

FEDERAL-STATE COOPERATIVE ACTIVITIES  
IN VOCATIONAL EDUCATION

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## PREFACE

As a result of Federal aid to the States for vocational education, since 1917, there has developed a Federal-State-local cooperative relationship which is unmatched in United States political history. Little research has been carried on to identify specific activities, through which the cooperative relationship can best be expressed in behalf of the promotion and administration of vocational education.

The professional leaders in vocational education from the three administrative levels throughout the country assisted in carrying out the purpose of this study; namely, to identify and assemble important mandatory and voluntary activities that should be engaged in between the vocational division of the United States Office of Education and the State boards for vocational education. Seventy-eight cooperative activities were identified, and the consensus of the leadership was obtained as to the relative frequency of their judgments ascribing importance to the activities.

Many persons and organizations displayed interest and rendered assistance in the conduct and completion of the study. I am especially grateful for the valuable guidance and diligent assistance of my friend and thesis adviser, Dr. James W. Richardson, Professor of Education, Oklahoma A. and M. College. I am also grateful for the counsel and

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## CHAPTER I

### THE PROBLEM

#### Federal Aid to Vocational Education

Although there has been general acceptance of the principle of Federal aid to the States for vocational education for forty years, there has been, and still is, some disagreement as to the continued need for Federal aid and all that it entails. In fact, differences of opinion have existed for a long time as to the place of the Federal Government in public education in the United States. Even before the birth of the United States of America, while the States were still in a confederation, the ordinances of 1785 and 1787 provided aid for education to the Territories. In practically all subsequent congressional acts admitting States to the Union, starting as early as 1802, Congress either aided the States or required the States to provide aid to education. Despite some basic philosophical differences, the United States Congress began a modern form of Federal grants-in-aid to States for education, beginning with the Morrill Act of 1862. Among these various forms of aid, vocational education has been one of the most prominent. (12, p. 571-576)

## Statement of the Problem

Serious questions have arisen from differences of opinion as to the responsibility of the State and of the Federal Government, in relation to cooperative activities that should exist between the Division of Vocational Education of the United States Office of Education and the State boards for vocational education, in the promotion and administration of vocational education.<sup>1</sup> This study, therefore, is concerned with the problem:

What mandatory and voluntary cooperative activities, as defined by professional vocational educators, should be engaged in between the Division of Vocational Education of the United States Office of Education and the State boards for vocational education, to carry out the provisions of the Smith-Hughes and George-Barden Acts?

### Basic Assumption of Cooperation.

Cooperation between the Federal Government and the States is inherent in the basic Smith-Hughes Act, Public Law No. 347, 64th Congress, as evidenced by the preamble to the act. It states,

An Act to provide for the promotion of vocational education; to provide for cooperation with the States in the promotion of such education in agriculture and the trades and industries; to provide for cooperation with the States in the preparation of teachers of vocational subjects; and to appropriate money and regulate its expenditure. [ Underlining is supplied here and hereafter by the author to give special emphasis. ]

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<sup>1</sup>See memorandum, July 1953, dealing with vocational education, by Council of State Governments, Chicago, Illinois, upon request of a Commission on Intergovernmental Relations, established by the Governors' Conference in 1951.



Sections 1, 2, 3, and 4 of the parent act include the clause, "...for the purpose of cooperating with the States." Section 5, which provides for the States' acceptance of the act's provisions, describes the State board as one "having all necessary power to cooperate." Section 6, describing the Federal Board for Vocational Education, states, "The Federal board shall have power to cooperate with State boards in carrying out the provisions of this Act." [ This power has been transferred from the Federal board to the Division of Vocational Education of the United States Office of Education, by Presidential Executive Order No. 6166, in 1933. (27, p. 2) ] Continuing in like manner, Section 7, which appropriates \$200,000 annually for administration of the act, refers to, "...for the purpose of making, or cooperating in making, the studies, investigations, and reports provided for in Section 6..." Section 8 provides that the States shall prepare and submit plans and reports for the review of the Federal board, a mandatory cooperative activity. Many other references in the remaining sections, 9 through 18, of the Smith-Hughes Act, allude to the basic consideration of cooperation between the Federal Government and the States, in the promotion of vocational education.

Since 1917, all of the States, possessions, and the District of Columbia have approved legislation accepting the provisions of the Federal acts; hence, paving the way for cooperative activities between the States and the Federal Office. (12, p. 182)

### Basic Assumption of National Concern

Vocational education has been considered a matter of national concern in the United States for more than a hundred years. The first evidence of this appeared in a manual labor education movement among unorganized craft groups as early as 1820. The manual labor education movement was an effort to introduce organized trade instruction into certain schools. Actually, trade training was borrowed from England, where it began in 1798 as a mechanics institute. In England, the idea was one of conducting evening schools for mechanics and craft workers. After 1820, mechanics institutes began to appear in the United States, aided by private philanthropy. They flourished for a time, but only a few survived to become permanent institutions.

(12, p. 11)

Fundamentally, the movement represented the desire of industrial and agricultural populations to improve the social and economic conditions of the common man through education. The early efforts were associated with providing elementary schools for the children of mechanics, particularly indigent workmen. The rise of the free public school solved this problem for the working man. Later, the attempts were devoted to providing extension training for mechanics. (4)

Following the institutes came the lyceums, the Chautauqua, and then the public forum. The importance of the manual labor education movement and these institutions should not be discounted as to their

influence as forerunners of our present day and evening industrial schools. All helped to build up an American ideal of popular education and placed emphasis on acquiring useful knowledge.

As various educational institutions came into existence, phenomenal industrial and commercial development took place in the United States. All through the 19th century, enormous population growth, vast natural resources, expanded markets, and developed transportation facilities combined to bring about the greatest and fastest economic development the world has ever known. Labor, education, and government were also constantly changing throughout this rapid growth. Industrial jobs increased in number tremendously, especially for skilled and semi-skilled craftsmen. Home sources of skilled labor were inadequate, and more and more skilled craftsmen were recruited and imported from abroad.

Out of this national occupational context and the inherent problems, industry, education, and government finally combined to bring about Federal aid to vocational education in 1917. The 1914 Commission on National Aid to Vocational Education was appointed by President Woodrow Wilson to study several questions, among which were:

1. Is there a need for vocational education in the United States?
2. Is there a need for national grants, stimulating the States to give vocational education?

The answers and conclusions of this study are well known to vocational educators throughout the country, as published in the report

of the 1914 Commission on National Aid to Vocational Education, to the 63rd Congress, volume 1, Report of the Commission, and volume 2, Hearings Before the Commission. (14, p. 13) A summary of their findings justified national grants by reason of:

1. The urgency of the demand for the effective training of our workers, which the States cannot meet in time without Federal encouragement and aid.
2. The interstate and national character of the problem, due to its nationwide interest and importance.
3. Abundant precedent, in appropriations by Congress throughout our entire history, for educational purposes, and in cooperation between the Federal Government and the States, where team play was necessary to handling matters that could not be as well handled by the States alone.
4. The successful results to the Nation, as well as to the States, of previous grants for educational purposes.

The report of the 1914 Commission on National Aid to Vocational Education revealed an overwhelming public sentiment in favor of national grants. Subsequent to the report and the passage of the Smith-Hughes Act, in 1917, the events of World Wars I and II, in connection with the need for training was production workers, firmly established national concern with vocational education. This conclusion was recognized in part, even by the negative majority report of the

Commission on Intergovernmental Relations, in 1955:

The Commission recommends that legislative action be taken to limit Federal grants-in-aid in behalf of vocational education to subjects vested with a clear and special national interest, and to establish new categories of Federal grants only to stimulate forms of training especially important to the national interest.

The Commission did not specify what forms of vocational training have or do not have "clear and special national interest." (30, p. 191)

Dr. William Anderson and Congressman Brooks Hays, of the same Commission, commented as follows:

We accept the recommendation, although with some misgivings. We believe that the major subjects of vocational education now partly supported by Federal grants-in-aid are vested with a sufficient national interest to justify continuation of the grants, and that Congress is most unlikely to establish a new grant in any field of vocational education unless there is a sufficient national interest. (30, p. 191)

Senators Hubert H. Humphrey, Wayne Morse, and Congressman James I. Dolliver, of the same Commission, in a minority report stated their position as follows: (30, p. 191)

In view of the fact that this program was enacted with national initiative and leadership, it would be unwise at this time to abolish or taper off national participation. The seventeen percent Federal contribution is a significant item budgetwise in many of the poorer school districts in rural areas.

The vocational agriculture program, with the attendant programs of the Future Farmers of America, forms the backbone of many high school agricultural instruction systems in rural areas. It has been one of the major contributions to the development of scientific farming. It has been a major factor in increasing our food supply. The home economics, trades and industries, and distributive education programs have to some degree brought about the same benefits.

Since the vocational education program provides scarce vocational skills essential to national defense and the domestic economy,

yet reaches less than fifty percent of the potential clientele, it should be expanded. Not until States have demonstrated their ability to administer such an expanded program should the National Government consider tapering off its leadership and participation.

In fact, the National Government, in cooperation with the States, should explore the other scarce skill areas to determine the national interest and need for expanding the program.

### The Need for the Study

Differences in opinion about Federal-State activities in vocational education do exist among professional educators throughout the country. Serious questions have been raised by general and vocational education leaders as to the need for, and desirability of, certain mandatory and voluntary cooperative activities between the Federal Government and the States, in the promotion and administration of vocational education. These questions have great bearing on whether the purposes of the vocational education acts are being carried out, and subsequently, as to whether Federal aid to vocational education should be continued.

Since passage of the Smith-Hughes Act, in 1917, conscientious efforts have been made by Federal and State leaders to engage in activities, especially on the Federal level, that would enhance good administration and promotion of the program. Early in the development of the program, there was unanimous agreement in the Federal Board for Vocational Education that greatest efforts should be devoted to a policy of developing leadership in the States, instead of one of creating a large Federal staff of outstanding leaders and specialists who would

be expected to carry on the work in the Federal Office and the States. This decision of the Federal board was first implemented by Memorandum No. 42, sent by L. S. Hawkins to the director of the Federal board, on December 29, 1917. It stated, in part:

The State board is an administrative body and is responsible, through its agent, for the supervision of vocational schools receiving money under the Smith-Hughes Act. The agent acting for the State board is then primarily an administrative officer and, presumably, would be charged not only with the supervision of the vocational schools, but also the teacher training. (12, p. 261)

In a later memorandum by Hawkins, No. 82, dated July 2, 1918, the point was made that the larger part of the supervisory function was really an aspect of teacher training. The significant statement, with such far-reaching effect, is quoted:

Since supervision is, in the main, a teacher-training function, even though it deals with teachers who are already in service, it would seem advisable to make the teacher-training funds available for the use of State boards in the maintenance of supervision as a phase of the teacher training.

This proved to be a wise decision, as demonstrated by the substantial development of the program under numerous capable State and local leaders.

Through the Federal board policy of stimulating the development of leadership in the States, administrative and supervisory staff leaders increased in number and assumed more and more responsibility for the expansion and improvement of vocational education programs. At the same time, there was but a slight increase in staff on the Federal level, and the Federal Office withdrew more and more from involvement in

State and local program matters. These contrasting situations presented a problem of how to obtain and keep good balance in the promotion and administration of vocational education in the Federal-State cooperative relationship, which had been deemed to be so valuable and effective.

Some vocational educators thought the Federal Office should withdraw as much as possible from program problems in the States, so that there would be no tendency toward domination and control of State programs. Other vocational education leaders felt that such action would be an abdication of leadership, which, in turn, would ultimately affect the program negatively. Between these two extreme points of view lay the basic question: What activities should the Federal Office engage in cooperatively with the States, so as to avoid the threat of control or domination, and at the same time, carry out the fundamental charge of the Smith-Hughes Act, "to provide for the promotion of vocational education; to provide for cooperation with the States..." Too serious a withdrawal might result in the abdication of leadership, and too great a Federal action might mean domination and control.

The problem prompted James H. Pearson, the present Assistant Commissioner for Vocational Education, United States Office of Education, to state,

We anticipate that the (this) study will give us a basis for working cooperatively with the States in the improvement and further development of vocational education. The study should help to identify areas that seem important and reduce activities that seem of lesser importance. We think this study will help determine



what is to be done and will also give us a basis for determining how it is to be done.<sup>2</sup>

### Hypothesis

Cooperative activities, mandatory and voluntary, between the Office of Education and the States, can be identified, and their importance can be ascertained for the purpose of aiding in the promotion and administration of vocational education, under the Smith-Hughes and George-Barden Acts.

### Purpose of the Study

Specifically, then, the purpose of this study was to identify and assemble important mandatory and voluntary cooperative activities which are, or might be, carried on between the Division of Vocational Education of the United States Office of Education and the State boards for vocational education, so that these agencies might carry out their major responsibilities under the present Federal acts, to promote and further develop vocational education. Further, the study was designed to obtain the collective judgment and opinion of the vocational education leaders in the United States, as to the importance of the assembled activities, with due regard for program requirements and community

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<sup>2</sup>James H. Pearson's letter of January 23, 1956, in response to the author's letter of January 9, requesting Mr. Pearson's comments as to the value of this study.

needs in the States.

### Limitations of the Study

The study was confined to identifying the desired cooperative activities and to determining the collective judgment of the vocational education leadership on Federal, State, and local levels, as to the importance of selected cooperative activities.

The activities in the final check list were limited to those which were:

1. Broad enough to be of interest and significance to vocational educators in the four major service areas; viz, agriculture, homemaking, trades and industry, and distribution.
2. Specific enough to permit ready, practical study and use by Federal and State leaders.

Activities dealing with international education, student organizations, or vocational guidance problems have been excluded, because these activities loom as very large and important separate problems of study.

### Definition of Terms

Vocational education, for purposes of this study, is interpreted to include only those federally-reimbursed programs qualifying under Smith-Hughes and George-Barden funds. These programs are vocational agriculture, vocational homemaking, trade and industrial education, and distributive education. They are referred to hereafter as the

services or the major service areas.

A cooperative activity is defined as a planned joint action between the professional personnel of the Division of Vocational Education of the United States Office of Education and the State boards for vocational education, to assist in administering and promoting vocational education in the States under the present Federal and State legislation. For purposes of this study cooperative activities are classified as mandatory if they are required by law or regulation. They are classified as voluntary if engaged in by choice and mutual agreement. In actual practice, over a period of thirty-nine years, there have been very few activities that are mandatory. Mandatory activities are concerned chiefly with financial, statistical, and descriptive reports and with the requirement to submit State plans. Most of the cooperative activities engaged in between the two agencies over the years have been voluntary. The cooperative activities of the Federal and State staffs are the means by which the purpose of the basic Smith-Hughes Act is carried out.

The Division of Vocational Education of the United States Office of Education was created in 1933 by Executive Order No. 6166, to administer the vocational education program on the Federal level, in lieu of the staff of the Federal Board for Vocational Education. (12, p. 388) Its staff consists of an Assistant Commissioner for Vocational Education, directors of the four major services and their staff members, who perform the field work with State staffs. This division is referred to frequently as the Federal Office.

The State boards for vocational education are the same as State boards of education in every case except in Wisconsin and Colorado, where there is legal provision for dual boards. In all States there are provisions for a staff, consisting of a State Director of Vocational Education and various State supervisors and assistants in the four major service areas of reimbursed vocational education: agriculture, homemaking, trades and industry, and distribution. These boards and staffs will be frequently referred to as the States.

#### General Plan of Procedure

A jury of representative vocational education leaders were asked to suggest mandatory and voluntary cooperative activities which they considered as important to the administration and promotion of vocational education. The suggested activities were revised, refined, and organized into a check list, under seven classifications; viz, Administration, Supervision, Teacher Training, Instructional Materials, Physical Facilities, Public Relations and Research, and Miscellaneous. The check list was submitted to the leaders in vocational education on Federal, State, and local levels, to obtain their judgment as to the importance or unimportance of each of the activities as a joint or cooperative endeavor between the Federal office and the States, and second, as to whether an activity adjudged important should be mandatory or voluntary. Provision was made for a respondent to indicate indecision about an activity.

The preliminary inquiry, the final check lists, and transmittal letters, designed to obtain the suggested activities and the judgments thereon, are to be found in the appendix.

The responses of the vocational education leaders were compared from three standpoints: (1) consensus of all who passed judgment; (2) consensus by governmental levels - Federal, State, and local; and, (3) consensus by regions - regions of the Division of Vocational Education, North Atlantic, southern, central, and western.

#### Plan of Presentation

Subsequent chapters of the study will reveal: (1) the historical background of the problem, including the origin, legalization, and development of the cooperative relationship between the Federal Office and the States; (2) the detailed procedure used to obtain the data about the problem; (3) an analysis and interpretation of the data; and (4) a summary of the findings, major conclusions, and recommendations.

## CHAPTER II

### THE HISTORY AND BACKGROUND

A depth of understanding of Federal-State cooperative activities in vocational education can be gained by examining some of the history and background of vocational education and the events leading to the cooperative working relationships that have developed between the States and the Federal Office.

#### Vocational Education -- A Specific Social Movement

Vocational education, which first received legal sanction in the United States by enactment of the Smith-Hughes Act, in 1917, by Congress, was a strong specific social movement. Certain outstanding events and activities, which led to the passage of the Smith-Hughes Act, reveal the evolution of this social movement into the present formalized public school program of vocational instruction, of less than college grade, administered under a close Federal-State-local relationship.

The National Society for the Promotion of Industrial Education, organized in 1906, with a well-defined goal of Federal aid for vocational education, demonstrated in its activities the pattern of Federal-State cooperative relationship and action, which has since developed throughout

the Nation. Before describing the significant activities of the Society, as related to this study, other social aspects of the vocational education movement should be related.

The origin and early progress of the vocational education movement grew out of at least three general social movements of the industrial revolution in the latter half of the nineteenth and the beginning of the twentieth century. The most important general social movements giving rise to vocational education were: (1) the labor movement; (2) the rise of the middle-class entrepreneur, including the midwest farmer, in the United States competitive market economy; and, (3) universal free public education, with special emphasis upon the broadening development of the secondary school curriculum. These three general social movements have provided the setting in which vocational education in the public schools developed. More specifically, vocational education in the public schools grew out of the dissatisfactions of labor, which involved the desire of labor to enjoy some of the fruits of the growing industrial empire; out of the dissatisfactions of the growing body of industrial and agricultural entrepreneurs, with the lack of attention given by governmental and other public agencies to their production and manpower problems; and out of the dissatisfactions of educators, parents, and students, with the secondary school curriculum and its limited opportunities and goals.

