to develop plans, procedures, and new meanings to share with his colleagues. He has and uses his inspiring opportunity of helping pupils and teachers to develop the capacity, each

in his unique way, to express impressions gained through seeing, hearing, feeling, and doing.

The supervisor knows what responsibility means. He knows that an essential of responsibility is sharing it with others. He recognizes that comprehensive supervision involves administrative activities of school superintendents and principals and respects their position and authority. He uses his own time wisely and is conscious of the value of the time of others.

No set of formulas will work in every situation. For this reason, the supervisor is both flexible and adaptable. He meets a change of plans with equanimity, understanding that out of new procedures may grow better situations. He realizes that change is inevitable and is aware that as he meets change so will the advance of education find those with whom he works ready to adapt themselves to new plans and procedures.

The supervisor has a keen sense of humor. Without it his attempts to cultivate the other desirable traits of ideal supervisors would be in vain. A smile may set the day right for a weary, discouraged teacher. The ability to laugh at himself will save the supervisor from becoming a weighty bore endowed with wonderful purpose but so dull that people flee from his path. His sense of humor is kindly and based upon subtle shadings. He laughs with, not at, people.

The supervisor is no hermit soul, living on an intellectual olympus. He is a social being who participates actively in the affairs of men. His interest in people makes him an acceptable member of any group of which he may be a part, whether it be a technical or professional

group, with interests similar to his own or a large group with many and varied interests which he can share or can learn to share.

The supervisor is sincere in his dealings with his fellowmen. His sincerity of purpose guides him in evaluating the efforts of others. He is fair but firm. He is patient but not indulgent with unsatisfactory and inexcusable teaching situations. He is equally eager to commend improvements as well as recommend improvements. He must understand the problems of the administrator since he is often called upon to serve as a consultant on matters of finance, budgets, and costs and specifications of equipment and facilities. He must also understand the problems of students as well as the social and intellectual problems of the shop and classroom as a whole.

For the man who has been called the supervisor in these pages is not one man, but many men of many backgrounds and abilities. He is a student, teacher of teachers, administrator, consultant, counselor, specialist in specific subject areas, philosopher, friend, and one who advances beyond the methods of yesterday to help schools function in the world of today.

Local Supervisor. The same personal qualities would be desirable for a local supervisor that are considered ideal for a state supervisor.

The duties and responsibilities of a local supervisor should not be confused with that of a local director. A director is one who directs the efforts of others and who participates very little or none in the actual doing of the jobs. His responsibility is to furnish direction to others and to assure that a satisfactory conclusion will be reached. The

supervisor is an expert in his field who actually works with teachers and others to attain the same satisfactory goal or conclusion.

The certificate requirements for local supervisors are listed in Table VIII. In addition to these requirements the best criteria for selecting a local supervisor is not to select one at all, but to let him identify himself through his interest in and contacts with various industrial groups in his area in attempting to assist them in organizing trade extension classes for themselves.

In many centers and communities, the shop teacher or coordinator is not only the only trade and industrial instructor but constitutes the entire trade and industrial program. Since the community was no doubt large enough and industrialized enough to justify his program at the time it was established, there no doubt exists a need for trade extension training for those who have already entered employment. If the local teacher has failed to investigate these possible needs and to inform his school administration of the services they may render and the industrial groups of the benefits they may receive, it is questionable that he has the qualifications for a local supervisor.

The local supervisor is the individual around whom a new program is built and through whom improvement is made in an established program.

The entrance age requirement varied from twenty-one to thirty years of age for a local supervisor. The amount of trade experience varied from three to seven years. General education requirements ranged from high school graduation to four years of college.

Professional education varied from eighteen to 250 clock hours. One state required one year of previous supervisory experience, while three states required two years of supervisory experience. Various states reported temporary certificates valid from one to three years. Renewal certificates were valid from one to ten years. Six states issue permanent or life certificates to local supervisors, with one state reporting the issuance of a conditional permanent certificate.

TABLE VIII

## QUALIFICATIONS &amp; CERTIFICATIONS OF A LOCAL SUPERVISOR

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education in Clock Hours	Supervisory Experience in Years	Certificate Valid in Years		
			Elementary School Years	High School Years	Technical - College			Temporary	Renewal	Life or Permanent
Alabama	21	3	---	C	2	236	-	3	10	CP
Arkansas	---	2a	---	C	2	-	-	2	5	-
Florida	---	2a	---	C	2	250	2	2	5	P
Georgia	---	3	---	C	2	-	-	3	3	P
Louisiana	---	3	---	---	4	-	1	2-3	2	L
Mississippi	25	2a	---	C	2	-	-	T	3	P
North Carolina	-	-	-	-	-	-	-	TP	S	-
Oklahoma	24	3a	---	---	C	-	-	T	T	-
South Carolina	---	1-3a	-	-	C	-	-	1	1	P
Tennessee	30	2a	---	C	---	180	2	1	4	5
Texas	---	7	---	C	2	-	-	2	2	P
Virginia	---	2-4a	-	-	-	18-24	-	1	1	-
Puerto Rico	25	6	---	---	C	-	2	S	S	-

C - Completed

TP - Temporary Permit

P - Permanent

- Not Listed

CP - Conditional Permanent S - Special

a - Beyond Apprenticeship

T - Temporary

L - Life

/ Beyond Learning Period

Right hand number under "Trade Experience" means years of Apprenticeship

Qualifications of Day Trade and Industrial Shop Teachers, Type

"A" Schools. The minimum entrance age varied from 21 to 24 years, with eight states listing no entrance age requirement.