In order to understand more clearly how Federal aid to vocational education and attending Federal-State relationships developed as a

specific social movement, the nature of reform movements, both general and specific, should be examined briefly. General social movements effect reforms in the order of life, through gradual but pervasive changes. New or changed values held by people develop slowly and irregularly, but persistently. Interesting psychological changes provide the motivation for general social movements. Leaders without directive control serve as pacemakers in general social reforms. General social movements involve mass behavior, without formal organization or articulate expression. (4, p. 199-200)

Specific social movements have a specific objective and develop organization and recognized accepted leadership. Through these means, a philosophy, procedures, and expectations are set up. Allegiances and loyalties develop among its members. As organization develops and improves, the specific movement goes through four stages. (16, p. 202-205) Vocational education, a reform movement which grew out of dissatisfactions, hopes, and desires, awakened in general social movements, went through these four stages:

1. Social unrest (1820-1906)
2. Popular excitement (1906-1917)
3. Formalization (1917-1946)
4. Institutionalization (1946 on)

The history of vocational education clearly reveals the process of these four stages. The National Society for the Promotion of Industrial Education was organized in 1906, climaxing a period of unrest. The Smith-Hughes Act, passed in 1917, ended a period of popular excitement generated by the National Society. Formalization took place



between the passage of the Smith-Hughes Act, in 1917, and the passage of the George-Barden Act, in 1946, following the close of World War II. Institutionalization has been under way since the passage of the George-Barden Act.

Of greater interest and importance than the four stages of development are the five general mechanisms and means which caused vocational education, as a specific social movement, to become organized and grow. They are: (16, p. 203)

1. Agitation
2. Development of "esprit de corps"
3. Development of morale
4. The formation of an ideology
5. The development of operating tactics

Again, the history and background of vocational education reveals the development of the movement through these five mechanisms. In fact, the successful development of vocational education, like all other specific social movements, is dependent upon them. These mechanisms establish a program, set policies, develop discipline, maintain discipline, and evoke allegiance. All of them are readily identified in various ways, as the story of vocational education unfolds.

Vocational education, as a social movement which sought to change a limited area of the social order, could be classified as a reform movement, rather than as a revolutionary movement. A revolutionary movement would seek to reconstruct some area of the social order. Vocational Education is not a revolt against the prevailing order or code. It established and maintained respectability by using existing institutions to press for the change.

It established an issue seeking favorable public opinion and making use of the discussion process. It did not seek a change in the social order, but sought to reaffirm some basic ideal values of American society.

#### Vocational Education As A Cooperative Social Movement Legalized

The formalization of vocational education in the United States can best be seen by looking briefly into the three general social movements, in the context of which vocational education occurred; namely, the growth of labor, the growth of the middle-class entrepreneur, including the midwest farmer, and the growth and development of secondary education.

The Growth of Labor - Vocational education had very early beginnings in the story of mankind. Primitive people perpetuated their culture largely through a system of training their youth to overcome the dangers and rigors of their environment. Each new discovery, device, manual skill, or knowledge had to be transmitted from one generation to the next. So, in some respects, "We are not dealing with a new thing in vocational education, but with extensions and developments of a system of training long in use." (12, p. 3)

The earliest forms of vocational education necessarily dealt with the making and using of weapons to obtain food and to provide safety for the group. Almost simultaneously was the training of youth, chiefly by the imitation method, in productive tasks, such as tilling the soil and caring for domestic animals. Hard work on "work tasks" was the

necessity of the primitive youth's day. This virtue developed into the most powerful motive among people in frontier and rural America.

Modern forms of vocational education can be traced to the earliest forms. Farm boys learned farming from their fathers; girls learned the duties and skills of the household from their mothers; and apprentices in the skilled trades learned from the journeymen. Even with the great development of organized training in these areas, many workers in a great variety of occupations still learn their jobs by pick-up methods. Most skilled workers are not trained in formal programs.

(12, p. 4)

In the English Colonies, crafts of many kinds had to be learned by the pick-up method. The apprenticeship system, through the indenture under the poor law, did come to serve the purpose of transmitting craftsmanship in England and in the Colonies, from 1783 to 1830. Apprentices were trained for self-support and literacy.

As civilization developed, more and more organized forms of vocational training appeared, along with a similar development in education. Actually, organized vocational education, which is an efficiency device, does nothing new, but strives to develop skill more efficiently. The social and economic efficiency concept has led to a dynamic system of public vocational education. This concept is the basis for the ideology and philosophy developed in behalf of public vocational education in the United States. (12, p. 5-6)

In 1820, when perhaps the first vocational education movement

(manual labor education) was noted in this country, the United States was already involved in the industrial revolution. The population had risen to 9,638,453, and the frontier had moved westward beyond the Mississippi River. The great natural resources were the fishing banks in North America, the forests, the rich soil and favorable climate, coal and iron, petroleum, copper, silver, and gold. These, combined with an energetic, resourceful, ingenious, ambitious people, set the stage for the greatest economic development in the history of mankind. In short, the new-found great natural wealth, the energy and intelligence of the pioneer settlers and immigrants, combined with the policies of Federal and State governments in encouraging the spirit of free enterprise, constituted the factors to which the country's subsequent economic greatness could in large measure be attributed.

(19, p. 319)

Despite the great advance of industry between 1815 and 1850, factories in the United States were smaller and produced fewer and more inferior goods than the European countries. (19, p. 375) The labor problem was complicated by the attraction of free land in the West. Skilled labor was so extremely scarce that most of it was imported from Europe. Unskilled labor was being supplied more and more in the South by the use of slaves. As the population moved westward, the distribution of goods became more difficult, and serious transportation problems developed.

By 1861, the population had reached thirty-one million, of which

about 4,500,000 were slaves and 4,000,000 were foreign-born. Badly needed manual labor was supplied by a large immigration of Irish, German, English, and French. Some of the immigrants brought developed trade skills, business experience, and capital. With the exception of the textile industry in the New England States, most of the manufacturing plants were small and widely distributed through the East and Middle West.

In the New England States, the wage-earning class was becoming distinct from the capitalist class, and trade unions were formed to increase wages and shorten hours. It is significant that much of the early impetus in the vocational education movement came from the New England States, particularly Massachusetts.

The Civil War had marked effects upon industrial development and political institutions as well. The slave system was broken up and hired labor substituted for it. The South was economically distraught, and a long time ensued before agriculture was revived on the new basis. Industrial progress was hastened by the war, and the United States became strong enough to compete with the greatest nations of the world for markets. Increased manufacturing costs brought about high tariffs on imports. The slow, but steady migration from rural to urban life began. In 1880, the percentages of rural and urban population were 70.5% and 29.5%, respectively. By 1910, the population percentages were 53.7% rural and 46.3% urban, nearly an equal distribution. In 1950, the urban percentage exceeded rural,

reaching 64%. (1950 United States Census Report)

Industrial jobs increased rapidly. Skilled craftsmen increased rapidly in number between 1870 and 1910 in such trades as toolmaking, carpentry and other building trades, plumbing, electrical work, sheet metalwork, foundrywork, and patternmaking. Semi-skilled workers increased even more rapidly, and the gradual decline in percentage of unskilled labor began to take place. In response to demand, many new skilled crafts were appearing on the industrial scene, such as photoengravers, pressmen, rollers, compositors, auto mechanics, cement masons, millwrights, structural steel workers, electric typers, and electrical linemen. Home sources of skilled labor were inadequate, and more and more craftsmen were recruited from abroad. Shipfitters, loftsmen, and draftsmen were sought from England, Ireland, Scotland, and the Scandinavian countries. Toolmakers, diemakers, and machinists from Germany; glassmakers from the Balkan countries; tile setters and stonemasons from Italy were just a few of the examples of imported skilled labor. In this national occupational context, labor groups joined in 1917 with industry, education, and government to help bring about Federal aid and Federal-State cooperation in vocational education.

The Growth of the Middle-Class Entrepreneur - Another important general social movement which helped to give rise to vocational education and a Federal-State cooperative relationship was the rapid growth of middle-class industrialists, businessmen, and midwest

farmers. The training needs of this new and expanding group of entrepreneurs in America had a great influence in the ultimate legalization of vocational education, through the passage of the Smith-Hughes Act.

The embargo of 1808 and the European wars, which ended by 1830, had stimulated home manufacture and business tremendously in this country. Three different systems of manufacturing already were producing goods: (1) the household system, (2) the shop or craft system, and (3) the domestic system. The use of machinery developed rapidly, particularly in the textile industry; for example, the 8,000 spindles, in 1808, for cotton yarn, increased to five million in 1815. Factories developed rapidly, especially in the New England States. Tariffs were established in 1816 to offset a commercial crisis, brought about by the dumping of great quantities of foreign goods in this country.

After the depression in 1815 and 1816, industrial establishments increased in number and size. A long series of labor-saving machines improved the quality of goods, increased the quantity of the output, and reduced the cost of production; consequently, the household and domestic systems of manufacturing began to disappear.

Westward expansion stimulated the development of transportation and manufacture and opened up much better farmland. The East was driven into more and more manufacturing. Transportation in the form of better roads, turnpikes, rivers, and canals, the steamboat, and the railroads brought about the specialization of each part of the country, in the line of production

for which it was best fitted. (19, p. 378-387)

By 1861, farming in the New England States changed from the raising of grains and livestock, to fruits, vegetables, and dairy products. The South continued to increase the production of cotton, tobacco, and sugar, primarily through the use of slave labor, but not without the labor-saving inventions, such as the cotton gin. In the Middle West, the farms were of moderate size and worked mainly by the owner, his family, and some hired labor. A variety of crops were produced, but the staple crops were chiefly wheat, corn, and meat. The threshing machine, the reaper, and many other farm machines, along with a rapidly growing market and improved transportation, enabled the midwestern farmer to make a prosperous living. Up to 1861, the Far West or Pacific coast had played little part in the industrial development of the United States. (19, p. 388-395)

From 1865 to 1914, industrial and commercial development in the United States was enormous. The population had reached one hundred million; immigration amounted to 500,000 to 1,000,000 annually by this time. A number of territorial gains had been made (Alaska, Hawaii, Puerto Rico, and the Philippines). All of these factors -- population, vast resources, expanded markets, developed transportation facilities, especially merchant marine and railroads -- combined to bring about the greatest and fastest economic development the world had ever known. Along with these essential factors came competition, more and better machinery, large scale production, utilization of



by-products, standardization and specialization, interchangeability, big and small business, trusts and monopolies, division of labor, and, not least, increased and improved management efficiency.

Out of this national context in business, manufacturing and farm development, organized groups joined hands with labor and education groups to give support to the proposal of Federal aid to vocational education.

The Growth of Secondary Schools in the United States - A thorough understanding of public vocational education and its Federal-State cooperative relationship would certainly not be complete without a brief description of the development of the public secondary schools of the country, during the nineteenth and early twentieth centuries. Like all other phases of American life, as the problems of society became more complicated, so the education of our people became more difficult and required more time. The American people have had a strong confidence and faith in education, based on the fact that education does something beneficial to people, and for them.

From a few years of schooling to master the rudiments of the three R's, early in the nineteenth century, there grew the concept of universal education, or "education for all the children of all the people," involving many years of school attendance. As a result of this growing concept, the public schools changed from a Latin grammar school, for professional purposes, to a broad program of universal education. Along with the previously described phenomenal growth of commerce,

business, and industry, came such educational mandatory standards as compulsory attendance laws, fixed length of the school year, regulation of school building construction, state-wide certification of teachers, determination of the general curriculum requirements, and establishment of minimum salary laws for teachers.

Of greatest significance, especially to this study, is the unprecedented growth of secondary education. In 1880, there were about 800 public high schools in the entire United States; twenty years later, in 1900, there were 6,005. In 1889-1890, public and private high schools enrolled only seven percent of the boys and girls, 202,000 between 14 and 17 years of age, as compared with 73 percent in 1949-1950. By 1917, there were 14,443 public high schools of all types, with a total enrollment of 1,735,619. By 1950, the growth in high school enrollments was even more phenomenal, as shown by the fact that the total number of youth had increased by 60%, while the high school enrollment had increased by more than 1600%. By 1954, the high school enrollment had reached about 7,300,000, in more than 20,000 high schools. (2, p. 9)

Obviously, the objectives and curricula of the high schools continued to change rapidly, and educational leaders were faced with the changing demands of a dynamic society. The broad challenge to the schools and their leaders was to educate all young people for useful participation as happy citizens in a complex world. It was in this public educational setting that vocational education appeared as a

specific social movement.

### The Influence of Commissions Toward Legislation

The forces of the three general social movements affecting vocational education were evidenced by several important commissions and organizations. A full understanding of the legalization of vocational education and its Federal-State cooperative relationships would not be possible without examining the influences of these commissions and organizations.

The Douglas Commission - By 1906, evidences of the impact of the various social movements began to appear. The famous Douglas Commission of Massachusetts, established in 1906, made a study and a report of the educational services of Massachusetts, with emphasis on the place of and the need for industrial education in the public schools of the State. The report of the Commission, and subsequent developments in the State, led to:

the rapid development of a comprehensive scheme of vocational education, in connection with the public schools of Massachusetts, which served as a model for study and inspired action by other states. (12, p. 36)

The National Society for the Promotion of Industrial Education - Often overlooked in the development of Federal-State relationships and activities in vocational education is the early work of the National Society for the Promotion of Industrial Education. Although much has been written about the Society and its successful efforts to bring about

the passage of the Smith-Hughes Act, not sufficient attention has been given to the relationships and activities on a national basis that were established and engaged in between the Society and the States in the period 1906 to 1917.

In 1906, very shortly after the establishment of the Douglas Commission, a group of educational, industrial and labor leaders organized the National Society for the Promotion of Industrial Education. Charles R. Richards, Teachers College, Columbia University, was the great unselfish leader of this movement. His realization that the States would have to be stimulated to act in the promotion of vocational education brought about the national organization. He then conceived the thought that the Nation should establish a partnership in vocational education. (4, p. 62) In February 1918, the Society adopted a resolution, changing its name to the National Society for Vocational Education. In 1926, the National Society for Vocational Education and the Vocational Education Association of the Middle West united to form the American Vocational Association. (4, p. 74)

The purpose or objects of the Society were plainly and simply stated in its constitution, as follows:

to bring to public attention the importance of industrial education as a factor in the industrial development of the United States; to provide opportunities for study and discussion of the various phases of the problem; to make available the results of experience in the field of industrial education, both in this country and abroad; and to promote the establishment of institutions for industrial training. (20)

There is little doubt that in the initial stages of the Society's work

the purposes were limited to education and training for workers in the mechanical and construction industries. However, the Society's management recognized early in its existence that the influence of other occupational groups and interests would play a vital role in obtaining Federal and State legislation for the promotion and support of industrial and vocational education. At its Philadelphia convention in 1912, industrial education, agricultural education, commercial education, and household arts education were included in "a statement of principles and policies that should underlie the legislation for State systems of vocational schools." This followed precedent in the States that had passed legislation up to this time and laid a broad foundation for the promotion of the Federal legislation that came later.

A symposium was published in 1907 that was based upon replies to a letter of inquiry sent to manufacturers and to representatives of organized labor, relative to their opinions on the matter of industrial education. Contained in the symposium were eleven replies received from prominent labor leaders of the manufacturing and construction industries and twenty replies from employers. None expressed opposition to industrial training in schools, but one employer doubted whether the public schools should provide the training. Most of the labor people and some employers opposed the training of skilled workers in schools conducted by employers, but practically all of these were in favor of publicly-conducted schools of this type. Many of the respondents also especially favored evening schools for journeymen and

apprentices. In some instances, a broad foundation in general education, followed by apprenticeship, was favored. A few of the labor respondents expressed a fear that trade schools might be used for purposes other than those for which they were intended. (31)

In addition to the symposium, a "Selected Bibliography on Industrial Education" was published by the Society, in 1907. This publication contained the names of publications, with annotations, relating to apprenticeship, industrial education in Europe, industrial education for girls, studies of the general problem of industrial education, relation of the public schools to industrial education, technical education for industrial workers, and other aspects of the movement. The current interest in the problem was well illustrated by the dates of the publications contained in the bibliography. Of 27 books and Federal and State government reports, 21 were dated between 1900 and 1907, and of 88 articles and addresses listed, 74 were dated after the year 1900.

Bulletin No. 4 of the Society, "Industrial Training for Women," was also published in 1907. This bulletin clearly indicated the trend toward the employment of women in productive industries, largely as operatives. It contained specific suggestions on how trade training for women could be organized and conducted.

The proceedings of the meetings of the Society indicate the consideration of many problems similar to those of today. The wage earner, the school, and industry were frequently considered. Patterns of

organization and the operation of trade schools were often discussed. Much time and serious consideration was given to the matter of surveys. A number of surveys were actually conducted in cities where the Society held annual meetings. Problems of State organization and legislation were considered. Members of the Society lent aid to the States desiring assistance with legislation for industrial education. Exhibits, too, were a part of the meetings. There was a constant effort to obtain Federal monies for the benefit of vocational education. Dual system of administration, versus the single board plan, was aired at the meetings. The minutes of the meetings reveal the breadth and depth of the thinking of early leaders.

It is evident that every effort was made to retain and increase the interest of all groups that could further the purposes of the Society. Actions and developments in the States and local communities and by the Federal Government, with respect to trade and industrial and vocational education, are ample evidence of the powerful influence the management and work of the Society generated.

During the ten years of the Society's activities, twenty-five bulletins were published and distributed to members without charge, and while the supply lasted, additional copies could be obtained upon request.

Of the bulletins issued, eleven were the proceedings of the meetings, three were bibliographies or directories. The other eleven had to do with legislation on industrial education in the United States, training girls and women for industrial work, educating workers in the shoe

industry, continuation schools in Munich, selection and training of teachers for State-aided industrial schools. The last two bulletins only, issued in 1917, related to the general subject of vocational education. These bulletins had to do with evening vocational courses for girls and women, the Smith-Hughes law, and with what States had to do to take advantage of its benefits.

By 1917, all but nine of the twenty-five bulletins were out of print, and five of these were proceedings of the annual meetings.

In addition to its own publications, the Society distributed many publications relating to the need for and value of industrial education that were issued by other agencies, both public and private.

The bulletins, issued by the Society, and other publications distributed were among the most effective promotional methods, both within the memberships and outside. Their value was inestimable, both in the promotion of State legislation and State program operation and in acquainting persons of influence with the objectives and work of the Society.

Surveys were made in connection with the annual meetings of the Society, at Richmond, Virginia, Minneapolis, and Indianapolis. The secretary and other members conducted or assisted in conducting surveys for vocational education in a considerable number of other cities and States. The survey became recognized as an ideal medium of publicity for the promotion of industrial and other phases of vocational education. During the survey, the citizens of the communities



involved, and many others, learned much of the purposes of industrial and other areas of vocational education, and some things about its values. It was probably this "double-barreled" purpose that prompted the Society to make a survey of the locality, immediately prior to each of the last three meetings.

The publicity of the Society was extensive. In 1911, Secretary J. H. Cone reported issuing a total of 1,500 news items and that abstracts of the convention addresses were used by 2,500 newspapers. During the same year, 21,000 circulars, descriptive of the work of the Society, were sent to selected persons and organizations.

In 1912, Secretary Prosser reported that he had traveled 50,000 miles, made addresses in fifteen States, dealt with problems connected with vocational education in a dozen other States, and in not less than fifty of the leading population centers of the country had made more than one hundred addresses before national, State, and local gatherings, representing labor, manufacturing, commercial, social, and educational interests. He also reported that in the same year he had set up points of helpful cooperation with every national organization interested in the promotion of practical and civic education for wage workers.

In 1914, Secretary Prosser reported distribution of press items on the work of the Society, and that more than 500 newspapers and periodicals in all parts of the country had printed them, sometimes as editorials. He also added that requests for further information, resulting from this publicity, had at times taxed the office of the Secretary.

Two conclusions can certainly be drawn from these and other publicity efforts of the Society. The first is that the Secretary and some others did a lot of most effective publicity planning that involved a tremendous amount of hard work. The second is that this effort contributed greatly to the ultimate outcome in 1917.

At almost every meeting of the Society, after its first meeting, mention is made of assistance to the States in planning State legislation for the promotion and support of industrial and vocational education, or revision of existing legislation. The several reports of the Secretary of the Society indicate that assistance in legislation had been provided in seventeen States -- California, Connecticut, Delaware, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Michigan, Missouri, New Jersey, New York, Ohio, Pennsylvania, Virginia, Washington, and West Virginia. At the meeting in 1914, Secretary Prosser reported that the growing prestige of the Society and the confidence of the public in it were shown by the fact that during the year the office was flooded with requests from the States for assistance in writing laws.

Working cooperation, of one kind or another, was established by the Society with a large number of national and local organizations, agencies, and institutions. Among these were included industrial and commercial organizations, representative of labor and employers; Federal and State governmental agencies having an interest in industrial employment and training; civic, social, and consumer organizations; educational institutions and associations; and State and local

officials and boards having an interest in or responsibility for administering programs of vocational education. The intense public and political interest that culminated in the passage of the State and Federal laws and grants for vocational education are indicative of the benefits derived. (20)

The 1914 Commission - In 1914, President Wilson established a commission for the study of Federal aid to vocational education. All during this early period of the twentieth century, many organizations were expressing outspoken interest in the development of industrial education programs in the public schools, for both young people and adults.

Among these were: National Metal Trades Association, National Association of Manufacturers, American Federation of Labor, National Society for the Promotion of Industrial Education, National Child Labor Committee, American Association for Labor Legislation, Southern Commercial Congress, United Textile Workers of America, American Founderman's Association, and Chamber of Commerce of the United States. In addition, testimony was given before the Commission by educators and by representatives of the civilian departments of the Federal Government.

One of the approaches of the Commission to illustrate the need for vocational education was a survey of each State to determine the extent to which occupational education and training were being provided by the local communities in the fields of trades and industries, commerce, agriculture, and household arts. Twenty-one States reported public

school training in one or more of the following types of programs: all-day preparatory, part-time or continuation, or evening extension. Most of the States reporting training in all-day schools had State laws for vocational education in 1914, and practically all States that reported part-time, continuation, and evening schools had special laws to authorize the operation of these schools.

The report of the Commission contains a record of twenty-three national organizations that endorsed the idea of national grants for vocational education. In addition, testimony was given before the Commission by educators and representatives of Federal Government civilian departments. The necessary occupational training systems for military personnel were described by representatives of the United States Navy and the United States Army. Thus, there was evidence and support established that vocational education was of national concern.

A summary of the findings of the Commission follows:

The report of the Commission, consisting of two volumes, was a comprehensive statement of the need for Federal aid for vocational education and of the problems involved in giving such aid. Volume 1 is the report of the Commission; volume 2 is a complete record of the hearings before the Commission. The Commission found there was a great need for the kind of vocational education which would prepare workers for the more common skilled trades and occupations in the United States. In the opinion of the Commission, a program of vocational education was needed in order to conserve and develop our resources; to promote a

more productive and prosperous agriculture; to prevent waste of human labor; to supplement apprenticeship; to increase the wage-earning power of our production workers; to meet the increased demand for trained workmen, and; to offset the increased cost of living. The report suggested that vocational education was needed as a wise business investment; that our national prosperity and happiness were at stake; furthermore, that our position in the markets of the world could not be maintained without an adequate supply of trained workers.

The Commission reported that the social and educational needs for vocational training were equally urgent, and that an overwhelming public opinion and sentiment showed the need for vocational education in this country.

While the Commission's report recognized that training for all the different vocations was important and desirable, agricultural and trade and industrial education were most in need of national encouragement at that time. It was suggested that the best way to aid the States in giving vocational training was by Federal grants for the preparation of efficient teachers, and grants for the part-payment of teachers' salaries, recognizing that the teacher is the greatest single factor in good instruction, and because higher salaries would be required to obtain qualified vocational teachers.

The Commission, furthermore, reported that inasmuch as the States were facing many new and difficult questions, in connection with efforts to develop agricultural, trade and industrial, commercial, and

home economics education, the Federal Government should aid the States in this work, by grants, expended through Federal agencies, for studies, investigations, and reports, in order that the States might place the work of their vocational schools on a scientific and business-like basis. (14)

The 1914 Commission report, along with support from interested people and organizations in the various States, finally resulted in the passage of the Smith-Hughes Act, in 1917, which provided for Federal aid to the States in the establishment of vocational agriculture, home-making, and industrial programs in the public schools. The Smith-Hughes Act established the basis for the Federal-State and, ultimately, the State-local administrative relationship of public supervision and control in vocational education. / Thus, the specific social movement, vocational education, became legalized.

#### Federal-State Cooperation - Development

The early Federal Board for Vocational Education, established in 1917 under the law, and composed of the Secretary of Agriculture, Secretary of Commerce, Secretary of Labor, United States Commissioner of Education, and three presidential appointees, representing manufacturing and commercial interests, agriculture, and labor, initiated vocational education programs throughout the country. This early board was empowered to administer the Act; to make studies, investigations, and reports; to cooperate with State boards for

vocational education; and to make annual reports to the Congress, on the administration of the Act and the expenditure of the funds allotted to each State.

The basic relationships set up with the States by the Board and later carried on by the United States Office of Education, were firmly established, despite changes in administrative structure on the Federal level. As indicated in chapter I, through Executive Order 6166, the powers of the Federal board were transferred to the United States Department of Interior in 1933. The Secretary of Interior, Ickes, then placed the administrative functions of the Federal board in the United States Office of Education, as a vocational division, to administer the program on the Federal level. On May 16, 1946, Reorganization Plan No. 2, promulgated by President Truman, abolished the Federal board and its functions. (12, p. 159-160)

By the end of 1917, all of the States had passed acceptance acts and had designated State boards to deal with the Federal Office in developing vocational education programs. The Federal board, in connection with the States, established a basic policy bulletin, which described the cooperative effort with the States and served as a set of rules and regulations and standards for the States and local communities to observe. The early policy bulletins were developed mainly out of questions raised by the States and answered by Federal board staff members, L. S. Hawkins and Charles R. Prosser. It was firmly established that the board, and later the vocational division of the United States Office of

Education, was to be a professional service office, to help the States develop high-standard programs.

Federal-State Cooperation in Vocational Education in Wartime. Although vocational education was not designed or intended to serve as a war program, the Federal-State cooperative relationships and activities came into existence during the initial stages of a world war. At the first meeting of the Federal board with its staff, in the summer of 1917, the discussion centered around two main topics: first, the extent to which the vocational education program could assist with the war effort; second, the possible development of a program for disabled ex-servicemen and persons disabled in industry. As a result of these discussions, there was agreement that, regardless of what other responsibilities might be put upon the board, its primary aim should be to promote vocational education in cooperation with the States, as set forth in the Smith-Hughes Act; and further, that the members of the vocational education staff should devote their efforts exclusively to this purpose.

In the light of the events of the following three years, a strict adherence to this policy carried the Federal-State cooperative vocational education program through its first major crisis. Informed members of Congress were able to point out that a transfer of the entire rehabilitation soldier program to another agency would still leave intact the original program, for which the board had been created to administer. On the other hand, it was fortuitous that the war training



program was of such a nature that it stimulated both the Federal board and the State boards in the initial stages of the Federal-State cooperative program. The fiscal year 1918 was one-third past when the first conferences of the Federal and State boards were held. Few of the States had in operation, at that time, schools and classes eligible for reimbursement. Nearly all subsequent enrollments for the fiscal 1918 were in war training classes. Out of a total of 86,830 males enrolled in trade and industrial classes for the year, 61,151 males were in war training classes.

It can be further noted that even the States reported an unexpended balance of nearly \$200,000 out of the total appropriation of \$564,499.89 for trade and industrial education, for fiscal 1918. As to the war training program itself, contrasted with the war production training program (VD-ND) of World War II, the following characteristics are worthy of note:

1. All schools and classes for which reimbursement was made from Federal funds were organized under the State plans and policies required under the Smith-Hughes Act.
2. Cost of operation was on the dollar for dollar matching basis set up in the Smith-Hughes Act.
3. Classes were open only to conscripted men.
4. Executive officers of State boards were appointed by Federal board, at a salary of \$1 per year, for the purpose of war training work.

One of the earliest Federal cooperative activities which also assisted the States occurred during World War I, in cooperation with the War Department. The Federal board, through a group of special agents, prepared a series of nine bulletins (instructional material), based on requirements of Army occupations. These monographs were used in classes of enlisted men, organized and conducted by the Army, as well as in classes conducted by State boards. Another cooperative program of the Federal Board with the United States Shipping Board (Emergency Fleet Corporation) resulted in the preparation of instructional materials for shipbuilding occupations. Shop work was done on the job in the shipyards by the training section of the Shipping Board, and the related work in part-time and evening classes was conducted under the supervision of the State Board.

In the years intervening between World War I and the present writing, certain indirect results of the training experiences of that period have become apparent. Military and political leaders have become aware of the defense potentialities of a strong national program of vocational education, centered in States and local communities, and coordinated at the Federal level; and the whole country has become vocational-education conscious. Industry and business, as well as our schools, have greatly extended and improved their training programs; emphasis has moved from preparation of unemployed youth for initial employment, to the training of employed youth and adults; the importance of training supervisors, lead men, and foremen has become recognized. That

vocational education is a part of the preparation for living needed by all normal individuals, has gradually replaced the idea that it is a device for keeping youth in school, or for taking care of delinquent, incorrigible, or mentally incompetent pupils, enrolled in the secondary schools.

War Production Training Program, World War II - At the advent of World War II, the Federal-State cooperative program of vocational education was in full operation in all 48 States, the District of Columbia, Hawaii, and Puerto Rico. Trade and industrial education showed an enrollment of more than seven hundred thousand students, with fifteen thousand teachers working and many more in training.

A survey of vocational school facilities, undertaken by the United States Office of Education in the fall of 1938, at the request of the War Department, showed, that during the summer, when regular classes were not in session, it would be possible to train 150,000 men in occupations essential to national defense. When this report was made available, in the spring of 1939, the States were in no financial condition to support such an extensive program. In less than one month from the release of the first announcements, the trade and industrial programs in the vocational schools were in full swing on a special program of national defense training, to be supported entirely from Federal funds, appropriated by Congress for that purpose. Hundreds of vocational schools were embarked upon a program of defense training, with an initial enrollment of nearly 75,000 men.

This program was operated under conditions quite different from those of 1917-18. All costs of instruction were paid from Federal funds; classes were open to all persons employed in or eligible for employment in essential industries; the program was operated entirely by and through the States; the content of courses was determined by local supervisors and teachers, in cooperation with local employers; training of military personnel was a small part of the program; pre-employment courses were directed toward initial employment, and supplementary courses were offered for persons employed. Enrollments in the latter type of course (nearly five million) exceeded enrollments in pre-employment courses (nearly three million); Federal money was allotted to each State on the demonstrated training needs, rather than population.

After the program started, in the summer of 1940, with buildings and equipment furnished by State and local communities, it became apparent that, when regular classes started that fall, it would be necessary to provide additional space and equipment, if the war production training program was to assume anything like the proportions predicted by both military and civil government forecasters. As a result, Congress extended authorization for rental of space and purchase or rental of equipment, October 9, 1940. It was also soon evident that the predicted expansion of the program would bring about a shortage of teachers.

This problem was solved by showing industry that by loaning the school one skilled worker to become a teacher, there could be dozens

of initially trained workers prepared in a relatively short time. Many of the regular day-school teachers were also employed on additional shifts in the war training program. As the war progressed, it became increasingly difficult to secure tools and machinery. War production classes not only produced many machines and tools needed for training, but, in numerous instances, supplied the Armed Forces and essential industries with much-needed equipment.

At the close of the war, Congress made the most economical, the quickest, and the most equitable disposition of surplus material on record when it passed an act, known as Public 124, approved July 3, 1945. By this act, all supplies and equipment purchased by the State or local community with Federal funds, under the provision of the War Production Training Acts, remained the property of the purchaser.

It cannot be stated too forcibly or emphasized too strongly that in putting over this extensive program of war production training, known in legislation as Vocational Education of Defense Workers (VE-ND), Vocational Training War Production Workers (V. T. W. P. W.), the identical Federal-State cooperative agencies were, at the same time, carrying on the peacetime "regular" vocational program, which had been developing over the previous quarter of a century.

Out of a three-day conference, in Washington, June 24-27, 1940, came practically all the basic policies which carried the war training program through nearly five years of a successful operation. Probably the third crucial period in the history of Federal-State cooperative

program of vocational education came in 1943, when an attempt was made to transfer the program to the War Manpower Commission. When the members of Congress were informed of the extent to which the administration and supervision of the war production training program was dependent upon the regular program, they definitely decided to leave it in the hands of the regularly constituted vocational authorities.

The leadership in vocational education, in general, has been sensitive to changing needs. During World War II, the changes in training needs were numerous and rapid. Training had to be anticipated. Only an experienced nationwide organization could have successfully put over such a program of training for the war emergency. (36)

Throughout the forty years' existence of the Smith-Hughes Act, the role of the Federal Government in the promotion and development of vocational education has been, with some exceptions, characterized by excellent leadership and cooperation, rather than control and domination. The policy bulletin, more familiarly known as Bulletin No. 1, has been revised periodically, so that the present bulletin is the fifth. (1917, 1922, 1926, 1937, and 1948) At the present time, the 1948 bulletin is under revision, with the assistance of the State and local communities. It is helpful in understanding Federal-State cooperative relationships and activities to examine the procedure under which the sixth bulletin is being prepared. The following is the procedure, as described in Circular Letter No. 3124, dated March 20, 1956, issued by the Assistant Commissioner, to State directors of vocational education:

Changing conditions and experience with current policies for the administration of vocational education indicate the need for a revision of the policies for the administration of vocational education under the Federal Vocational Education Acts. The enclosed mimeographed copy is a preliminary draft of such revision.

It is requested that this copy and the additional copies being sent to the State director under separate cover be reviewed in the State by the vocational education staff, members of the State board and any others with whom you may choose to consult. When a consensus has been reached, one copy of this preliminary draft should be marked up and returned to this office not later than April 30, along with a letter of transmittal making such comments as are believed to be significant in the formulation of policies.

It is proposed that the procedures used in developing the 1948 edition of Vocational Education Bulletin No. 1 will be followed in general in the proposed revision. Thus, after we receive the comments from the various states and prepare a second preliminary draft, it is proposed to hold a number of conferences for state vocational education officials for further review. After changes are made on the basis of the discussions in such conferences, a semi-final draft will be presented to an advisory committee consisting of State directors of vocational education and executive officers of State boards for vocational education.

Your cooperation in this revision of policies will be greatly appreciated.

State Plans -- Instruments of Cooperation - The principal instrument which establishes the Federal-State cooperative relationship is what is known as the State plan. Each State prepares a plan outlining the kinds of vocational education for which its Federal and matching State appropriations will be used.

Federal office representatives virtually wrote the early State plans in most of the States, by sitting down with State officers and assisting them in preparing a plan adapted to a particular State. At present, a plan is developed or revised with the assistance of local people. After

the plan is completed, the draft is reviewed by the vocational division of the United States Office of Education, which may make further suggestions and recommendations. Finally, the State plan is approved by the State board and is submitted to the Federal Office for its final review and acceptance. Acceptance of the plan by the Federal Office qualifies the State to receive its allotment of the Federal grants, and becomes a kind of contractual agreement between the vocational division of the United States Office of Education and the States.

A State plan may be revised or amended at any time by the State board, and with the approval of the United States Office of Education. The State board has full authority regarding the expenditure of Federal funds, if they are spent in accordance with the provisions of the approved State plan.

Many of the States have used the State plan as a basis for drafting what is known as a State-local plan. A State-local plan serves as an administrative guide to local districts that are operating various types of vocational education services. The plans describe organization and administration, types of programs, how the various vocational programs will be operated, the plans for training, recruitment, selection and in-service training of vocational teachers, and the minimum requirements for the qualifications of teachers and supervisors and directors. Each year, local school authorities submit a request for approval of reimbursement for a local program of vocational education, which is to be operated in accordance with the provisions of the State-local plan. This



is really a form of a State-local mandatory cooperative activity.

Federal funds are sent to State Treasurers, who are designated custodians of the funds under the Federal acts. The basic acts, Smith-Hughes and George-Barden, provide that the vocational education programs must be under public supervision and control, and further, that the instruction shall be of less than college grade. As stated earlier, the philosophy of the Federal-State administrative relationship is simply that Federal and State offices are service offices set up to help the States and local districts meet standards of good programs, not to control these programs.

Local Administrative Responsibility - Since 1917, the professional vocational educator has recognized the principle of administration, that the local school board and its administrator are responsible for all educational programs in their schools, including vocational education classes. What appear to be contradictory to this principle are situations caused by lack of understanding and shirking of responsibility by vocational teachers and school administrators, or by neglect or disregard of recognized standards of effective vocational education instruction.