The trade experience varied from three to seven years, with eight years where three years of journeymen experience was required beyond a four year apprenticeship.

General education requirements varied from completing elementary school in two states, to two years of college in one state. The central tendency was the requirement of completion of high school.

Professional improvement in clock hours ranged from 72 to 240 with eight states listing no requirement.

Temporary certificates were valid in years from one to three. Renewal certificates were valid from one to five years. Five states reported the issuance of permanent or life certificates, one conditional permanent, and two special permanent certificates.

Table IX presents a summary of these requirements.

TABLE IX

QUALIFICATIONS AND CERTIFICATE REQUIREMENT FOR  
DAY TRADE & INDUSTRIAL SHOP TEACHERS, TYPE "A" SCHOOLS

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education in Clock Hours	Remarks	Certificate Valid in Years		
			Elementary Years	High School Years	Technical or College			Temporary	Renewal	Life or Permanent
Alabama	21	2-a	C	-	-	-		3	3	CP
Arkansas	-	2-a	-	-	-	-		T	-	-
Florida		6-4	-	-	-	72		2	1-5	P
Georgia	21	3/	C	-	-	-		-	3	-
Louisiana		6-4	-	-	-	216		2-3	2	L
Mississippi		3-a	-	C	-	-		T	2-3	P
North Carolina		2	-	-	-	-		TP	S	S
Oklahoma	24	2-a	-	C	-	-		T	T	-
South Carolina		2-a	-	-	-	-		1	1	P
Tennessee	21	2-a	-	C	-	18		1	2-5	5
Texas		7	-	C	2	-		2	2	L
Virginia		2-a	-	C	-	108		1	1	-
Puerto Rico	21	3-a	-	C	-	240		SP	S	S

C-Completed a-Beyond Apprenticeship TP-Temporary Permit

- Not Listed / Beyond Learning Period T-Temporary

P-Permanent L-Life S-Special CP-Conditional Permanent

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.



Qualifications of Day Trade and Industrial Related Subjects

Teachers, Type "A" Schools. Alabama was the only state listing any minimum entrance age requirement for this type of teacher; twenty-one years.

The amount of required trade experience varied from one to eight years. Six states required two years trade experience.

General education requirements ranged from completion of high school to completion of four years of technical college.

Professional education in clock hours varied from 72 to 402 with ten states listing no professional education requirements.

Temporary certificates were valid from one to three years. Renewal certificates were valid from one to five years. Five states reported the issuance of permanent or life certificates, one conditional permanent, and two special permanent.

It should be noted that less trade experience and more general and technical education is required for related subjects teachers than for shop teachers, while more trade experience and less general and technical education is required of shop teachers than related subjects teachers.

Table X presents a summary of these requirements.

TABLE X

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR  
DAY TRADE AND INDUSTRIAL RELATED SUBJECTS TEACHERS, TYPE "A" SCHOOLS

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education in Clock Hours	Remarks	Certificate Valid in Years		
			Elementary School Years	High School Years	Technical or College			Temporary	Renewal	Life or Permanent
Alabama	21	1		C	2	-		3	3	CP
Arkansas		2		C	2	-		T	-	-
Florida		2	-	-	-	72		2	1-5	P
Georgia		2		C	2	-		-	3	-
Louisiana		1			C	402		2-3	2	L
Mississippi		3a			C	-		T	2-3	P
North Carolina		2	-	-	-	-		TP	S	S
Oklahoma		2		C	2	-		T	T	-
South Carolina		2a	-	-	-	-	-	1	1	P
Tennessee	21	3		C		-		1	2-5	S
Texas		6		C	2	-		2	2	L
Virginia		1			C	108		1	1	-
Puerto Rico		2		C		-		SP	S	S

C-Completed    a-Beyond Apprenticeship    TP-Temporary Permit  
 - Not Listed    / Beyond Learning Period    T-Temporary  
 P-Permanent    L-Life    S-Special    CP-Conditional Permanent  
 Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.

Qualifications of Day Trade and Industrial Teachers, Type "B" Schools. The minimum entrance age varied from 21 to 24 years, with eight states listing no requirement of this type.

Trade experience required varied from two to eight years, with five years being the average required.

General education requirements ranged from two states listing elementary school completion, to one state listing two years of technical college as required.

Professional education in clock hours varied from eighteen to 240. Ten states listed no professional education requirements.

Certificate tenure and renewals were found to be the same for teachers in Type "B" schools that they were in Type "A".

The type of trade experience for teachers in Type "B" schools would be more general than those of Type "A". Teachers of Type "B" classes teach a family of trades, such as the metal trades that might include units in machine shop, welding, sheet metal, forging, and foundry.

Teachers of Type "A" classes teach a single unit trade, such as machine shop or sheet metal.

Table XI presents a compiled analysis of these requirements.