The promotion of new programs is a major responsibility of the State staff and of the Federal staff. Programs of vocational education may originate through the efforts of local public school authorities; however, many programs have originated through requests from various organizations, such as labor groups, parent-teacher associations, business and industrial firms, and homemaking and farm groups. In

any case, there exists herein a three-way relationship through cooperative activity between Federal and State and local school agencies.

It should be emphasized again that the local board and administrators have complete administrative responsibility for the control of a local program. The vocational teachers are employees of the local board and are subject to all local conditions of employment, in the same manner as other teachers. It is important, of course, for vocational administrators and vocational teachers to understand the inherent differences in the characteristics of vocational programs and other kinds of classes. A thorough understanding of the various types of programs requires the best kind of administrative leadership for the program.

Federal-State-Local Relationships - Most obstacles encountered in establishing effective vocational education programs can be overcome if all those concerned are really interested in providing young people and adults with good opportunities to train for useful employment. Successful operation of vocational classes is largely dependent upon an understanding of the basic purposes of the various types of vocational programs, which are implemented by cooperative Federal-State-local relationships. The cooperation is best described by the exact words of the Foreword in the first Statement of Policies, Bulletin No. 1, of the Federal Board for Vocational Education, issued in 1917. (24)

The Smith-Hughes Act provides a scheme of cooperation between the Federal Government and the States for the promotion of vocational education in the fields of agriculture, trade, home

economics, and industry.

Under this act the Federal Government does not propose to undertake the organization and immediate direction of vocational training in the States, but does agree to make from year to year substantial financial contribution to its support. It undertakes to pay over to the States annually certain sums of money and to cooperate in fostering and promoting vocational training and the training of vocational teachers. The grants of Federal money are conditional, and the acceptance of these grants imposes upon the States specific obligations to expend the money paid over to them in accordance with the provisions of the act.

This cooperation of the States with the Federal Government is based upon four fundamental ideas: First, that vocational education being essential to the national welfare, it is a function of the National Government to stimulate the States to undertake this new and needed form of service; second, that Federal funds are necessary in order to equalize the burden of carrying on the work among the States; third, since the Federal Government is vitally interested in the success of vocational education, it should, so to speak, purchase a degree of participation in this work; and, fourth, that only by creating such a relationship between the central and the local Governments can proper standards of educational efficiency be set up.

#### Agencies of Cooperation

The machinery established by the act is devised to secure effective cooperation in promoting vocational education. The law provides for the appointment by the President of a representative Federal Board for Vocational Education. . . . To provide agencies representing the States, the act requires that State boards of not less than three members shall be created by act of legislature. Each State board is to work in cooperation with the Federal board in carrying out the provisions of the act. . . .

Before this machinery can fully operate in a State, the legislature must create a State Board for Vocational Education to cooperate with the Federal board. After the appointment or designation of such a board, any State may accept the benefits of the appropriations made under the law.

The scheme of education proposed contemplates that each State shall submit to the Federal board a plan outlining the method

by which it proposes to conduct its vocational education activities. These plans the Federal board must carefully examine; and if it finds them to be in conformity with the spirit and purpose of the act, it is authorized to direct that the moneys apportioned to the various States be paid. In other words, partly by the act itself, partly by the Federal board, and partly by the State board in cooperation with the Federal board, standards of vocational education are established meeting the approbation of both the State and Federal Governments. Each in its own field supreme, the State board and the Federal board, in order to function at all, must come together on the ground thus briefly described.

#### The Reassessment of Federal-State Relationships and Activities

The foregoing presentation describes generally how Federal-State relationships developed and became established during peacetime and war. All through the history of the vocational education program, since the passage of the Smith-Hughes Act, there are evidences of the many cooperative activities planned and carried on by the Federal and State offices. The principal joint activities carried on consisted of annual financial, statistical, and descriptive reports, special reports, national and regional conferences for supervisors and teacher educators, program reviews in the field, preparation and publication of professional and technical bulletins, and the preparation and amendment of policies and State plans. Most of these activities were engaged in on a voluntary basis. Only those dealing with the annual financial and statistical reports, and the preparation of policies and State plans, were required by law, and therefore mandatory.

Following the extremely active period of war production training, the amount of funds provided for the operation of the vocational division

of the United States Office of Education reverted to a pre-World War II basis. By this time, salary, travel, and other costs had risen sharply, thereby requiring that personnel and travel be reduced to come within the limited funds. At the same time, there developed a general movement that the Federal Office should not interfere with or dominate State programs. As a result of this combination of factors, there developed a reticence toward the planning of joint activities and a gradual withdrawal of the Federal Office from leadership action within the States. Much of this development was justified by some professional and lay persons, on the basis that in this manner the Federal Office would not interfere with, control, or dominate State programs.

Several years of this apparent withdrawal of leadership by the Federal Office began to result in critical comments from various vocational education leaders on Federal, State, and local levels. In 1951, the Hardy Committee inquiry and report of the operations of the vocational division of the United States Office of Education was quite critical of alleged administrative deficiencies of the Federal Office, especially of the mandatory activities imposed by law, e. g. :

It was also brought out that the Federal assistance given the States in drafting the (State) plans was at best, under the circumstances, meager, and that more careful cooperative assistance was desirable. (36, p. 3)

The Hardy Committee report drew up eight observations and conclusions and six recommendations, all of which pointed up the need for more and better leadership on the Federal level.

Although the Hardy inquiry dealt chiefly with the mandatory activities of the Federal Office with the States, it was obvious that deficiencies in this respect coincided with the lack of progressive leadership and action in essential voluntary cooperative activities between the two levels. It also became obvious to vocational education leaders on all levels that there was need for a reassessment of the Federal-State relationship in vocational education, particularly in terms of developing and carrying out certain essential cooperative activities. Up to the time of this study, there had been no organized formal attempt made to identify and report such activities back to the vocational leadership of the country. The remainder of this study is devoted to a report of the procedure used and the results obtained in the reassessment of Federal-State cooperative activities in vocational education.

## CHAPTER III

### THE METHODOLOGY AND PROCEDURE

Cooperative relationships, as established by the basic vocational education acts, require that certain meaningful cooperative activities be designed and carried out to promote and administer the program of vocational education. This study, therefore, is concerned with the problem: What cooperative activities should exist between the Division of Vocational Education of the United States Office of Education and the State boards for vocational education, to carry out the provisions of the Smith-Hughes and George-Barden Acts?

#### Making the Inventory of Cooperative Activities

The first step of the study was to obtain a group of suggested cooperative activities which are, or might be engaged in between the Federal Office and the States. A seven-page preliminary inquiry form was designed to obtain a list of suggested cooperative activities from a selected jury of leaders of long experience in vocational education. A copy of the inquiry form is found in appendix A. The inquiry form provided for the division or classification of activities under seven main headings; namely, (I) Administration, (II) Supervision (III) Teacher

Training, (IV) Instructional Materials, (V) Physical Facilities, (VI) Public Relations and Research, and (VII) Miscellaneous. The miscellaneous classification was used to stimulate suggestions from jury members, without regard for any specific phase of program. (In the final check list, the miscellaneous classification was eliminated, and in item VI, Public Relations and Research were separated and listed as section VI - Public Relations and section VII - Research.) The classifications used are familiar to vocational educators in their work, and therefore served as a frame of reference to guide them in thinking of meaningful cooperative activities. (It should be noted here that a number of activities have been engaged in for many years. Others have been discussed and contemplated for many years, while still others have been renewed or started during the preparation of this study. No formal method has been used to identify the activities, with respect to their previous or present existence.)

Several illustrations of suggested activities were listed under each classification by the author, to stimulate the jury members to suggest additional cooperative activities. Further assistance and stimulation of jury members were provided by sending an outline of the study along with a transmittal letter, which are included in the appendix. The transmittal letter includes the following: (1) the purpose of the study and a request for assistance, (2) a definition of a cooperative activity, mandatory and voluntary, (3) the seven main classifications of activities, as a frame of reference, and (4) specific explanations of what the jury



members were asked to do to assist in the study. The outline of the study set forth the following: the problem statement, purpose of the study, basic assumptions, need for the study, hypothesis, procedure, and methodology.

A test of the preliminary inquiry form was obtained by requesting associates to examine the transmittal letter, the outline of the study, and the instrument. Their efforts to complete the inquiry form, by using the information supplied and by following the instructions, resulted in valuable constructive criticisms and suggestions. These were used by the author in refining and improving the form and the instructions.

The Preliminary Jury - In order to gather the list of suggested activities, a preliminary jury of widely-experienced Federal and State vocational education leaders were asked to respond to the preliminary inquiry form. Twenty-seven Federal and State vocational education leaders were selected by the author, with the assistance of his associates on the staff of the Kansas State Board for Vocational Education, and the Assistant Commissioner of Education in the Federal Office. Associates and the Federal Office recommended the names of Federal and State leaders in each of the four major service areas: agriculture, distribution, homemaking, and trades and industries; and in each of the four geographic regions of the vocational division of the United States Office of Education in the country. Table I lists the States and territories that comprise each region.

TABLE I

STATES AND TERRITORIES INCLUDED IN THE FOUR VOCATIONAL  
EDUCATION REGIONS OF THE UNITED STATES

States in North Atlantic Region	States in Southern Region	States in Central Region	States in Western Region
West Virginia	Texas	North Dakota	Washington
Maryland	Tennessee	South Dakota	Oregon
Washington, D.C.	Oklahoma	Nebraska	California
Pennsylvania	Arkansas	Kansas	Nevada
New York	Louisiana	Minnesota	Idaho
Connecticut	Mississippi	Iowa	Montana
Massachusetts	Alabama	Missouri	Wyoming
Vermont	Georgia	Illinois	Colorado
Rhode Island	Florida	Ohio	Arizona
Maine	South Carolina	Indiana	New Mexico
New Jersey	North Carolina	Wisconsin	Utah
Delaware	Virginia	Kentucky	Hawaii
New Hampshire	Puerto Rico	Michigan	Alaska
	Virgin Islands		

The selection of members of the preliminary jury was made on the basis of the following criteria:

1. Each should possess certification in policy-making positions as a State supervisor, teacher educator, State director, or Federal Office representative in vocational education, under the provisions of Federal and State acts and regulations governing reimbursed vocational education programs.
2. Each should have had at least ten years of combined experience in the positions described in number one.
3. The entire jury should adequately represent the four major areas and the four regions of the country.

Table II lists the names, positions, and locations of the jury members.

TABLE II

NAMES, TITLES, STATE, AND REGIONAL LOCATIONS OF JURY MEMBERS

NAME	POSITION	STATE AND REGION
James H. Pearson	Assistant Commissioner for Vocational Education	Washington, D. C. , Federal
John P. Walsh	Director, Trade & Industrial Education Branch	Washington, D. C. , Federal
Edna P. Amidon	Director, Home Economics Education Branch	Washington, D. C. , Federal
John Pope	Program Specialist, Distributive Education	Washington, D. C. , Federal
William P. Spanton	Director, Agricultural Education Branch	Washington, D. C. , Federal
Emmett O'Brien	State Director of Vocational Education	Connecticut, North Atlantic
John Seidel	State Director of Vocational Education	Maryland, North Atlantic
Joseph R. Strobel	State Director of Vocational Education	New York, North Atlantic
Robert T. Stoner	State Director of Vocational Education	Pennsylvania, North Atlantic
J. E. Hill	State Director of Vocational Education	Illinois, Central
Harold VanWestrienen	State Director of Vocational Education	Michigan, Central
Cecil E. Stanley	State Director of Vocational Education	Nebraska, Central
C. L. Greiber	State Director of Vocational Education	Wisconsin, Central
Florence Fallgatter	Head, Teacher Training - Home Economics	Iowa, Central
H. H. London	Head, Industrial Education	Missouri, Central
Milo Peterson	Professor and Head - Agriculture Education	Minnesota, Central
A. E. Robinson	State Director of Vocational Education	Louisiana, Southern
J. Warren Smith	State Director of Vocational Education	North Carolina, Southern
J. B. Perky	State Director of Vocational Education	Oklahoma, Southern
M. A. Browning	State Director of Vocational Education	Texas, Southern
Lela O'Toole	Dean, School of Home Economics	Oklahoma, Southern
Martha Creighton	Teacher Trainer - Home Economics	Virginia Southern
Frank B. Cale	State Director of Vocational Education	Virginia, Southern
Wesley P. Smith	State Director of Vocational Education	California, Western
O. I. Paulson	State Director of Vocational Education	Oregon, Western
Mark Nichols	State Director of Vocational Education	Utah, Western
Herman N. Miller	State Director of Vocational Education	Washington, Western

Actually, more than twenty-seven vocational educators participated as jury members in preparing the list of suggested cooperative activities. In the letter transmitting the original inquiry form, it was suggested that jury members might engage in the assistance of their staff members to devise and recommend cooperative activities. In practically every case, they involved their staff members, with the result that a wide range of activities was obtained in the returns.

An excellent illustration of the involvement of staff members occurred on the Federal level, where Assistant Commissioner James H. Pearson, a jury member, first discussed the problem and the instrument with the Federal directors of the four major service areas: John P. Walsh of trade and industrial education, William P. Spanton of agriculture, Edna P. Amidon of home economics, and John Pope of distributive education, along with the assistant director of the vocational division, Ward Beard. A meeting of the directors served the purpose of developing an understanding of the study and the procedures that would be followed. Each service director held a similar meeting with his or her staff members, and their suggestions were compiled in one list or submitted separately, as they preferred. Most of the State directors, who comprised the greater part of the jury, handled the instrument in a like manner with their supervisory staffs. Because of the unknown number of staff members involved, and the varied methods of employing their assistance, it is practically impossible to list them all in table II.

After a lapse of six weeks, a follow-up letter of request was sent to eight jury members who had not returned the preliminary inquiry form. A copy of this letter is attached as appendix C. As a result, returns were received from every jury member. A grand total of 446 cooperative activities were received in the returns from the 27 jury members and their staffs. The extent of the response of the jury was gratifying and the number of suggested activities far exceeded expectations. Table III lists the total number of activities in the seven classifications submitted by the preliminary jury.

TABLE III

TOTAL NUMBER OF COOPERATIVE ACTIVITIES SUGGESTED  
BY THE JURY IN SEVEN CLASSIFICATIONS

Classification	Total Number of Activities Submitted
I. Administration . . . . .	68
II. Supervision . . . . .	88
III. Teacher Training . . . . .	61
IV. Instructional Materials . . . . .	53
V. Physical Facilities . . . . .	29
VI. Public Relations and Research . . . . .	90
VII. Miscellaneous . . . . .	57
TOTAL	446

## Developing the Final Check List of Cooperative Activities

The complete preliminary list of the 446 suggested cooperative activities received from the jury was assembled exactly as submitted, under each of the seven main classification headings. All activities were reviewed and then reclassified, wherever necessary, into their proper classifications. Activities in the miscellaneous group were classified under some one of the other headings, after dividing public relations and research into separate classifications, labeled as VI and VII, respectively, in the final check list.

Each suggested activity was then examined critically, as to its meaning and its clarity of expression. Many were found to duplicate each other. Such items were rephrased and rewritten as one activity. In other cases, where a suggestion was found to be a part of some broader activity, it was eliminated or, if deemed helpful in clarifying the broader activity, was added specifically as a part of the related activity.

Every suggested activity was rephrased, with due regard to its meaning, so as to indicate any action to be taken. For example, one activity submitted in original form read as follows: "Continual exchange of plans, ideas, and experience." This was rephrased and clarified to read,

Set up an organized communication plan which would provide for the continuous exchange of data, plans, ideas, and program development in the States.

After this item was reviewed, in six more drafts or revisions, in combination with other similar suggested activities, it finally read as follows on the final instrument:

Set up an organized plan of continuous communication of changes in policy, interpretations, regulations, data, plans, ideas, and program development in the States.

In this manner, many similar suggestions were combined, expanded, and rephrased, so as to reduce the total of 446 activities to 78. Care was exercised so that the intended meaning of a suggested activity was preserved as accurately as possible.

Obviously, many suggested activities were dropped from the list entirely, by including only those which met the following general criteria:

1. That the activity was general enough to involve all four services in vocational education. With few exceptions, activities that could be applied only to one of the services were dropped.
2. That the activity was specific enough to be of practical value to the program.
3. That the results stemming from carrying out an activity might be of immediate use in the program.

The revised 78 activities were included in a newly-designed final check list. As explained previously, the miscellaneous classification was eliminated in the final check list, and the sixth classification, research and public relations, was divided into two, so that the seven

classifications were: (I) General Administration, (II) Supervision, (III) Teacher Training, (IV) Instructional Materials, (V) Physical Facilities, (VI) Public Relations, and (VII) Research. A copy of the first page of the final check list and the memorandum of transmittal are found on pages 67 and 68. A complete list of the seventy-eight activities is to be found in appendix C.

The one-page transmittal memorandum was designed to give necessary instruction briefly, without sacrificing clarity. It requested the participation and help of 1,226 vocational education leaders throughout the country. It consisted of the following essential features:

1. A direct request for assistance and participation.
2. The need for the study.
3. Definition of terms, cooperative activity, important, mandatory, voluntary, unimportant, undecided.
4. Five point description of what was expected of the respondent.
5. Request for return of the instrument within three weeks.
6. An offer to send a summary of the study upon request.



FEDERAL-STATE COOPERATIVE ACTIVITIES IN VOCATIONAL EDUCATION  
PART I -- GENERAL ADMINISTRATION ACTIVITIES

Return to:

W. M. Arnold, 1025 Kansas Avenue, Topeka, Kansas

Position (Check one) 1. ( ) Director 2. ( ) Supervisor 3. ( ) Teacher Educator

& 3 State \_\_\_\_\_ Name \_\_\_\_\_

Position Level (Check one) 1. ( ) Federal 2. ( ) State 3. ( ) Local

Vocational Service (Check one) 1. ( ) Agr. 2. ( ) H. Ec. 3. ( ) T & I 4 ( ) D. E.

Region (Check one) 1. ( ) N. Atlantic 2. ( ) Southern 3. ( ) Central 4. ( ) Western

Check in only one column				1. If you think an activity is valuable and should be engaged in, check it as "Important." 2. Place the check under "Mandatory" if you believe the activity should be required by law or regulation. Check it under "Voluntary" if you feel it should be carried on by choice. 3. Check an activity as "Unimportant," if you think it has no value. 4. If you are in doubt as to the value of an activity, check the column marked "Undecided." 5. Please check in only one column for each activity.
MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
				Prepare, submit, and review Annual State Financial Statistical, and Descriptive Reports, including periodic revision of forms and content.
				Review and revise periodically the Policy Manual - Bulletin No. 1 - United States Office of Education.
				Conduct periodic national and regional workshops for State Directors on administrative problems and trends in the total educational program and their implications for Vocational Education.
				Make surveys continuously of national, state and local conditions as basis of plans for balanced total vocational education programs needed to meet changing conditions.

March 21, 1956

TO: Vocational Educators

FROM: W. M. Arnold, State Director, Vocational Education,  
Topeka, Kansas

SUBJECT: The Need For and Value of Federal-State Cooperative  
Activities in Vocational Education

This is to request your participation and help in a doctoral vocational education study at Oklahoma A & M College, with the sponsorship of the U. S. Office of Education, the American Vocational Association, and the National Association of State Directors of Vocational Education.

Serious questions have been raised in recent years, as to the need and the desire of the States for continued Federal professional and financial assistance in the administration and promotion of vocational education. In order to help to answer these questions, a series of Federal-State cooperative activities, in seven different phases of vocational education, has been developed, through the assistance of a jury of experienced vocational educators.

In this study, a "cooperative activity" is defined as a planned, specific joint action, either mandatory or voluntary, between the professional personnel of the vocational division of the United States Office of Education and the State boards for vocational education, for the purpose of carrying out their major responsibilities under the present Federal Acts.

Please express your opinion about each activity according to the following pattern:

1. If in your opinion an activity is valuable and useful and should be carried on jointly by the Federal Office and the States, you should designate it as "Important."
2. Whenever you have decided that an activity is "Important," you are requested to indicate by a check mark whether the activity should be mandatory or voluntary. "Mandatory" will mean that the activity should be required by law or regulation. "Voluntary" means that the activity should be carried on by choice.
3. If you consider an activity has little or no value in vocational

education, as a joint action, you should check it as  
"Unimportant."

4. If you are in doubt, check the column marked "Undecided."
5. In any case, only one check mark is to be made for each activity.

Your thoughtful response and the return of the attached instrument by April 9 will be very much appreciated. A summary of the study will be sent to you upon request.

The grouping of the activities by number and total, from the final instrument, in each classification, is shown in table IV.

TABLE IV

CLASSIFICATIONS, ORIGINAL NUMBER, FINAL NUMBER  
AND NUMBERS ASSIGNED TO ACTIVITIES  
AS FOUND IN FINAL CHECK LIST

Classification of Activities	Original Number of Activities Submitted by Jury	Final Check list of Activities	Numbering of the Activities on Final Check list
I. Administration	68	11	7 to 17
II. Supervision	88	12	18 to 29
III. Teacher Training	61	14	30 to 43
IV. Instructional Materials	53	10	44 to 53
V. Physical Facilities	29	5	54 to 58
VI. Public Relations and Research	90	9*	59 to 67
VII. Miscellaneous	57	17**	68 to 84
TOTAL	446	78	

\*Public Relations only in final check list.

\*\*Research only in final check list.

It seems to be of more than passing interest that by far the greatest number of original activities submitted (90) had to do with research and public relations, while the fewest number dealt with physical facilities. It seems logical to deduce, therefore, that "fact finding" in general was more numerously expressed and was perhaps of prime

importance as compared with physical or mechanical problems dealing with plant, equipment, tools, and supplies. Further, it is interesting to note the emphasis attached to supervision and administration problems, as evidenced by the number of activities originally suggested, 88 and 68 respectively. Teacher training activities followed closely in number with 61.

The final eight-page check list was designed with the assistance of a representative of International Business Machines Corporation, with a view toward doing four things:

1. Identifying the respondent easily and completely.
2. Restating the five point instructions mentioned in the transmittal memo.
3. Providing a quick method of checking an opinion, after reading and thinking about each activity.
4. Arranging the checking columns so as to expedite the punching of IBM for tabulation of response data.

The first six numbered items were used to identify the respondent by position, State, administrative level, vocational service, and geographical region. The 78 activities began with number 7, running through 84. The total number of 84 items required two IBM cards to be punched for responses on each activity. The preliminary inquiries were stamped with consecutive numbers, to identify each one with the person to whom it was sent.

Circulating the Final Check List - The specific purpose of the final check list was to obtain a consensus of all vocational education leaders on Federal, State, and local levels, throughout the country, as to the relative frequency with which they adjudged importance of the seventy-eight Federal-State cooperative activities. The further plan of the study was to analyze the responses and to make various comparisons of the responses from Federal, State, and local levels; and finally, in the four United States Office of Education vocational education regions, North Atlantic, southern, central, and western.

The Final Jury - Complete and accurate current directories of all chief officers of vocational education, on Federal, State, and local levels, were obtained from the United States Office of Education and the States. The list constituted the purposive sampling of vocational educators, to whom the final instrument would be sent. This total list of 1,226 vocational education leaders, consisting of 35 Federal representatives, 51 State directors, 181 chief State supervisors of the four major service areas, 258 head teacher educators, and 701 local directors and supervisors of vocational education made up the final jury.

The total number of returns of the final check list were 656, from approximately 54% of the final jury. Table V shows a summary of the population and the number and percentage of returns from each major group of respondents.

TABLE V

THE NUMBER OF CHECK LISTS SENT AND RETURNED, AND  
PERCENTAGES OF RETURNS BY GROUPS OF LEADERS

Group	Number Sent	Number of Returns	Percentage of Returns
Federal	35	30	86%
State Directors	51	38	75%
State Supervisors of Vocational Agriculture	43	31	72%
State Supervisors of Trade and Industrial Education	47	34	72%
State Supervisors of Home Economics Education	50	29	58%
State Supervisors of Distributive Education	41	30	73%
Teacher Trainers of Vocational Agriculture	75	49	65%
Teacher Trainers of Trade and Industrial Education	43	31	72%
Teacher Trainers of Home Economics Education	128	70	55%
Teacher Trainers of Distributive Education	12	11	92%
Local Administrators	701	303	43%
TOTALS	1,226	656	54%

The table reveals exceptionally high returns from Federal, State, and teacher trainer groups. The lower percentage of local leaders responding was expected, because the study did not involve them as directly as the Federal and State groups. For this reason, too, no follow-up letter was sent to local people, as was done with the Federal and State groups.

In each activity, a certain number of responses had to be eliminated because a jury member failed to make a check mark, or because

he checked two or more columns on the same item.

To indicate the opinion that an activity was not important as a cooperative activity, the respondent checked it "unimportant"; if he was uncertain, he checked it "undecided."

The 656 responses were tabulated on IBM cards, in the service bureau of International Business Machines Corporation, in Kansas City. An IBM representative of the Topeka office assisted in the planning of the final check list and in the punching of the cards. The manager of the IBM service bureau, in Kansas City, supervised the key-punching of the cards, from the check lists, and also provided key verification of the punched data, for correctness. The IBM cards were then run on an O-75 sorter machine, in the IBM department of the Department of Social Welfare of Kansas. All of the cards were run to tabulate the data for the total responses of the individuals, on Federal, State, and local levels. The cards were run a third time, to tabulate the responses of the final jury, according to geographic regions - North Atlantic, southern, central, and western. Composite tables were designed, as shown in chapter IV, to record the number of responses and percentages in each of the described classifications.

The final step in the procedure required the analysis of the data tabulated from the responses of the vocational education leaders, and the interpretation of the results. Data on each activity were tabulated from the IBM machine runs on form sheets. Results were checked and errors were eliminated by re-running cards on the sorter machine.



Accurate counts were made of each juryman's response on each activity. These counts were tabulated in totals, first by grand total of all respondents, second by Federal, State, and local groups, and finally, by four regional groups - North Atlantic, southern, central, and western. Percentages of responses of these groups were calculated and listed on forms designed for this purpose, as shown in tables VI to XII inclusive.

The activities were then placed in descending rank order, according to the percentages of the total respondents who judged them important, both mandatory and voluntary. The activity receiving the highest percentage of leaders' responses indicating it as important was placed first in each classification and table, and the others followed in descending percentage order. The data on all activities in each table were analyzed and interpreted.

Significant Differences - Statistical treatment of the data was employed to find significant differences between percentages of responses from the administrative levels and from the regions, as applied to importance and as to mandatory or voluntary action. The formula for calculating the reliability of the difference between two percents was used. (10, p. 236) In each classification, calculations were made to determine what size difference between percents constituted a significant difference at the .05 level. After this difference was found, the written description of the analysis in each classification pointed out the instances where significant differences had occurred, and efforts

were made to interpret these differences. An example of such calculation follows. In the case of item 1 of the eleven administration activities, "Review and revise periodically the Policy Manual No. 1 - United States Office of Education," the difference between the percentage of jurors from the North Atlantic region (65%) and that of jurors from the southern region (77%), who judged that the item is not only important, but mandatory, was 12, when N in the case of the former was 155 and the latter 158.

$$\begin{aligned}
 N_1 &= 158 & P &= \frac{N_1 P_1 + N_2 P_2}{N_1 + N_2} = \frac{158 \times 77 + 155 \times 65}{158 + 155} \\
 P_1 &= 77 & & \\
 N_2 &= 155 & & \\
 P_2 &= 65 & & \\
 & & &= \frac{22241}{313} \\
 & & P &= 71.06\%
 \end{aligned}$$

$$\begin{aligned}
 Q_D &= \sqrt{PQ \left[ \frac{1}{N_1} + \frac{1}{N_2} \right]} & P &= 71\% \\
 & & Q &= (1 - P) = 29\% \\
 &= \sqrt{71 \times 29 \left[ \frac{1}{158} + \frac{1}{155} \right]} \\
 &= \sqrt{\frac{2059}{158} + \frac{2059}{155}} & &= \sqrt{\frac{319145 + 325322}{24490}} \\
 &= \sqrt{26.31} \\
 &= 5.13
 \end{aligned}$$

The difference between the two percents is 12%.

$$CR = \frac{(P_1 - P_2) - 0}{Q \sqrt{P_1 - P_2}} = \frac{77 - 65}{5.13} = \frac{12}{5.13} = 2.34$$

There are 311 df ( $N_1 + N_2 - 2$ )

The CR of 2.34 exceeds 1.97 at the .05 level, but is less than 2.59 at the .01 level. The difference between the two percentages is significant at the .05 level, but the responses are not different in any degree of significance at the .01 level. The significant difference was evidence of the favor toward importance and mandatory action by the group from the southern region.

Efforts were made throughout chapter IV to point up other noteworthy and interesting features of the various activities and the responses. Conclusions and recommendations were drawn and set forth in chapter V.

## CHAPTER IV

### ANALYSIS OF DATA AND FINDINGS OF THE STUDY

The work of the preliminary jury and the author, as described in chapter III, carried out the first purpose of this study; namely, to identify the cooperative activities that were submitted to the final jury, which included the leadership previously described. The responses of the 656 (of 1,226) Federal, State, and local leaders of vocational education to the 78 activities previously identified, form the basis for carrying out the second purpose of the study; namely, to obtain the relative frequency of the responses of vocational education leaders as to the importance of the activities and as to whether the activities should be mandatory or voluntary.

In order to simplify and clarify the great amount of data assembled on the 78 activities, separate treatment was given to each group of activities under the seven main classifications which were used to form the original frame of reference. This kind of treatment of the data on the 78 activities permits interested readers and students to examine each specific phase of this study, to derive some facts and draw conclusions, without having to examine the entire list of 78 activities. In other words, it permits those who have a special

interest in some one of the different groups of activities to study that group alone.

The data were assembled in seven tables, in each of which the activities were arranged in descending order, according to the percentage of total leaders' responses as to importance, the highest being first, and so on, in each classification. Each table contains the usable responses of 656 respondents, as to the frequency of leaders' indication of the importance of each activity, and whether an activity should be mandatory (required by law or regulation), or voluntary (engaged in by choice).

The data in each classification of activities were analyzed and the results interpreted. First, a general analysis was made of each classification of activities, in the light of the leaders' responses. Next, an analysis was made, in each classification, of the comparison of Federal, State, and local leaders' responses. Following this, a similar analysis was made of the comparison of the same leaders' responses by regions. Finally, there was a brief summary made of findings and conclusions, in each classification of activities.

The total of responses to each activity always agrees with the sum of the administrative level responses. The sum of the responses of the geographic regions is always twelve less than the grand total, because twelve Federal representatives were not associated with any particular region of the country. Except for this, the totals agreed exactly, within every activity.

The tables in every case show the number and percentage of responses in each column item, in the final check list, by overall total, administrative levels (Federal, State, and local), and by geographic regions (North Atlantic, southern, central, and western).

The tables are somewhat complex because they were designed to serve a dual purpose in the text of this chapter. The first purpose was to show the comparisons of percentages of the leaders' judgments, with emphasis upon each activity in each classification. The second purpose was to bring each activity into focus, as all leaders judged them, by totals, administrative levels, and by regional locations. The use of the tables in the text seemed to be the most effective and efficient method of analyzing and interpreting the data on each activity, for the author and the reader.

#### General Administration Activities

The eleven administration cooperative activities were arranged in rank order, highest to lowest, in table VI, according to the percentage of the total responses indicating the activities as important, both mandatory and voluntary. Table VI also shows the number and percentages of total responses indicating: (1) that the activities should be mandatory or voluntary; (2) that the activities are unimportant; or (3) that the respondents were undecided. The number and percentages of Federal, State, and local respondents' opinions, as to the importance of activities, mandatory or voluntary, their unimportance, or

their indecision are also revealed in table VI. Finally, this table discloses the number and percentages of responses of leaders, by their regional locations, as to importance of the activities, mandatory or voluntary, their unimportance or indecision.

TABLE VI

## TABULAR SUMMARY OF RESPONSES TO ELEVEN ADMINISTRATION ACTIVITIES

Item 1 - Rank 1.5 Review and revise periodically the Policy Manual - Bulletin No. 1 - United States Office of Education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	462	71	18	60	230	72	214	71	100	65	121	77	144	71	90	73
	Voluntary	172	26	12	40	84	26	76	25	51	33	34	22	53	26	29	24
Unimportant		12	2	0	0	4	2	8	3	3	1	1	0	5	2	3	2
Undecided		5	1	0	0	1	0	4	1	1	1	2	1	1	1	1	1
<b>TOTALS</b>		651	100	30	100	319	100	302	100	155	100	158	100	203	100	123	100

Item 2 - Rank 1.5 Make surveys continuously of National, State, and local conditions, as basis of plans for balanced total vocational education programs needed to meet changing conditions.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	323	50	11	37	145	45	167	55	76	49	79	50	97	48	67	54
	Voluntary	309	47	18	60	164	51	127	42	73	47	75	47	99	49	54	44
Unimportant		14	2	0	0	9	3	5	2	3	2	4	3	5	2	2	2
Undecided		6	1	1	3	2	1	3	1	3	2	1	0	2	1	0	0
<b>TOTALS</b>		652	100	30	100	320	100	302	100	155	100	159	100	203	100	123	100



TABLE VI (Continued)

Item 3 - Rank 3 Conduct periodic national and regional workshops for State directors on administrative problems and trends in the total educational program and their implications for vocational education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	274	42	7	23	133	42	134	44	66	43	63	40	80	39	61	50
	Voluntary	352	54	23	77	169	53	160	53	84	54	89	56	114	57	57	47
Unimportant		14	2	0	0	9	3	5	2	2	1	6	4	5	2	1	1
Undecided		12	2	0	0	8	2	4	1	3	2	1	0	5	2	3	2
<b>TOTALS</b>		652	100	30	100	319	100	303	100	155	100	159	100	204	100	122	100

Item 4 - Rank 4 Prepare, submit, and review annual State financial, statistical, and descriptive reports, including periodic revision of forms and content.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	534	82	29	97	282	89	223	74	125	81	133	85	164	80	100	81
	Voluntary	86	13	1	3	25	8	60	20	21	14	16	10	30	15	19	16
Unimportant		25	4	0	0	11	3	14	5	7	4	6	4	8	4	4	3
Undecided		5	1	0	0	0	0	5	1	2	1	1	1	2	1	0	0
<b>TOTALS</b>		650	100	30	100	318	100	302	100	155	100	156	100	204	100	123	100

TABLE VI (Continued)

Item 5 - Rank 5 Set up an organized plan of continuous communication of changes in policy, interpretations, data, plans, ideas, and program development in the States.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	309	48	10	35	141	44	158	52	72	47	79	50	91	45	61	50
	Voluntary	302	46	16	55	165	52	121	40	74	48	71	45	95	47	57	46
Unimportant		27	4	3	10	10	3	14	5	5	3	7	5	12	6	2	2
Undecided		12	2	0	0	4	1	8	3	3	2	1	0	6	2	2	2
<b>TOTALS</b>		650	100	29	100	320	100	301	100	154	100	158	100	204	100	122	100

Item 6 - Rank 6 Develop patterns for cooperative program relationships between all vocational services on Federal and State levels.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	180	28	5	17	86	27	89	30	42	27	46	29	52	26	37	30
	Voluntary	399	62	21	70	200	62	178	59	94	61	96	60	130	64	72	59
Unimportant		49	6	3	10	22	7	24	8	14	9	12	8	14	7	8	7
Undecided		23	4	1	3	12	4	10	3	5	3	5	3	7	3	5	4
<b>TOTALS</b>		651	100	30	100	320	100	301	100	155	100	159	100	203	100	122	100

TABLE VI (Continued)

Item 7 - Rank 7 Prepare a simplified outline of suggested content and method of preparation of revised State plan, including date and frequency of submission.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	269	42	12	40	148	46	109	37	64	42	75	48	75	37	50	41
	Voluntary	303	47	15	50	145	46	143	48	69	44	68	43	101	50	60	50
Unimportant		55	8	3	10	15	5	37	12	15	10	12	8	19	9	7	6
Undecided		20	3	0	0	10	3	10	3	6	4	2	1	8	4	4	3
<b>TOTALS</b>		647	100	30	100	318	100	299	100	154	100	157	100	203	100	121	100

Item 8 - Rank 8 Organize a suggested professional course in "The Administration of Local Programs of Vocational Education for School Administrators" for graduate study by school administrators.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	144	22	0	0	66	20	78	26	32	21	36	23	45	22	31	26
	Voluntary	423	65	21	70	217	68	185	61	105	68	104	65	125	62	83	68
Unimportant		49	8	6	20	22	7	21	7	10	6	14	9	18	9	3	2
Undecided		35	5	3	10	15	5	17	6	8	5	5	3	15	7	5	4
<b>TOTALS</b>		651	100	30	100	320	100	301	100	155	100	159	100	203	100	122	100

TABLE VI (Continued)

Item 9 - Rank 9 Prepare periodically a publication of "Suggested Reimbursement Policies" for use in the States.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	231	36	6	21	97	30	128	43	65	42	58	37	69	34	36	30
	Voluntary	290	45	16	55	153	48	121	41	67	43	68	44	88	44	63	53
Unimportant		65	10	5	17	29	9	31	10	11	7	17	11	23	11	12	10
Undecided		59	9	2	7	40	13	17	6	12	8	13	8	23	11	9	7
<b>TOTALS</b>		645	100	29	100	319	100	297	100	155	100	156	100	203	100	120	100

Item 10 - Rank 10.5 Designate and use a national professional advisory committee, composed of State directors of vocational education and chief State school officers.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	190	29	4	14	86	27	100	33	49	32	51	33	48	23	39	32
	Voluntary	319	49	19	65	157	49	143	47	79	51	77	49	103	51	56	45
Unimportant		93	15	4	14	51	16	38	13	16	10	17	11	40	20	18	15
Undecided		46	7	2	7	24	8	20	7	11	7	11	7	12	6	10	8
<b>TOTALS</b>		648	100	29	100	318	100	301	100	155	100	156	100	203	100	123	100

TABLE VI (Continued)

Item 11 - Rank 10.5 Work toward the establishment of a representative Federal board for education and adequate Federal vocational education staff, to provide more in-service and leadership training for State staffs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	279	43	4	14	143	45	132	44	65	42	74	47	87	43	52	43
	Voluntary	227	35	18	62	110	35	99	33	58	37	54	34	65	32	43	35
Unimportant		94	15	6	21	39	12	49	16	18	12	21	13	33	17	20	17
Undecided		46	7	1	3	25	8	20	7	14	9	9	6	16	8	6	5
<b>TOTALS</b>		646	100	29	100	317	100	300	100	155	100	158	100	201	100	121	100

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory																
	Voluntary																
Unimportant																	
Undecided																	
<b>TOTALS</b>																	

All eleven administration activities were deemed to be important by a majority of the 656 respondents, ranging from 78% on item 11, relating to an organized plan of communication, to 97% on items 1 and 2, dealing with the revision of policies, and surveys of conditions on which to base program plans.