TABLE XI

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR  
DAY TRADE AND INDUSTRIAL TEACHER, TYPE "B" SCHOOLS

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education in Clock Hours	Remarks	Certificate Valid in Years		
			Elementary School Years	High School Years	Technical or College			Temporary	Renewal	Life or Permanent
Alabama	21	3	C	-	-	-	-	3	3	CP
Arkansas		2a	-	-	-	-	-	T	-	-
Florida		2	-	-	-	72	-	2	1-5	P
Georgia		3a	-	C	-	-	-	-	3	-
Louisiana		6-4	-	C	-	-	-	2-3	2	L
Mississippi		2a	-	C	-	-	-	T	2&3	P
North Carolina		2	-	-	-	-	-	TP	S	S
Oklahoma	24	2a	-	C	-	-	-	T	T	-
South Carolina		2a	-	-	-	-	-	1	1	P
Tennessee	21	2a	-	C	-	18	-	1	2-5	S
Texas		7	-	C	C	-	-	2	2	L
Virginia		6	C	-	-	-	-	1	1	-
Puerto Rico	21	3a	-	C	-	240	-	SP	S	S

C-Completed      a-Beyond Apprenticeship      TP-Temporary Permit

- Not Listed      / Beyond Learning Period      T-Temporary

P-Permanent      L-Life      S-Special      CP-Conditional Permanent

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.

Qualifications for Day Trade and Industrial Related Subjects Teachers, Type "B" Schools. Alabama was the only state listing an entrance age requirement; 21 years.

Trade experience required varied from two to seven years with three years and five months being the average required.

General education requirements ranged from nine states requiring high school graduation to two states requiring four years of college.

Professional education varied from 72 to 480 clock hours.

Certificate tenure and renewal requirements were the same as for related subjects teachers in Type "A" schools.

It should be noted that in Type "B" schools as in Type "A" schools, related subjects teachers are required to have less trade experience than shop teachers but more general and technical education.

Table XII presents a compiled analysis of these requirements.

TABLE XII

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR  
DAY TRADE AND INDUSTRIAL RELATED SUBJECTS TEACHERS, TYPE "B" SCHOOLS

STATES	Minimum Entrance Age	Trade Experience Years	General Education				Professional Education in Clock Hours	Remarks	Certificate Valid in Years		
			Elementary School Years	High School Years	Technical or College	Temporary			Renewal	Life or Permanent	
Alabama	21	3				-		3	3	CP	
Arkansas		2		C	2	-		T	-	-	
Florida		2	-	-	-	72		2	1-5	P	
Georgia		3		C		-		-	3	-	
Louisiana		2		C		-		2-3	2	L	
Mississippi		3a		C	C	-		T	2&3	P	
North Carolina		2			C	480		TP	S	S	
Oklahoma		2		C	2	-		T	T	-	
South Carolina		2a	-	-	-	-		1	1	P	
Tennessee	21	3		C		-		1	2-5	S	
Texas		6-4		C	2	-		2	2	L	
Virginia		6		C	2	-		1	1	-	
Puerto Rico		2		C		-		SP	S	S	

C-Completed a-Beyond Apprenticeship TP-Temporary Permit

- Not Listed / Beyond Learning Period T-Temporary

P-Permanent L-Life S-Special CP-Conditional Permanent

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.

Qualifications for Part-Time General Continuation Coordinators.

Alabama listed 18 years as the minimum entrance age required with Mississippi listing 25 years of age. Other states gave no age entrance requirements.

The required trade experience varied from one to six years with the average being between two and three years.

General education requirements ranged from completion of high school in one state to four years of college in nine states.

Professional education required from twelve to 180 clock hours.

Four states listed two years of supervisory experience as a requirement, while one state listed three years of supervision as a requirement.

Temporary certificates were reported valid from one to three years. Renewal certificates were reported valid from one to two years. Six states issue permanent or life certificates, one state issuing conditional permanent, with two states issuing special permanent certificates.

Table XIII presents an analysis of these requirements.

TABLE XIII

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR  
PART-TIME GENERAL CONTINUATION COORDINATOR

STATES	Minimum Entrance Age	Trade Experience Years	General Education				Professional Education in Clock Hours	Supervisor, Years	Certificate Valid in Years		
			Elementary School Years	High School Years	Technical or College	Temporary			Renewal	Life or Permanent	
Alabama	18	1			4	12-21		3	8&10	CP	
Arkansas		2-3			C	144	2	T	-	-	
Florida		1		C	1	120	2	2	2	P	
Georgia		1-3			2	-	-	-	3	P	
Louisiana		2			C	-	-	3	2	L	
Mississippi	25	1-2a		C	4	180	-	T	3	P	
North Carolina		3			C	180	-	TP	S	S	
Oklahoma		1			2	-	-	T	T	-	
South Carolina		1-2		C	C	108	2	1	1	P	
Tennessee		2			C	-	2	1	4	S	
Texas		3		C	C	144	3	2	2	P	
Virginia		-				72	-	1	1	-	
Puerto Rico		-			C	30	-	SP	S	S	

C-Completed      a-Beyond Apprenticeship      TP-Temporary Permit

- Not Listed      / Beyond Learning Period      T-Temporary

P-Permanent      L-Life      S-Special      CP-Conditional Permanent

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.