The percentage of responses indicating that the activities should be mandatory ranged from a low of 22%, on item 8, to a high of 82%, on item 4. Item 4 - preparation of, submitting, and reviewing the annual State financial, statistical, and descriptive reports - is one of only two of the 78 activities that have been in existence and required by law since the passage of the Smith-Hughes Act. It is possible that the 4% of the respondents who thought this activity was unimportant and the 1% who were undecided did not understand clearly what was requested of them, because great importance has been attached to this requirement for 40 years, by the Congress, the Federal Office, and the States. The 13% who felt that this activity is important, but should be voluntary, seemed to indicate a mild reaction to a particular requirement being imposed upon the States by the Federal Government.

Five of the eleven administration activities, item numbers 1, 2, 4, 5, and 8, received more mandatory checks than voluntary. In fact, one of the surprising results, from the reactions of respondents to this group of activities, was the sizable percentage - no less than 22% - of leaders favoring mandatory activities. There is reason to believe that many leaders indicated a mandatory choice, in an effort to give

emphasis to the importance, and hence to the "shouldness" of a number of administration activities. This may be an indication, also, that it was thought the activity would more likely be accomplished, or put into action, if it were made mandatory.

The top ranking of the item 2 activity, "Make surveys continuously of National, State, and local conditions, as basis of plans for balanced total vocational education programs needed to meet changing conditions," was borne out by the conclusions reached in a research conference in Washington, in June 1955. Representatives of various States, meeting on research needs, concluded that studies of changing conditions in American economic and social life are most necessary to keep vocational education programs adapted to current needs.<sup>3</sup>

Interesting implications were found in the third ranking activity, "Conduct periodic national and regional workshops for State directors on administrative problems and trends in the total educational program and their implications for vocational education!" A national study of problems in trade and industrial education, conducted by the author in 1955 for the National Association of State Directors of Vocational Education, established clearly and forcefully the following conclusion: "Many problems are administrative and supervisory and can be handled

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<sup>3</sup>Misc. 3495. Research and Studies in Trade and Industrial Education, December 1955, Division of Vocational Education, United States Office of Education, Washington, D. C.

adequately by skilled, trained leaders in vocational education."<sup>4</sup> Obviously, leaders felt strongly that State directors, with the assistance and cooperation of the Federal Office, should participate in workshop sessions devoted to administrative problems.

The activity ranked fifth placed great importance upon communication between the Federal Office and State staffs, as does industry, business, and all effective educational organizations. The sixth ranking activity pointed out one of the most difficult problems in vocational education, that of developing close coordination and relationship between the various vocational services, on Federal and State levels. Simplified outlines of State plans, as suggested in the activity ranked seventh, are presently being developed by the Federal Office. A number of vocational teacher educator institutions, including Mississippi State College, Oklahoma A & M College, and the University of Michigan, are offering graduate professional courses in administration of vocational education, as recommended in the activity ranked eighth.<sup>5</sup> The last two activities, tied for lowest ranking, brought substantial percentages of responses indicating importance.

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<sup>4</sup>A summary report of a study of the problems in trade and industrial education under the Smith-Hughes and George-Barden Acts, for the National Association of State Directors of Vocational Education, May 2, 1955.

<sup>5</sup>Education 550, A Professional Course in Organization and Administration of Vocational Education for School Administrators, Oklahoma A & M College, Stillwater, Oklahoma.



Comparison of Judgments of Leaders from Three Administrative Levels -

There was a significant difference in only one activity, between the percentages of Federal, State, and local leaders' responses, as to the importance of the activities. This occurred in the activity ranked eighth, relating to organization of a graduate professional course in administration of vocational education. State and local leaders' responses exceeded those of Federal leaders by 18% and 17%, respectively.

Except for one activity, item 4, the percentage of responses favoring mandatory action was consistently higher from State and local leaders than from Federal representatives. The fact that this activity dealt with the annual reports required by the Federal acts may explain somewhat why Federal responses were 97% mandatory. This general reaction would seem to indicate that State and local leaders are not as fearful or sensitive about Federal mandatory requirements as is commonly thought. By the same token, Federal leaders' responses for voluntary action were substantially and consistently higher than those of State and local leaders, except for the activity ranked fourth.

All eleven activities were deemed to be important (mandatory and voluntary) by more than 75% of the Federal, State, and local leaders.

There were significant differences between the percentages of Federal and local respondents' opinions in the five activities ranked 3, 8, 9, 10, and 11, indicating local leaders' more favorable reaction to mandatory action. In the fourth ranked activity, the percentage of Federal leaders' responses, indicating mandatory action, was much

greater than that of local respondents. The latter fact revealed the importance which the Federal leaders attach to the mandatory requirement of making annual financial, statistical, and descriptive reports.

There were also significant differences between the percentages of Federal and State leaders' responses, in three activities ranked 3, 8, and 9, with State leaders favoring mandatory action.

#### Comparison of Judgments of Same Leaders by Their Regional Locations -

The same leaders from the four regions appeared to agree generally that the various administration activities were important, since there was no significant difference between the percentages of their responses. A 12% difference in percentages of responses between regions would establish a significant difference at the .05 level, but not at the .01 level. There were no percentage differences between responses of any two regions greater than 9%.

The only significant statistical difference in percentages of mandatory or voluntary responses occurred between the North Atlantic region and the southern region on item 1 (12%) and between the North Atlantic region and the western region responses on item 10 (12%), and then only at the .05 level. In the first instance, the southern region favored mandatory action on item 1, while in the second case, the North Atlantic region favored mandatory action.

Although the differences were not statistically significant, the percentages of central region responses indicating importance of the activities ran consistently lower than those of the other three regions.

This seemed to indicate a slight tendency toward a more moderate or conservative viewpoint or reaction about Federal-State cooperative activities among central region leaders, as compared with other regional leaders.

Summary of Findings on Administrative Activities - The great majority of leaders adjudged all of the administration cooperative activities to be important. This strong consensus of emphasis on the administration activities pointed up the demand by leaders on all levels for increased action and leadership in vocational education. The considerable percentage of leaders' opinions that the activities should be mandatory further emphasizes their feeling of urgency about cooperative action, especially in those five activities where the percentage of responses for mandatory action exceeded that of voluntary action.

There were no significant differences between the percentages of leaders' responses between any two of the three administrative levels, as to the importance of the activities. However, the percentage of responses of local leaders, indicating importance of the activities, ran consistently higher than those of State and Federal leaders. The State leaders' responses as to importance of the activities ran slightly higher than those of Federal leaders. Apparently, the urgency of need for cooperative action was felt more strongly at the local operating level of programs and then less strongly at the levels further removed from program operation, State and Federal.

Very little difference was found between percentages of leaders'

responses on any score on a regional basis. Central region leaders' responses, adjudging importance of activities, ran slightly but consistently less than those from other regions. So far as administration cooperative activities were concerned, there did not appear to be any marked difference of opinion among leaders, in the four geographical regions of the vocational division of the United States Office of Education, as to the need for action. Only the central region leaders' slightly more conservative estimate of importance of activities was noteworthy of mention as a difference.

#### Supervision Activities

Twelve supervision activities are to be found in table VII in rank order, by percentage of total respondents judging them important. The responses indicating importance are further detailed in the table by number and percentage suggesting that the activity be mandatory or voluntary. Also included in table VII is a summary of responses to the twelve activities according to administrative level - local, State, and Federal - and to geographic region - North Atlantic, southern, central, and western.

TABLE VII

TABULAR SUMMARY OF RESPONSES TO TWELVE SUPERVISION ACTIVITIES

Item 1 - Rank 1 Conduct annual program review in each service in each State, by pre-planning so that maximum benefits can result in the improvement of instruction and in-service training of State staff.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	212	33	12	43	115	36	85	28	46	30	59	38	57	28	47	39
	Voluntary	371	58	15	54	178	56	178	60	89	58	88	56	116	57	71	58
Unimportant		45	7	0	0	15	5	30	10	12	8	6	4	23	12	4	3
Undecided		16	2	1	3	8	3	7	2	7	4	3	2	6	3	0	0
<b>TOTALS</b>		644	100	28	100	316	100	300	100	154	100	156	100	202	100	122	100

Item 2 - Rank 2.5 Conduct an annual regional conference of State supervisors and teacher trainers and a national conference in each vocational service every five years.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	301	47	9	31	164	51	128	43	76	49	75	48	93	47	53	43
	Voluntary	278	43	14	48	135	43	129	43	65	43	70	44	83	41	55	45
Unimportant		54	8	6	21	17	5	31	10	11	7	11	7	19	9	11	9
Undecided		14	2	0	0	3	1	11	4	2	1	2	1	7	3	3	3
<b>TOTALS</b>		647	100	29	100	319	100	299	100	154	100	158	100	202	100	122	100

TABLE VII (Continued)

Item 3 - Rank 2.5 Plan and conduct visits, meetings, programs, conferences, and workshops to assist States in identifying and solving the problems of the various vocational education services.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	138	21	8	29	63	20	67	22	31	20	33	21	44	22	25	20
	Voluntary	442	69	17	61	227	70	198	66	104	68	113	71	136	67	84	69
Unimportant		41	6	2	7	15	5	24	8	9	6	9	6	15	7	7	6
Undecided		27	4	1	3	15	5	11	4	9	6	4	2	8	4	6	5
<b>TOTALS</b>		648	100	28	100	320	100	300	100	153	100	159	100	203	100	122	100

Item 4 - Rank 4.5 Plan, organize, and conduct periodic national, regional, and interstate leadership development conferences for State supervisors in all services.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	130	20	2	7	58	18	70	24	33	21	31	20	34	17	30	26
	Voluntary	441	68	25	83	230	72	186	62	101	66	112	71	141	69	78	64
Unimportant		44	7	2	7	18	6	24	8	9	6	13	8	18	9	4	3
Undecided		34	5	1	3	15	4	18	6	11	7	2	1	11	5	9	7
<b>TOTALS</b>		649	100	30	100	321	100	298	100	154	100	158	100	204	100	121	100

TABLE VII (Continued)

Item 5 - Rank 4.5 Conduct periodic cooperative evaluation of entire State program, in all services, upon request of States.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	118	18	4	13	63	20	51	17	24	16	27	17	46	23	18	15
	Voluntary	450	70	21	70	226	70	203	69	107	70	120	75	125	62	91	74
Unimportant		55	9	5	17	20	6	30	10	15	10	9	6	22	11	7	6
Undecided		24	3	0	0	12	4	12	4	6	4	3	2	9	4	6	5
<b>TOTALS</b>		647	100	30	100	321	100	296	100	152	100	159	100	202	100	122	100

Item 6 - Rank 6 Plan and prepare a bulletin on "Effective Practices in State Supervision," to be used by all services.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	156	24	5	17	61	19	90	31	36	24	40	26	49	25	28	22
	Voluntary	400	63	16	53	218	69	166	56	98	64	103	67	117	59	77	64
Unimportant		54	8	7	23	21	8	26	9	12	8	9	6	21	10	9	7
Undecided		29	5	2	7	14	4	13	4	6	4	2	1	12	6	8	7
<b>TOTALS</b>		639	100	30	100	314	100	295	100	152	100	154	100	199	100	122	100

TABLE VII (Continued)

Item 7 - Rank 7 Set up standards and minimum requirements for the selection of State supervisors and provide for their in-service training.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	305	47	11	37	131	41	163	54	71	46	84	53	92	45	52	43
	Voluntary	253	39	18	60	134	42	101	34	58	38	62	39	76	38	51	42
Unimportant		60	9	0	0	34	11	26	9	19	12	7	4	19	9	15	12
Undecided		29	5	1	3	18	6	10	3	5	4	5	4	16	8	3	3
<b>TOTALS</b>		647	100	30	100	317	100	300	100	153	100	158	100	203	100	121	100

Item 8 - Rank 8 Conduct National, regional, and State follow-up studies of graduates and drop-outs of vocational education programs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	130	20	4	14	57	18	69	23	32	21	34	21	42	21	19	16
	Voluntary	424	65	24	80	227	71	173	58	99	64	106	67	127	63	83	68
Unimportant		60	9	1	3	21	7	38	13	16	10	15	9	15	7	14	11
Undecided		34	6	1	3	15	4	18	6	7	5	4	3	17	9	6	5
<b>TOTALS</b>		648	100	30	100	320	100	298	100	154	100	159	100	201	100	122	100



TABLE VII (Continued)

Item 9 - Rank 9 Develop and distribute suggested nationally-coordinated patterns of programs in supervisory training, including methods of providing them.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	87	14	2	7	33	11	52	18	22	15	23	15	26	13	15	12
	Voluntary	407	64	16	55	207	66	184	62	90	60	103	66	129	65	80	66
Unimportant		99	15	7	24	55	17	37	13	22	15	21	13	32	16	20	16
Undecided		44	7	4	14	19	6	21	7	15	10	9	6	12	6	7	6
<b>TOTALS</b>		637	100	29	100	314	100	294	100	149	100	156	100	199	100	122	100

Item 10 - Rank 10 Plan and establish minimum standards and criteria for the selection and approval of training stations in cooperative programs, including a suggested list of approved jobs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	147	23	3	11	75	24	69	23	34	22	45	29	39	19	27	22
	Voluntary	325	51	13	46	157	49	155	52	76	50	87	55	97	48	61	50
Unimportant		112	17	8	29	56	18	48	16	27	18	17	11	41	20	23	19
Undecided		60	9	4	14	29	9	27	9	15	10	8	5	25	13	11	9
<b>TOTALS</b>		644	100	28	100	317	100	299	100	152	100	157	100	202	100	122	100

TABLE VII (Continued)

Item 11 - Rank 11 Prepare a national bulletin on "Organization and Operation of Technical Training Programs."

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import-ant	Mandatory	132	21	5	17	43	14	84	29	40	27	34	22	33	17	22	18
	Voluntary	328	52	10	34	173	55	145	49	74	49	80	52	103	52	67	55
Unimportant		131	20	9	32	76	25	46	15	27	18	35	23	39	20	26	21
Undecided		44	7	5	17	20	6	19	7	9	6	5	3	22	11	7	6
<b>TOTALS</b>		635	100	29	100	312	100	294	100	150	100	154	100	197	100	122	100

Item 12 - Rank 12 Develop and publish a national bulletin on selection of vocational students for various types of vocational programs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import-ant	Mandatory	110	17	1	3	38	12	71	24	31	20	29	19	30	15	19	16
	Voluntary	350	55	16	53	180	57	154	52	80	53	93	60	111	55	59	48
Unimportant		91	14	7	24	54	17	30	10	20	13	18	11	27	13	24	20
Undecided		91	14	6	20	44	14	41	14	21	14	15	10	33	17	20	16
<b>TOTALS</b>		642	100	30	100	316	100	296	100	152	100	155	100	201	100	122	100

The great majority of leaders expressed the opinion that all twelve supervision activities were important (mandatory and voluntary) as joint actions of the Federal and State offices. The percentage of leaders' responses adjudging importance ranged from 72% on item 12 to a high of 91% on item 1.

In only two of the twelve activities, those marked 2 and 7, did the percentage of responses indicating mandatory action exceed those indicating voluntary action. One of the two dealt with an annual regional and a five-year conference of State supervisors and teacher trainers in each service. The other provided for setting up minimum standards and requirements for the selection and in-service training of State supervisors in the various service areas. The first of these two, with the exception of a five-year national conference, has been carried out for a number of years. The high percentage of responses (90%) adjudging importance and the majority percentage of responses (47%) suggesting mandatory action indicate a strong confirmation of the necessity and value of this type of jointly planned conference in the promotion and administration of the present Federal and State vocational education acts. Likewise, the predominant similar percentages (86% and 47%) on item 7 placed considerable emphasis upon setting up minimum qualifications and continuous training of State supervisors. There was apparent evidence here that the role of the State supervisor was thought of by most leaders as a key job in the development of vocational education.

It should not be overlooked that the activity ranked first, dealing with an annual State program review, was rated important by 91% of its respondents, the largest received by any one of the supervision activities. This activity was among the oldest existing activities in the Federal-State relationship in vocational education.<sup>6</sup> Here again, an overwhelming percentage of the leaders attached importance to this joint activity, with the proviso that pre-planning be done so as to obtain maximum benefits in the improvement of instruction and in-service training of State staffs. In the broad sense, this latter proviso related to the activity ranked seventh, with respect to in-service training of State supervisors.

The first four ranking activities of the twelve supervision activities referred to various types of conferences between Federal and State staffs. Obviously, importance and value was attached to this kind of joint activity and relationship. A national leadership training conference for trade and industrial education potential leaders was begun in August 1955 at Colorado A & M College, Fort Collins, under the direction of the Federal Office and in cooperation with the States.<sup>7</sup> A second similar conference, with the same cooperation, was held in August 1956

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<sup>6</sup>Interoffice Memorandum on Program Review, September 10, 1952, Division of Vocational Education, United States Office of Education, Washington, D. C.

<sup>7</sup>Conference Report, National Leadership Development Conference, August 1-12, 1955, Circular No. 477, United States Office of Education, Washington, D. C.

at Purdue University,<sup>8</sup> and a third conference is in the planning stage for August 1957, at Cornell University. These leadership conferences are being used also as models for similar conferences in the other three major service areas. Development of evaluation and effective practices in supervision in the activities ranked fifth and sixth were also deemed important by 88% and 87% of the respondents, respectively.

Considerable activity on regional, State, and local levels, already taking place on follow-up studies of graduates and drop-outs, seems to be related to the high percentage of the leaders who judged the importance of the activity ranked eighth. The North Atlantic region conducts an annual follow-up study on, "What Becomes of the Trade School Graduate?"<sup>9</sup> The central region completed a follow-up study in 1953 of the vocational school graduates of the class of 1948, in twelve central States.<sup>10</sup> Many local vocational schools and departments are conducting one kind or another of follow-up studies, to show results of training, and to justify requests for expansion and development of their programs.

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<sup>8</sup>Conference Report, National Leadership Development Conference, July 30 - August 10, 1956, Circular No. 492, United States Office of Education, Washington, D. C.

<sup>9</sup>What Becomes of the Trade School Graduate?, an annual report of the North Atlantic region, United States Office of Education, Washington, D. C.

<sup>10</sup>Report of Follow-up Study of Class of 1948 Vocational Industrial Graduates in Central Region States, 1953, Dr. H. H. London, University of Missouri, Columbia, Missouri.

The fact that as recently as May 1956 a special conference of Federal and State vocational personnel was held to study the problem of supervisory training seems to be related to the importance ascribed by the respondents to the activity concerned with supervisory training, ranked ninth. Two valuable outcomes of this conference were the publication of the reports of the conference and a manual on organization and procedures of establishing broad programs of supervisory training in the States.<sup>11</sup>

The development of standards and criteria for the selection and approval of training stations in cooperative programs, an activity ranked tenth, recently commanded the attention of the leaders. A representative of the Apprentice Training Service of the United States Department of Labor was assigned to meet and work with Federal and State staffs in trade and industrial education, for the purpose of clearing up many questions and problems of training stations in local cooperative secondary school programs. A recent release by the vocational division of the United States Office of Education was one of the results of this cooperative endeavor. Its purpose was to define more clearly for operating level personnel what an approved cooperative training

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<sup>11</sup>C. L. 3136, Report of Supervisory Development Conference, United States Office of Education, Washington, D. C. June 15, 1956.

station should be.<sup>12</sup>

Still another development has taken place, while this study has been in process, in connection with the activity ranked eleventh. A national bulletin on technical training is in process in the Federal Office as a cooperative endeavor between the States and that Office. Concurrent with the work on this bulletin is a national study of area vocational-technical schools, recently completed by the American Vocational Association.<sup>13</sup>

The fact that no joint action has taken place between the Federal Office and the States, in the preparation of a bulletin on the selection of vocational students, may indicate that this activity, ranked last, is more a purely local or State matter.

In the previously described four activities, ranked 9, 10, 11, and 12, the total of the percentages of responses indicating unimportance and indecision were a substantial expression of the opinion that these activities were not as urgently requested as the others.

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<sup>12</sup>C. L. 3175 Safe and Suitable Jobs for Part-time Trade and Industrial Cooperative Trainees, United States Office of Education, Washington, D. C., February 5, 1957.

<sup>13</sup>The Area Vocational School Story, American Vocational Journal, October 1956, American Vocational Association, Washington, D. C.

Rank of Activity	Percent of Responses Indicating Unimportance	Percent of Responses Indicating Indecision	Total Responses
9	15	7	22
10	17	9	26
11	20	7	27
12	14	14	28

Comparison of Judgments of Leaders from Three Administrative Levels -

Again, the percentage of Federal representatives rating the activities mandatory ran consistently less than those of State and local leaders.

The only major exceptions to this general observation occurred in item numbers 1 and 3. Here again, it was apparent that Federal representatives placed more emphasis upon mandatory action in these two activities, annual program reviews and special conferences, because they have been in existence throughout many years and have taken on the aspect of more or less regular required joint actions.

There were only two activities, items 2 and 12, dealing with annual regional conferences and a bulletin on selection of vocational students, in which a significant statistical difference was found between the percentages of Federal, State, and local leaders judging them mandatory. In activity 2, the percentage of State leaders' responses for mandatory action exceeded that of the Federal representatives by 20%. Local leaders' responses for mandatory action exceeded those



of Federal representatives by 21%, on the activity ranked twelfth.

The percentage of responses by Federal leaders for voluntary action was equal to or higher than those of local leaders, in six of the twelve activities, and higher than those of State leaders in seven of the twelve. However, the differences in percentages of responses were statistically significant in only four of the activities. Federal leaders' responses for voluntary action were higher than local leaders' responses by 21%, 26%, and 22%, on items 4, 7, and 8, respectively. Federal leaders' responses for voluntary action were 21% less than those of State leaders in the activity ranked eleventh. Apparently, State leaders felt that only voluntary action was needed to get underway with the development of information about technical training programs.

#### Comparison of Judgments of Same Leaders by Their Regional Locations -

Among the supervision activities, there was again remarkable similarity in percentages of responses of leaders from the four regions. Two noteworthy variations were found in the slight, but consistently higher percentage of responses adjudging importance from the southern region, and consistently lower percentage from the central region leaders. In nine of the twelve supervision activities, the southern region leaders' responses indicating importance were highest and in the other three activities were second highest of the four regions. This would seem to indicate slightly greater emphasis upon Federal-State joint activities and relationships among southern leaders, particularly when contrasted with responses of central region leaders. Central

region leaders' responses favoring importance were lowest in percentage in eight of the twelve activities and second highest in three others. The percentage of central region responses judging importance was highest in only one activity, 9, dealing with minimum qualifications requirements and provision for in-service training of State supervisors.

Despite these notably consistent variations, there was only one instance where there was a statistically significant difference between the percentages of leaders' responses favoring importance, from any two of the four regions. This single case of significant difference occurred in the 12% higher percentage favoring importance from the southern region than from the North Atlantic region, in the activity ranked tenth, dealing with development of criteria for selection of cooperative program training stations. Calculation revealed that there was no significant difference in three other instances, where percentage differences of 9% and 8% existed. This single case was interesting when the background of the nature of the activity was analyzed. It dealt with planning and establishing minimum standards and criteria for the selection and approval of training stations in cooperative programs, including a suggested list of approved jobs. If carried out, it would contribute most to the diversified occupation and distributive education programs, which exist in far greater proportion in the southern region than in any other. These programs have historically not received as much attention or emphasis in the North Atlantic region. It seems pertinent or pointed that the southern

region should attach much more importance to this activity than the North Atlantic region.

A significant difference existed in only one activity, that ranked eleventh, in percentage of regional responses as to mandatory or voluntary action. The single difference occurred between the responses from the North Atlantic region (27%) and the central region (17%) favoring mandatory action. The difference of 10% was found by calculation to be significant at the .05 level, but not at the .01 level.

Item 11 dealt with the preparation of a national bulletin on organization and operation of technical training programs. This difference can be logically attributed to the greater interest of leaders in the more highly industrialized North Atlantic region in technical training, than among leaders in the central region States, which are more rural in make up and background, and which are in the process of attracting a variety of industries into their States.

Summary of Findings on Supervision Activities - All of the twelve supervision cooperative activities were judged important by a majority of the total vocational education leaders responding. In only two of the twelve activities, items 2 and 7, were there greater percentages of responses favoring mandatory, rather than voluntary action. This finding placed high value, in the opinion of the respondents, upon the long-existing activity of annual regional conferences, sponsored by the Federal Office (item 2) and upon the need for reassessment of requirements for the selection and training of State supervisors (item 7).

The same findings also pointed up generally the opinion of the leaders that most of the Federal-State cooperative actions should be on a voluntary, rather than a mandatory basis.

The high percentage of responses (88%) favoring importance of item 4, ranked 4.5, seemed to bear out the desirability and value of some leadership conferences that have been developed and conducted already, on a cooperative basis, between the Federal Office and the States. (See footnotes 7 and 8, pages 102 and 103.) Follow-up studies of graduates and drop-outs (item 8) and development of coordinated patterns of supervisory training programs (item 9), both of which have been underway as cooperative activities, were generally favored by the leaders. (See footnotes 9, 10, and 11, pages 103 and 104.)

Larger percentages of local and State leaders than Federal leaders favored making cooperative activities mandatory, rather than voluntary. This fact would seem to contradict the oft-repeated statement that local educational people fear Federal domination or control in education.

There was very little difference in the percentages of responses from leaders in any two of the four regions. The percentages of responses from the central region favoring importance ran slightly less and those of the southern region leaders slightly higher than those of the other two regions.

Obviously, the great majority of vocational education leaders, on all levels and in all regions, favored and supported cooperative action between the Federal Office and the States, at least within the range of

the twelve supervision activities included in this study.

### Teacher Education Activities

The responses of vocational education leaders to fourteen teacher education activities are summarized in table VIII. The activities are arranged in descending rank order, according to the numbers and percentages of responses judging the activities as important, including those favoring mandatory and voluntary action. In addition, the table shows the numbers and percentages of responses of leaders favoring mandatory or voluntary action, the numbers and percentages of leaders' responses from three administrative levels, Federal, State, and local, and the numbers and percentages of responses from four geographical regions, North Atlantic, southern, central, and western.

TABLE VIII

TABULAR SUMMARY OF RESPONSES TO FOURTEEN TEACHER EDUCATION ACTIVITIES

Item 1 - Rank 1 Develop suggested in-service teacher education programs, based on current developments and problems that new and experienced teachers face.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	124	20	3	10	53	17	68	24	27	18	39	25	37	18	18	15
	Voluntary	447	70	22	73	236	74	189	65	106	71	105	67	138	69	91	75
Unimportant		40	6	3	10	22	7	15	5	7	5	7	4	18	9	7	6
Undecided		29	4	2	7	9	2	18	6	9	6	6	4	8	4	5	4
<b>TOTALS</b>		640	100	30	100	320	100	290	100	149	100	157	100	201	100	121	100

Item 2 - Rank 2 Work with States and teacher training institutions on programs of recruitment of new teachers and for expansion and improvement of teacher education programs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	127	20	1	3	47	15	79	27	30	20	32	21	40	20	24	20
	Voluntary	438	68	27	90	229	72	182	63	105	71	107	68	136	68	80	66
Unimportant		42	7	0	0	20	6	22	8	10	7	8	5	11	6	13	11
Undecided		31	5	2	7	21	7	8	2	3	2	10	6	13	6	4	3
<b>TOTALS</b>		638	100	30	100	317	100	291	100	148	100	157	100	200	100	121	100

TABLE VIII (Continued)

Item 3 - Rank 4.5 Develop criteria and minimum standards for selecting trainers for teacher education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	244	38	9	31	110	35	125	42	50	33	75	48	72	36	43	35
	Voluntary	307	48	17	59	154	49	136	46	75	50	66	42	100	50	59	48
Unimportant		56	9	3	10	30	9	23	8	15	10	8	5	18	9	15	12
Undecided		33	5	0	0	22	7	11	4	11	7	8	5	9	5	5	5
<b>TOTALS</b>		640	100	29	100	316	100	295	100	151	100	157	100	199	100	122	100

Item 4 - Rank 4.5 Conduct periodic national workshops or conferences for teacher trainers in each field of vocational education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	184	29	4	14	89	28	91	31	35	23	57	36	52	26	37	30
	Voluntary	367	57	21	73	190	60	156	53	87	57	86	55	115	57	72	59
Unimportant		50	8	3	10	22	7	25	8	15	10	11	7	17	9	6	5
Undecided		40	6	1	3	16	5	23	8	15	10	3	2	15	8	7	6
<b>TOTALS</b>		641	100	29	100	317	100	295	100	152	100	157	100	199	100	122	100

TABLE VIII (Continued)

Item 5 - Rank 4.5 Devise methods of coordinating teacher education more closely with operating program.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	118	19	3	10	36	12	79	28	26	18	35	22	28	14	27	22
	Voluntary	424	67	24	80	230	74	170	59	92	64	106	67	135	69	82	67
Unimportant		53	8	2	7	26	8	21	7	13	9	11	7	22	11	7	6
Undecided		37	6	1	3	20	6	16	6	13	9	6	4	11	6	6	5
<b>TOTALS</b>		632	100	30	100	312	100	286	100	144	100	158	100	196	100	122	100

Item 6 - Rank 4.5 Plan ways that the States can work with first-year teachers and draw from this implications for improvement of pre-service and in-service teacher training programs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	98	15	3	10	43	14	52	18	20	14	31	20	32	16	13	11
	Voluntary	456	71	22	73	239	74	195	67	105	71	110	70	138	69	95	79
Unimportant		46	8	4	14	18	6	24	8	12	8	10	6	15	7	7	6
Undecided		39	6	1	3	18	6	20	7	11	7	7	4	16	8	5	4
<b>TOTALS</b>		639	100	30	100	318	100	291	100	148	100	158	100	201	100	120	100



TABLE VIII (Continued)

Item 7 - Rank 8 Develop criteria and minimum standards for establishing, evaluating, and accrediting pre-service vocational teacher education programs in institutions of higher learning in each service.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	228	35	8	27	109	34	111	38	51	34	60	38	64	31	50	41
	Voluntary	315	49	21	70	160	51	134	45	75	50	79	51	98	49	55	45
Unimportant		56	9	0	0	23	7	33	11	13	8	8	5	25	12	10	8
Undecided		43	7	1	3	25	8	17	6	12	8	10	6	14	8	7	6
<b>TOTALS</b>		642	100	30	100	317	100	295	100	151	100	157	100	201	100	122	100

Item 8 - Rank 8 Cooperate in encouraging business and industry to provide practical work experience for vocational teachers.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	109	17	4	14	32	10	73	25	23	15	30	19	36	18	17	14
	Voluntary	430	67	15	52	221	70	194	66	100	67	108	69	139	69	80	66
Unimportant		54	8	5	17	36	11	13	4	12	8	13	8	12	6	15	12
Undecided		46	8	5	17	25	9	16	5	15	10	6	4	13	7	9	8
<b>TOTALS</b>		639	100	29	100	314	100	296	100	150	100	157	100	200	100	121	100

TABLE VIII (Continued)

Item 9 - Rank 8 Develop criteria for the establishment of "graduate study programs" to serve teachers, teacher trainers, and supervisors in one or more fields of vocational education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	112	17	5	17	41	13	66	22	25	17	33	21	34	17	18	15
	Voluntary	430	67	20	67	225	71	185	63	97	63	97	70	131	66	83	68
Unimportant		61	10	4	13	30	9	27	9	13	9	8	5	22	11	18	15
Undecided		39	6	1	3	22	7	16	6	16	11	7	4	13	6	3	2
<b>TOTALS</b>		642	100	30	100	318	100	294	100	151	100	157	100	200	100	122	100

Item 10 - Rank 10 Organize and conduct national, regional, or interstate workshops for improvement of technical preparation of vocational teachers in service.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	174	27	3	10	70	22	101	34	38	26	51	32	48	24	35	29
	Voluntary	354	55	19	66	187	59	148	51	82	55	87	55	111	56	67	55
Unimportant		62	10	5	17	31	10	26	9	18	12	11	8	21	10	11	9
Undecided		50	8	2	7	29	9	19	6	11	7	8	5	21	10	9	7
<b>TOTALS</b>		640	100	29	100	317	100	294	100	149	100	157	100	201	100	122	100

TABLE VIII (Continued)

Item 11 - Rank 11 Seek a method of approach to the standardization of content in minimum professional courses required for State certification.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	152	24	3	10	47	15	102	35	39	27	43	27	37	19	31	25
	Voluntary	296	47	14	48	154	48	128	44	67	47	76	48	91	45	58	48
Unimportant		115	18	10	34	66	21	39	13	20	14	23	15	40	20	26	21
Undecided		73	11	2	8	51	16	20	8	18	12	16	10	32	16	7	6
<b>TOTALS</b>		636	100	29	100	318	100	289	100	144	100	158	100	200	100	122	100

Item 12 - Rank 12 Plan and prepare forms for exchange of data on vocational teachers, trained and available for employment, on regional or area basis.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	74	11	3	10	27	9	44	15	20	13	13	8	24	12	14	12
	Voluntary	376	59	14	48	188	60	174	58	87	57	103	66	112	56	71	58
Unimportant		92	14	5	18	46	15	41	14	21	14	20	13	30	15	19	16
Undecided		100	16	7	24	56	16	37	13	24	16	21	13	35	17	17	14
<b>TOTALS</b>		642	100	29	100	317	100	296	100	152	100	157	100	201	100	121	100

TABLE VIII (Continued)

Item 13 - Rank 13 Develop a suggested forty-hour practice teaching program with minimum standards for vocational teachers in various services, including the necessary training for student teacher supervisors.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	101	17	2	8	33	11	66	23	23	15	31	21	24	13	22	18
	Voluntary	279	46	11	42	132	44	136	48	64	45	73	49	84	45	56	47
Unimportant		153	25	8	31	84	28	61	22	37	26	35	23	53	28	26	22
Undecided		76	12	5	19	51	17	20	7	20	14	11	7	26	14	16	13
<b>TOTALS</b>		609	100	26	100	300	100	283	100	143	100	150	100	187	100	120	100

Item 14 - Rank 14 Conduct a national survey of activities engaged in and services provided for teacher educators.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	64	10	3	10	35	11	26	9	10	7	18	11	22	11	12	10
	Voluntary	324	51	13	43	169	53	142	49	64	43	99	63	93	47	63	52
Unimportant		116	18	11	37	51	16	54	19	32	22	21	13	31	16	28	23
Undecided		135	21	3	10	4	20	68	23	42	28	20	13	53	27	19	15
<b>TOTALS</b>		639	100	30	100	319	100	290	100	148	100	158	100	199	100	122	100

The percentages of responses favoring importance ranged from 61%, on the lowest ranking activity, to 90% on the highest. The percentage of responses favoring mandatory action ranged from a low of 10%, on item 14, to a high of 38%, on item 3, indicating a marked decline in percentages of responses favoring mandatory action in teacher education activities, as contrasted with the responses favoring mandatory action, on administration and supervision activities. In no one teacher education activity did the percentage of responses for mandatory action exceed those favoring voluntary action.