Qualifications for Part-Time General Continuation Related Subjects

Teachers. Only two states listed entrance age requirements for this type of teacher. Alabama requires 18 years of age as the minimum. Tennessee listed 21 years of age as the minimum.

One to three years of trade experience was reported as a requirement by various states.

General education requirements varied from elementary school completion to four years of college.

Professional education requirements ranged from twelve to 216 clock hours.

Arkansas listed one year of teaching or supervisory experience as required.

Florida listed two years of teaching or supervisory experience as required.

Temporary certificates were reported valid from one to three years. Three states issue temporary permits, with one reporting the issuance of special permits for this type of teaching.

Renewal certificates were reported valid from one to three years.

Eight states issue permanent life certificates, while two states issue conditional life certificates.

Table XIV gives a complete analysis of these requirements.

TABLE XIV

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR  
PART-TIME GENERAL CONTINUATION RELATED SUBJECTS TEACHERS

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education in Clock Hours	Remarks	Certificate Valid in Years		
			Elementary Years	High School Years	Technical or College			Temporary	Renewal	Life or Permanent
Alabama	18	1			4	12-21		3	3	CP
Arkansas		2		C	1	-	1T-S	T	T	T
Florida		1		C	1	120	2T-S	1	2	P
Georgia		1	C					-	3	P
Louisiana		1			C	216		2-3	2	L
Mississippi		1		C	2	-		T	2-3	P
North Carolina		1		C		-		TP	S	S
Oklahoma		1-2		C		-		TP	T	-
South Carolina		1		C	1	-		1	1	P
Tennessee	21	1-3			C	60		TP1	1	CP
Texas		1-3			C	-		2	2	P
Virginia		-		C		72		1	1	-
Puerto Rico		-			C	30		SP	S	S

C-Completed a-Beyond Apprenticeship TP-Temporary Permit

- Not Listed / Beyond Learning Period T-Temporary

P-Permanent L-Life S-Special CP-Conditional Permanent

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.

Qualifications for Evening Trade Extension Shop Teachers. Three states listed twenty-one years of age as the minimum entrance age, one state listed twenty-four, and one state listed twenty-five.

Two to seven years were reported as trade experience requirements.

Four states required elementary school graduation while five states required high school graduation.

Professional education requirements ranged from eight to 240 clock hours.

Three states issue temporary teaching permits. Four states issue one year certificates, while the remainder issue two and three year temporary certificates. Renewal certificates were reported valid from one to five years. Five states issue permanent or life certificates while one issues a conditional permanent certificate and one reported issuing a special permanent certificate.

A condensed analysis of these requirements are listed in Table XV.

TABLE XV

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR PART-TIME AND EVENING TRADE EXTENSION SHOP TEACHERS

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education In Clock Hours	Remarks	Certificate Valid in Years		
			Elementary Years	High School Years	Technical or College			Temporary	Renewal	Life or Permanent
Alabama	21	2-a	C	-	-	8		3	3	CP
Arkansas	-	2-a	-	-	-	9		-	-	-
Florida		2-a	-	-	-	-		1	2	P
Georgia	21	3/	C	-	-	-		-	3	-
Louisiana		6-4	-	C	-	-		2-3	2	L
Mississippi		2-a	C	-	-	-		TP	2-3	P
North Carolina		2	-	-	-	-		TP	T	-
Oklahoma	24	2-a	-	C	-	-		TP	T	-
South Carolina		2-a	-	-	-	-		1	1	P
Tennessee	25	2-a	-	C	-	18		1	1-5	-
Texas		7	-	C	-	-		2	2	P
Virginia		6-4	C	-	-	-		1	1	-
Puerto Rico	21	3-a	-	C	-	240		S	S	S

C-Completed      a-Beyond Apprenticeship      TP-Temporary Permit  
 - Not Listed      / Beyond Learning Period      T - Temporary  
 P-Permanent      L-Life      S-Special      CP-Conditional Permanent

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.

Qualifications for Evening Trade Extension Related Subjects

Teachers. Only two age entrance requirements were reported. Alabama listed twenty-one years of age and Tennessee listed twenty-five years of age.

Six states listed two years of trade experience as being required for this type of teaching. Two states listed one year and two states listed two years beyond an apprenticeship.

Five states require high school graduation, while seven states require two years of post high school, and two states require college graduation as general education requirements.

Eight to eighteen clock hours were listed as professional education requirements.

Mississippi reported no schools of this type.

Temporary permits and certificates were reported as valid from one to three years. Renewal certificates were valid from one to five years, while four states only reported issuing permanent or life certificates to evening trade extension related subjects teachers.

Table XVI gives a compiled analysis of these findings.

TABLE XVI

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR  
EVENING TRADE EXTENSION RELATED SUBJECTS TEACHERS

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education in Clock Hours	Remarks	Certificate Valid in Years		
			Elementary Years	High School Years	Technical or College			Temporary	Renewal	Life or Permanent
Alabama	21	1	-	C	2	8		3	3	CP
Arkansas	-	2	-	C	2	9		T	T	T
Florida	-	2-a	-	-	-	-		1	2	P
Georgia		2		C	2			-	3	-
Louisiana		2		C	2			2-3	2	L
Mississippi	-	-	-	-	-	-	NS	-	-	-
North Carolina		2		C	2	-		TP	S	-
Oklahoma		2		C	2	-		T	T	-
South Carolina		2-a		-	-	-		1	1	P
Tennessee	25	2			2	18		1	2-5	-
Texas		1			4	-		2	2	P
Virginia		-		-	-	18		1	1	-
Puerto Rico		-		C	2	-		S	-	-

C-Completed      a-Beyond Apprenticeship      TP-Temporary Permit

- Not Listed      / Beyond Learning Period      T - Temporary

P-Permanent      L-Life      S-Special      CP-Conditional Permanent

N S - No Schools      Right Hand Number Under "Trade Experience"  
Means Years of Apprenticeship.

Qualifications for a Part-Time Trade Extension Related Subjects

Teacher. Two states listed twenty-one as the entrance age requirement, while two states listed twenty-four, and two states twenty-five.

One to six years of trade experience was reported as required by various states.

Seven states required high school graduation; two states two years of high school. One state required college graduation, while six states required two years of college as general education requirements.

Professional education in clock hours varied from 9 to 72 clock hours.

The certificate requirements for a part-time trade extension teachers were found to be the same as those for evening trade extension teachers.

Table XVII lists a compiled analysis of these requirements.

TABLE XVII

QUALIFICATIONS AND CERTIFICATE REQUIREMENTS FOR  
PART-TIME TRADE EXTENSION RELATED SUBJECTS TEACHERS

STATES	Minimum Entrance Age	Trade Experience Years	General Education			Professional Education in Clock Hours.	Remarks	Certificate Valid in Years		
			Elementary Years	High School Years	Technical-College			Temporary	Renewal	Life or Permanent
Alabama	21	1		C	2	-		3	3	CP
Arkansas		2		C	2	-		T	T	T
Florida		2	-	-	-	-		1	2	P
Georgia	21	2		C		-		-	3	P
Louisiana		2		C	C	-		2-3	2	L
Mississippi	25	1		C	2	-		T	2-3	P
North Carolina		2		2		-		TP	S	S
Oklahoma	24	2-a		C		-		TP	T	-
South Carolina		2-a	-	-	-	-		1	1	P
Tennessee	25	2			2	18		TP1	1	CP
Texas		6		C	2	-		2	2	P
Virginia		1	C	2		72		1	1	-
Puerto Rico		-		C	2	-		SP	S	S

C-Completed      a-Beyond Apprenticeship      TP-Temporary Permit

- Not Listed      / Beyond Learning Period      T-Temporary

P-Permanent      L-Life      S-Special      CP-Conditional Permanent

Right Hand Number Under "Trade Experience" Means Years of Apprenticeship.



Like supervisors, vocational trade and industrial teachers must pass certain personal qualities in addition to certificate requirements and qualifications.

The Ideal Teacher. Irrespective of the field of education or the subject to be taught, the first requisite of any teacher is to thoroughly and unquestionably know the subject matter.

The ideal trade and industrial teacher is a skilled craftsman who knows his trade thoroughly and is recognized and respected as such by his associates in the trade.

He is a general educator who recognizes the place and importance of all aspects of education. He also recognizes that his special field of training is but an integral part of an overall program of education.

He is interested in imparting to others the skills and knowledge of his trade. He commands the respect of both students and teachers by his professional attitude and personal accomplishments. He has the ability to stimulate in others a sincere interest to learn.

The ideal teachers personal appearance is always appropriate for his work. He has a magnetic personality and emotional stability, remaining calm under all circumstances.

He has the initiative to organize and carry through the jobs that need to be done. He is resourceful and can cope with unusual problems. He cooperates to the fullest extent with both school officials and students. He is progressive and always alert to ways of improving his work. He has the ability to lead and handle students. His lessons are

always appropriate and related to the occupational needs of the class. He uses proper methods in teaching. He constantly revises his instructional material in accordance with the latest materials, methods, and standards of industry. He handles his classroom and shop management in such a way that order always prevails and students are interested and working.

He keeps equipment in an excellent state of repairs. He always insists on high standards of workmanship and character. He recognizes that teaching a student to drill a perfect hole is failure if the student steals the drill. He plans ahead and provides for orderly procurement, processing, and putting away of both tools and materials.

He strives to place students in most suitable employment and systematically follows up all students of his department.

He is publicly accepted and looked upon with pride by all.

## INSPECTION AND EVALUATION

To insure the proper safeguards on expenditures and acceptable instruction, the supervisor must inspect and evaluate classes and programs in terms of reimbursable standards. One of the most common devices used in the evaluative procedure is a report or visitation check sheet.

Check Sheets. Two of the thirteen states reported the use of a visitation check sheet. Of these, nine stated that written commendations and recommendations for improvements were furnished the teacher. Eight furnished them to the superintendent of school, ten to the principal, and twelve to the State Office. One state reported that they were, sometimes, furnished to the above officials. Only one state reported no use of a check sheet or written commendation and recommendation.

Value and Use of Check Sheets. It is the writer's opinion that if properly used, the check sheet may serve many valuable and useful purposes.

Improvement of instruction is the goal of all supervision and many factors may enter into it. A good supervisor looks first to the personal adjustment of a teacher and tries to be sure that each teacher's working conditions are adequate, safe, and conducive to good teaching and learning. The use of a properly designed check sheet should insure that all items are given proper consideration in attempting to produce these conditions.

A check sheet should serve as a written record for future reference on suggested improvements as well as a record of commendations on teachers work. Written records of this type are very valuable to substantiate administrative action on promotions and demotions of teachers. They should also cause the supervisor to be more alert and do a better and more detailed job of supervising. They serve as a written record for the teacher to constantly refer to in making improvements.

Caution should be exercised in using check sheets, since the way in which they are used may produce adverse as well as favorable conditions and attitudes.

A good supervisor should never fill out a check sheet in the shop or classroom while making a supervisory visit. The feeling of being put on display and checked or inspected before his students is humiliating and unfair to a teacher. All items should be observed and the evaluation sheet completed later by the supervisor. It should also be reviewed with the teacher at sometime outside of his teaching time. He is the most important individual in the shop or classroom during the class period and nothing should detract from his teaching and work with the students.

An analysis of evaluation check sheets from various states showed a variety of items to be checked or rated.

The following items were found on personal qualities of the teacher; appearance, attitude, personality, cooperation, physical condition, initiative and willingness to work.

Under physical conditions of the classroom or shop, the following items were found; housekeeping, arrangement, maintenance, ventilation, lighting and safety.

For classroom management, efficiency in starting, operating and closing a class were listed for evaluation.

Teaching procedures were checked on the following points; lesson plans, methods, use of instructional aids, standards of workmanship required, correlation of related information to the job or project, student interest, participation, reaction and morale.

The following items were rated on records and reports; promptness, accuracy and adequacy.

For coordination of student's training and work experience, provisions were made for evaluating, placement, follow-up, guidance, quality of training station, quality of occupation, visitation and conference with employers.

Two general plans of rating were found. In some cases provisions were made for rating items by checking them as being superior, excellent, fair, acceptable or unsatisfactory. The other plan provided for a numerical rating within a given score range with a comparative possible total score and an actual total score.

Salary Increments. Seven states reported that merit was a factor for consideration in salary increases for teachers. Eleven reported tenure as a determining factor. Eleven states that professional improvement was required for an increase, while nine listed additional trade experience as being essential.

TABLE XVIII

COMPARATIVE ANALYSIS OF INSPECTION  
EVALUATION PROCEDURES

STATES	Supervisor Visitation Check Sheet Used	Written Commendations and Recommendations for Improvement Fur- nished to:				Teacher's Salary Increases Based On:				Evaluation of Teachers For Special Merit Awards
		Teacher	Superintendent	Principal	State Office	Merit	Tenure	Professional Improvement	Additional Trade Experience	
Alabama	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Arkansas	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Florida	Y		Y	Y	Y		Y	Y	Y	N
Georgia	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Louisiana	Y			Y	Y	Y	Y	Y	Y	N
Mississippi	N	N	N	N	N	Y	Y	Y	Y	N
North Carolina	Y	Y		Y	Y		Y	Y		
Oklahoma	Y	Y	Y	Y	Y	N	N	N	N	N
South Carolina	N	Y	-	-	Y		Y	Y	Y	N
Tennessee	Y	S	S	S	Y	N	Y	Y	Y	N
Texas	Y	Y	Y	Y	Y	Y	Y	N	N	Y
Virginia	N	Y	Y	Y	Y			Y	Y	N
Puerto Rico	Y	Y	Y	Y	Y	Y	Y	Y		Y

Spaces Left Blank Where States Reported But Made No Listing

- States Not Reporting

Y Yes

N No

S Sometimes

## SUMMARY

State Staffs and Assignments. The number of supervisors on the state level in the various states ranged from two to ten, with the representative state having five supervisors.

The number of districts in each state varied from one to five with most states having only one district or area.

The number of supervisory headquarters ranged from one to eight in each state with the average being two.

Five states reported special supervisors of womens training.

All states reported that supervisors have some teacher training duties. The amount of time spent on teacher training was reported from five to eighty percent.

A diversity of plans were reported on supervisory assignments. Fourteen were reported assigned according to districts. Twenty-five were assigned according to type classes supervised, while six were reported assigned according to occupation or trades supervised.

Two states reported no separate teacher training personnel. Four states reported one teacher trainer each. One state reported two full time and one half-time teacher trainer. One state reported three teacher trainer, while five states listed no data.

One state reported one teacher training institution. Four states reported two teacher training institutions. One state reported four teacher training institutions, while five gave no data.

Supervisory Duties. According to the best authorities consulted, supervisory duties consist of promoting programs, passing on qualifica-

tions and certification of teachers, training of teachers, and inspection and evaluation classes and programs.

Promotion. Twelve states reported the use of newspapers for promotion and publicity. Ten states reported the use of radio, eleven reported the use of bulletins, ten reported the use of leaflets and pamphlets, eight reported the use of brochures, seven reported the use of pamphlets, and five reported the use of booklets. One reported the use of television and one reported the use of paid newspaper advertisements locally.

Qualification and Certificate Requirements. In investigating qualifications and certificate requirements the following was found:

The representative state supervisor is mature with three years trade experience, three years teaching experience, three years supervisor experience, 540 hours of professional education and a Bachelor's degree.

The representative day trade and industrial shop teacher Type "A" and "B" is twenty-one to twenty-four years of age with three years trade experience, a high school education, and 100 to 120 clock hours of professional education.

A representative day trade and industrial related subjects teacher Type "A" and "B" is from twenty-one to twenty-four years of age with two years trade experience, two years of college, and 108 to 180 clock hours of professional education.

The representative evening trade extension and part-time trade extension shop teacher was found to be twenty-four years of age with three years trade experience, a high school graduate with two years of



post high school, and fifty to sixty clock hours of professional education.

The representative general continuation coordinator ranged between twenty-four to forty years of age, with two to three years trade experience, a Bachelor's degree, 108 to 120 clock hours of professional education and two years supervisory experience.

The representative part-time general continuation related subjects teacher was found to be approximately twenty-four years of age with one to three years trade experience, two years of college education, 120 clock hours of professional education, and two years teaching experience.

Inspection and Evaluation. Ten of the thirteen states reported the use of a supervisory check sheet. Eleven states recommended the practice of furnishing written commendations and recommendations on improvement to the teacher, superintendent, principal, and State Office.

Tenure and professional improvements were found to be the major factors in salary increments for teachers. Additional trade experience was second and merit was last.

Two states reported the use of evaluations for special merit awards. A great deal of similarity, as well as a diversity of state supervisory practices were found. This is as it should be because of the difference in geography, size and locations of states. There is also a difference in the types of industries served as well as a difference in the education systems of various states.

Since the demand for educational offerings should arise from the needs of the groups and areas in which they serve, different types of supervisory techniques and practices are required to best meet these educational needs.

## CHAPTER IV

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In this study the various plans of state supervision of vocational trade and industrial classes have been analyzed as to state staffs, supervisory responsibilities, methods of promotion, certification requirements, teacher training, and evaluation procedures.

#### SUMMARY

On the following pages is a review of the findings of this study and conclusions drawn regarding the materials presented.

As states in Chapter I, the major objectives were: First, to analyze and compare the various plans for supervising trade and industrial education in the several states and territory of the southern region. Second, to suggest ways and means of utilizing the findings to formulate a set of policies to assist supervisors to improve and make supervision more practical and effective.

The importance of the study was indicated by the fact that the vocational education program in America has grown very rapidly in recent years.

Supervision was defined as all efforts directed toward providing leadership to teachers and other educational workers in the improvement of instruction.

The limitations of the study covered state supervision of vocational trade and industrial education in the twelve states and one territory of the southern region.

The investigational procedures consisted of detailed studies of textbooks, state plans, state and federal bulletins, related studies, and information gathered from the states included in the study through use of a questionnaire. Follow-up inquiries were made where insufficient data were furnished or where additional information was needed. Aside from a few reports, very little in the way of research was found in the field of supervision on trades and industrial education.

Paine made a study in 1939 of the state boards for vocational education in trades and industries in Wisconsin and Ohio.

DeForest made a study of organization, administration, and sources of funds for vocational education in the states of Ohio and New York.

Whitney reported findings of inquiries to thirty-three individuals on supervision and teaching.

Earhart made a study of certificate requirements for trade and industrial personnel and found great variations in qualification requirements.

Chapter II presents the historical background necessary to understand federal legislation in the trade and industrial field.

The Morrill Act provided land grants to colleges for the establishment of agriculture and mechanical arts. This was followed by the Hatch Act which established experiment stations in these land-grant institutions. The second Morrill Act provided funds for the related studies applying to

the industries of life. The Adams Act appropriated continuing funds for the experiment stations established by the Hatch Act.

The Smith-Lever Act provided funds for cooperative extension work in agriculture and home economics. It brought the college to the farm and home, but it had little to do with trade and industrial education. However, it introduced the principal of detailed specifications governing the expenditure of federal funds when used for state aid purposes. Many of the characteristics of the Smith-Lever Act appear in later legislation that deals with specific vocational problems.

The Smith-Hughes Act provided funds for instructional purposes and teacher training in the fields of agriculture, home economics, and trade and industries. This Act, passed in February, 1917, was the first basic law to promote vocational education on a national basis for students of less than college grade. Like the Smith-Lever Act, the legislation is detailed and specific.

The Smith-Sears Act and the Smith-Bankhead Act deal with rehabilitation of returned veterans of World War I as well as the rehabilitation of civilians disabled in industry. The George-Reed Act extended appropriations for instructional purposes in agriculture and home economics subjects, but had nothing to do with activities in trades and industries. The George-Ellsey Act was a temporary extension of the provisions of the George-Reed Act.

However, it was not until the passage of the George-Deen Act that appropriations were authorized to continue the provisions of the Smith-Hughes Act on a permanent basis, and added appropriations for distributive

education were provided. The last vocational legislation was the George-Barden Act which superceded the George-Deen Act and provided increased appropriations for all vocational services.

Vocational education for trades and industries was defined as being the type of education and training that is intended (1) to assist individuals already employed in trade and industrial occupations to add to their special knowledge and skills; to improve their prospects for steady and permanent employment; or to prepare themselves for promotion and advancement; (2) to prepare individuals for profitable and advantageous entrance into the mechanical trades or industrial pursuits; and (3) to assist employed minors in adjusting themselves to their work and to the existing social order through such types of education as are properly given in the general continuation school.

Vocational education was defined as being instruction of less than college grade, for persons over fourteen years of age, to fit them for useful employment or to increase their skills, related knowledge, and civic intelligence.

The types of schools or classes were explained as follows:

1. Evening trade extension for persons over sixteen years of age who have entered employment.
2. Part-time trade extension for persons fourteen to eighteen years of age who have entered into a trade or industrial pursuit; classes offered during the hours of work and considered as part-time instruction.

3. Part-time trade preparatory for persons fourteen to eighteen years of age who have entered upon employment; instruction designed to fit such persons for a trade other than the one in which they are engaged.
4. Part-time general continuation for persons fourteen to eighteen years of age who have entered employment, yet need to enlarge their civic or vocational intelligence.
5. The day trade and industrial, Type "A", for purposes of preparing persons over fourteen years of age for useful employment in a trade or industrial pursuit; classes to extend for a period of not less than thirty-six weeks. Type "A" programs designed for cities over 25,000 in population.
6. The day trade and industrial, Type "B", for same work as Type "A" except that this type of school is designed for cities of less than 25,000 population and certain requirements are relaxed to fit the needs of smaller centers.

The materials concerning state staffs, publicity, certificate requirement, and evaluation procedures were presented in chart form. The certificate requirements were listed according to entrance age, trade experience, general education, professional education, teaching experience, and supervisory experience.

The representative state staff consists of five supervisors, who have both supervisory and teacher training duties. They spend an average of thirty-six percent of their time on teacher training and are assigned

according to type classes they supervise.

The representative state has two to three teacher trainers and two teacher training institutions.

The representative state used all types of publicity which are listed in the order of importance and frequency that they were reported used; newspapers, bulletins, radio, leaflets, brochures, pamphlets, booklets, and television.

The representative state supervisor was required to have attained an entrance age of twenty to forty years with three years trade experience, three years teaching experience, three years of supervisory experience, 540 clock hours of professional education, and a Bachelor's degree at the time he becomes a supervisor.

The representative trade and industrial shop teacher requires to have attained an average entrance age of twenty-six years, have three years trade experience, completed high school, and have completed eighty five hours of professional education at the time he became a shop teacher.

The representative related subjects teacher was required to have attained an entrance age of twenty-four years, have two years of trade experience, two years of post high school or college training, and have completed ninety-five clock hours of professional education at the time he became a related subjects teacher.

The representative coordinator was required to have attained an entrance age of twenty-five years, have three years of trade experience, two years of post high school or college, have completed ninety-one clock hours of professional education, and have two years of previous supervisory experience.

The representative state issued temporary certificates that were valid from one to three years. Renewal certificates were valid from one to ten years. Six states issued life or permanent certificates. One state issued conditional permanent certificates.

The representative state used visitation check sheets and recommended that written commendation and recommendations be furnished the superintendent of school, the principal, the teacher, and the state office.

The following items were reported in importance in the order in which they are listed for consideration in teacher salary increments; tenure, professional improvement, additional trade experience, and merit.

#### CONCLUSIONS AND RECOMMENDATIONS

From this study of various plans for state supervision in trades and industries, several conclusions may be drawn.

1. A definite interest in a study of this type was indicated by the high percentage of returns on inquiries and materials requested.
2. Little has been done on a regional or national scale in compiling and analyzing materials dealing with supervisory practices and responsibilities.
3. A diversity of concepts were found to exist as to specific duties and responsibilities of supervisors.
4. This study discloses great variations in the various state plans regarding the trade experience, general and professional



education, and other qualifications required for vocational trade and industrial personnel of the different states.

5. All states require some form of temporary certificate, but many states make no further provision for advanced certificates. Other states have a well developed and progressive certificating program.
6. Inspection and evaluation procedures revealed by the study vary greatly throughout the states. Some states presented evidence of a comprehensive plan of evaluation and follow-up, while others reported the use of no check sheet or written records in evaluating.

More detailed and thorough studies of various areas included in the present work would no doubt reveal additional interesting and valuable material. Such investigations should be very timely, since much interest exists in the vocational education movement at this time, and the program undoubtedly faces the possibility of marked expansion in the years ahead.

Furthermore, it is hoped that additional inquiries will be made not only in the field of trades and industries, but in vocational agriculture, home economics, and distributive education as well. As already pointed out, much work remains to be done in the field of vocational education in informing and educating both school and lay personnel as to the services that may be rendered and benefits that may be received through vocational offerings. More uniform methods should be established in selecting, certifying, and training vocational personnel. More objective procedures should be established in evaluating programs.

Finally, it is hoped that this and similar studies will contribute to producing better supervision, better vocational teaching, and better programs of vocational education by disclosing opportunities for improvement.

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