The two activities, items 3 and 7, receiving the greatest percentage (38% and 35% respectively) of responses favoring mandatory action, relate to the development of criteria and minimum standards for selecting educators and vocational teachers (item 3) and for establishing, evaluating, and accrediting pre-service vocational teacher education programs (item 7). Both of these activities are represented, to some degree, in the qualifications of teacher educators and the requirements for teacher education programs, as specified in the various State plans for vocational education. Apparently, a comparatively large percentage of leaders felt that joint action by the Federal Office and the States, in developing certain criteria and minimum standards for selection of teacher educators and for teacher education programs should be mandatory, rather than voluntary.

#### Comparison of Judgments of Leaders from Three Administrative Levels -

The percentage of Federal leaders' responses was greater than that of

State and local leaders about item 7, as to the importance of developing criteria and minimum standards for establishing, evaluating, and accrediting pre-service vocational teacher education programs, 12% higher than State leaders and 14% higher than local leaders. Apparently, Federal leaders, in general, see a greater need in this area of vocational education than State or local leaders.

A greater percentage of local leaders than Federal leaders emphasized importance of four activities. One, ranked tenth, deals with the organization and conduct of workshops for the improvement of technical preparation of employed vocational teachers; a second, ranked eleventh, with seeking a method of approach to the standardization of content in minimum professional courses, required for State certification of vocational teachers; a third, ranked twelfth, with planning and preparing forms for exchange of data on vocational teachers educated and available for employment on a regional or area basis; and, fourth, the activity ranked thirteenth, with developing a suggested forty-hour practice teaching program, with minimum standards for vocational teachers in various services, including the necessary training for student teacher supervisors. This different reaction by local leaders indicated greater concern among them with certain more specific problems in the teacher education area of vocational education.

In two activities, those ranked twelfth and fourteenth, the percentage of State leaders' responses indicating importance were higher than

Federal leaders' responses by 11% in each case. This difference in reaction would seem to point up the greater concern of State leaders with the problem of inadequate supply of vocational teachers and with inadequate service by teacher educators.

Item 5 activity, ranked 4.5, the devising of methods of coordinating teacher education more closely with operating program, was among the top choices of all levels of leaders. All of this seems to express considerable concern of most leaders over the shortage of vocational teachers and of the need for teachers to be more adequately prepared for the actual and real problems of teaching vocational subjects.

In three activities, items 2, 4, and 10, there was a significant difference between the percentage of responses of State leaders favoring mandatory action, as compared with those of Federal representatives. In each of these cases, the percentages of State leaders' responses were 12%, 14%, and 12% higher, respectively, than the Federal leaders' responses. The differences seemed to point again to State leaders' concern with the vocational teacher shortage, with the need for conferences and workshops for teacher educators, and with the inadequate technical background of vocational teachers in service.

In nine of the fourteen activities, the percentages of local leaders' responses favoring mandatory action exceeded those of Federal leaders significantly (items 1, 2, 4, 5, 7, 8, 10, 11, and 13). This difference is somewhat startling, in view of the common belief that local educational leaders are said to fear Federal domination and control. This

difference in reactions seemed also to indicate that the local leaders were looking to the Federal and State levels for more leadership and action than the Federal leaders have been conscious of.

Comparison of Judgments of Same Leaders by Their Regional Locations -

Again, there was remarkable similarity in the percentages of responses from the four geographical regions. Except for a few significant differences between certain regions in several activities, there was strong evidence that vocational education leaders of the four regions did not differ greatly in their reactions to teacher education cooperative activities. Significant differences between percentages of responses of leaders from the four regions, ascribing importance, occurred at the .05 level, but not at the .01 level, with two exceptions, in the following instances:

- Item 4 Southern region responses 11% greater than North Atlantic region.  
Western region responses 9% greater than North Atlantic region.
- Item 9 Southern region responses 11% greater than North Atlantic region.
- Item 11 Central region responses 10% less than North Atlantic region.
- Item 13 Southern region responses 10% greater than North Atlantic region.
- Item 14 Southern region responses 24%\* greater than North Atlantic region.  
Western region responses 12% greater than North Atlantic region.  
Southern region responses 16%\* greater than central region.

\*At the .01 level, also.



In general, these differences indicated less concern, generally, on the part of North Atlantic region leaders with these particular teacher education problems. A greater percentage of southern and western region leaders indicated the importance of the last ranking activity, to conduct a national survey of activities engaged in and services provided by teacher educators, than did leaders from North Atlantic and central regions.

Significant differences between southern region and North Atlantic region responses regarding mandatory action were found to exist in items 3 and 4. Southern region leaders favored mandatory action, to the extent of 15% more on item 3 and 13% more on item 4, over the percentages of the North Atlantic region. Apparently, southern region leaders feel there should be more emphasis placed upon joint action in efforts to develop criteria and minimum standards for selecting teacher educators and upon conducting periodic national workshops or conferences for teacher educators, than do the leaders from the North Atlantic region.

Indecision and Judgments of Unimportance - Leaders on Federal and State levels contributed more to the total percentages indicating unimportance and indecision than those on the local level, to items 11, 12, 13, and 14.

Summary of Findings on Teacher Education Activities - All of the fourteen teacher education activities were adjudged important by a majority of the respondents, the lowest ranking activity being indicated as

important by 61% of the vocational education leaders responding. In recent years, teacher education programs in vocational education have received closer scrutiny by the States than any other major phase of vocational education. The leaders' responses to these activities indicated their desire for more continued cooperative action in this connection, between the Federal Office and the States.

The percentages of leaders' responses favoring mandatory action dropped sharply on these fourteen activities. Items 3 and 4 received by far the greater percentage of responses favoring mandatory action, 38% and 35%, respectively, the first dealing with the development of standards for selecting teacher educators, and the second with developing standards for evaluating and accrediting teacher educator institutions. The emphasis on "shouldness" in these two activities would seem to give more urgency to the need for action there than in the other activities. Certainly, these two activities represent two very basic important considerations in the preparation of teachers.

Federal level leaders stressed the importance of high standards for teacher education programs, 97% ascribing importance to item 7. Local leaders emphasized attention to the technical training needs of teachers in service, 91% indicating the importance of item 8. The percentages of local leaders' responses favoring mandatory action far exceeded those of the Federal level, thus again indicating no particular fear of Federal control. The percentages of State leaders' responses favoring mandatory action were also greater than those of Federal leaders, but not as much

greater as the local leaders' responses. It appears safe to conclude that both local and State leaders desire more active cooperative participation than do Federal leaders in these teacher education activities.

The percentages of responses from the four regions were again very similar in ascribing importance to the fourteen teacher education activities. Southern region leaders' responses indicating importance and mandatory cooperative action ran consistently higher than those of the other three regions. This difference may be due to the fact that the congressional leaders who originally sponsored Federal aid to vocational education were from the South.

The percentages of leaders' responses indicating unimportance and indecision ran considerably higher in the teacher education activities than in either the supervision or administration activities. A high percentage of the responses ascribing unimportance and indecision was contributed by leaders from Federal and State levels. Some of the present alleged inadequacies of teacher education programs may exist because of the lack of interest or concern on the part of some Federal and State leaders. Both have a legal responsibility for the administration of teacher education programs in the States.

#### Activities Involved in the Production and Distribution of Instructional Materials

Ten activities dealing with the production and distribution of instructional materials are arranged in descending rank order in

table IX, according to the percentages of total responses ascribing importance to the activities. The table also contains the data on responses suggesting mandatory or voluntary action, by total responses, administrative levels, and by geographical regions. Numbers and percentages of responses adjudging importance, unimportance, and indecision are shown, also.

TABLE IX

## TABULAR SUMMARY OF RESPONSES TO TEN INSTRUCTIONAL MATERIALS ACTIVITIES

Item 1 - Rank 1 Plan and arrange for an exchange of instructional materials of proven worth between States.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.		
Important	Mandatory	127	20	2	7	49	16	76	26	29	19	31	20	40	20	26	21
	Voluntary	469	73	25	87	244	77	200	68	112	75	113	72	146	72	88	72
Unimportant		21	3	1	3	13	4	7	2	2	1	6	4	8	4	5	4
Undecided		24	4	1	3	11	3	12	4	7	5	6	4	8	4	3	3
<b>TOTALS</b>		641	100	29	100	317	100	295	100	150	100	156	100	202	100	122	100

Item 2 - Rank 2.5 Prepare and distribute quarterly annotated lists of instructional materials, including audio-visual aids, from all sources for use in all services.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.		
Important	Mandatory	195	30	3	10	86	27	106	37	46	31	45	28	59	30	41	34
	Voluntary	363	57	12	40	187	58	164	56	83	56	97	61	113	56	65	53
Unimportant		47	7	9	30	28	9	10	3	7	5	10	6	15	7	8	7
Undecided		37	6	6	20	19	6	12	4	12	8	7	5	15	7	7	6
<b>TOTALS</b>		642	100	30	100	320	100	292	100	148	100	159	100	202	100	121	100

TABLE IX (Continued)

Item 3 - Rank 2.5 Develop and exchange among States and cities effective procedures for state-wide curriculum work in the various vocational education fields.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	85	13	2	7	32	10	51	17	18	12	16	10	32	16	18	15
	Voluntary	475	74	23	79	234	74	218	73	116	76	120	77	141	70	89	73
Unimportant		52	8	2	7	33	10	17	6	10	7	14	9	17	8	10	8
Undecided		31	5	2	7	18	6	11	4	8	5	6	4	12	6	5	4
<b>TOTALS</b>		643	100	29	100	317	100	297	100	152	100	156	100	202	100	122	100

Item 4 - Rank 4 Establish national, regional, or interstate curriculum laboratories, through special Federal and State appropriations, for the purpose of producing necessary related instructional materials, using representative advisory assistance of all interested private and public organizations.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	183	29	1	3	70	22	112	38	47	32	55	35	53	27	27	22
	Voluntary	315	49	14	47	166	52	135	46	78	52	66	42	99	49	68	56
Unimportant		85	13	9	30	46	14	30	11	17	11	20	13	25	12	19	16
Undecided		59	9	6	20	38	12	15	5	7	5	16	10	25	12	8	6
<b>TOTALS</b>		642	100	30	100	320	100	292	100	149	100	157	100	202	100	122	100

TABLE IX (Continued)

Item 5 - Rank 5 Develop suggested trade extension courses of study, in major occupations and/or industries.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	109	18	1	4	34	11	74	25	25	17	24	16	38	19	21	18
	Voluntary	316	50	12	44	149	49	155	53	78	52	84	56	90	46	61	51
Unimportant		149	24	13	48	94	31	42	14	31	21	36	24	47	24	29	24
Undecided		53	8	1	4	28	9	24	8	16	10	7	4	22	11	8	7
<b>TOTALS</b>		627	100	27	100	305	100	295	100	150	100	151	100	197	100	119	100

Item 6 - Rank 6 Plan and prepare courses of study and curricula for various vocational education programs in all services.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	133	21	1	3	39	12	93	32	37	25	32	20	41	21	22	18
	Voluntary	292	46	13	43	147	47	132	45	67	45	77	49	85	43	59	48
Unimportant		88	14	5	17	49	15	34	12	14	9	21	13	30	15	20	17
Undecided		125	19	11	37	81	26	33	11	31	21	28	18	42	21	20	17
<b>TOTALS</b>		638	100	30	100	316	100	292	100	149	100	158	100	198	100	121	100

TABLE IX (Continued)

Item 7 - Rank 7.5 Organize a joint committee, national in scope, to provide policy and support for needed instructional materials.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	131	21	2	8	48	16	81	27	29	19	33	21	47	23	21	17
	Voluntary	293	45	13	50	155	49	125	42	72	48	79	51	71	36	66	54
Unimportant		131	21	6	23	70	22	55	19	31	21	32	21	43	22	22	18
Undecided		81	13	5	19	41	13	35	12	17	12	12	7	38	19	13	11
<b>TOTALS</b>		636	100	26	100	314	100	296	100	149	100	156	100	199	100	122	100

Item 8 - Rank 7.5 Prepare instructional materials for use in much needed and undeveloped programs for slow learners.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	118	18	0	0	39	12	79	27	36	24	30	19	30	15	22	18
	Voluntary	306	48	12	40	149	47	145	50	81	55	70	45	101	50	51	42
Unimportant		126	20	14	47	78	24	34	12	16	11	36	23	39	20	28	23
Undecided		89	14	4	13	53	17	32	11	15	10	21	13	31	15	20	17
<b>TOTALS</b>		639	100	30	100	319	100	290	100	148	100	157	100	201	100	121	100



TABLE IX (Continued)

Item 9 - Rank 9.5 Establish sound minimum standards for formats and kinds of instructional materials.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	120	19	2	6	43	14	75	26	34	23	36	23	31	16	18	15
	Voluntary	297	46	14	47	137	43	146	50	66	45	80	50	88	44	58	48
Unimportant		107	17	5	17	70	22	32	11	24	16	17	11	42	21	21	17
Undecided		114	18	9	30	68	21	37	13	23	16	25	16	39	19	24	20
<b>TOTALS</b>		638	100	30	100	318	100	290	100	147	100	158	100	200	100	121	100

Item 10 - Rank 9.5 Provide for coordinated national program of development of related subject matter apprentice program in less common occupations.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	110	17	3	12	42	13	65	22	21	14	23	15	35	18	30	25
	Voluntary	307	48	8	31	137	44	162	55	81	53	70	45	94	47	58	48
Unimportant		171	27	12	46	111	35	48	16	34	22	54	35	52	26	27	22
Undecided		48	8	3	11	23	8	22	7	16	11	7	5	18	9	6	5
<b>TOTALS</b>		636	100	26	100	313	100	297	100	152	100	154	100	199	100	121	100

The percentages of leaders who rated the ten instructional materials activities as important (mandatory and voluntary) ran from 65% to 93%. The percentages of responses favoring mandatory action were comparatively low, ranging from a low of 17% to a high of 30%. Obviously, the nature of the activities is such that it is impractical that they be required by law or regulation.

The top ranking activity, adjudged by 93% of respondents as important, deals with planning and arranging for an exchange of instructional materials of proven worth, between the States. Many States have developed a great variety of instructional materials in all vocational services over a period of years. The Federal Office, with the assistance of the States, since 1941 has prepared and distributed a compilation of trade and industrial education instructional materials that are prepared by and available from the States.<sup>14</sup> However, many useful materials are frequently unknown and unavailable, because of limitations within the States. Vocational leaders place a high rating of importance upon a system of exchange of proven materials.

The second ranking activity, which 87% of the respondents adjudged important, is closely related to the first:

Prepare and distribute quarterly annotated lists of instructional materials, including audio-visual aids from all sources for use in all services.

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<sup>14</sup>Misc. 3243, Revised June 1955. Division of Vocational Education, U. S. Office of Education, Trade and Industrial Education Branch, Washington, D. C.

If the first activity were not possible, then item 2 would apparently be a next best action.

Item 3, ranked equally with item 2, deals with the development and exchange among States and cities of effective procedures for state-wide curriculum work in the various vocational education fields. Much information has been sought between States, in this regard. Apparently, this predominant opinion expresses a desire for the Federal Office to participate more actively in this matter. The activity ranked fourth, with 78% responses adjudging importance, involved the establishment of curriculum laboratories. A futile effort was made in Congress in recent years to obtain earmarked funds for this purpose. Apparently, leaders still feel that it deserves special attention and emphasis. The remaining six activities are much more specific in nature than the first four activities. Therefore, they are of much greater concern to local program operating personnel, as shown below.

#### Comparison of Judgments of Leaders from Three Administrative Levels -

A larger percentage of local leaders rated the activities of the instructional materials classification important in every instance than did those of the Federal and State levels. In fact, the differences favoring the local leaders were significant, at the .05 level and the .01 level, in eight of the ten activities; items 1 and 4 were exceptions. Differences favoring the percentages of State leaders adjudging importance, over those of the Federal level, were significant, in six of the activities -- 2, 4, 5, 6, 8, and 10.

Apparently, these sharper differences in opinions between administrative levels can be attributed to the fact that the local leaders were much more involved and concerned with the actual use of instructional materials than State and Federal leaders. State leaders, likewise, were more concerned with these activities because of their greater responsibility for the success of local programs, than Federal leaders. The greatest difference occurred in the activity dealing with the preparation and distribution of quarterly annotated lists of instructional materials, item 2. The percentage of local leaders adjudging importance of item 2 exceeded that of the Federal group by 43%, and the State exceeded the Federal by 33%. Other significant differences occurred in items 4, 5, 6, 8, 9, and 10, where local leaders' responses were greater than Federal leaders' by 34%, 30%, 31%, 37%, 23%, and 34%, respectively.

Again, it is surprising that local and, to some lesser extent, State leaders' responses favored mandatory action in greater percentages than did Federal leaders'. It should not be overlooked, however, that in every activity in table IX, the percentages of responses of leaders favoring voluntary action on the three administrative levels exceeded those favoring mandatory action. There were significant differences between State leaders' and Federal leaders' responses favoring mandatory action on items 2, 4, and 8; between local and Federal leaders' responses favoring mandatory action in items 1, 2, 4, 5, 6, 7, 8, and 9, and between local and State leaders' responses favoring mandatory

actions in items 4, 5, 6, 7, 8, and 9.

It seems, therefore, that the local and the State leaders had a stronger feeling about the importance of the development, production, and distribution of instructional materials than Federal leaders.

Comparison of Judgments of Same Leaders by Their Regional Locations -

Leaders of all four regions attached importance to all of the suggested instructional materials activities, to the extent of at least 65% of the respondents. For the most part, the percentages of responses ascribing importance from the leaders of the four regions were again very similar. The one notable exception occurred in item 8, on the proposal for joint action in the preparation of instructional materials for use in much needed and undeveloped programs for slow learners. In this instance, the North Atlantic region leaders' responses indicating importance exceeded those of the southern region by 15%, the central region by 14%, and the western region by 19%. All of these were statistically significant differences. It would appear that the North Atlantic region, more thickly populated and with larger vocational school enrollments, generally were facing a greater problem, in this respect.

In general, the North Atlantic region leaders in greater percentages ascribed importance to the instructional materials activities than did the leaders of the other three regions. The percentages of leaders from the central region ascribing importance were noticeably lower than those of the other three regions. These findings might be

attributed to two general differences commonly recognized between the two regions:

1. A greater concentration of population and vocational industrial programs, and higher vocational student enrollments per school in the North Atlantic region, and hence more serious involvement with instructional materials problems in vocational industrial classes.
2. A traditionally more conservative approach in the central region to any joint or cooperative action of the States with the Federal Government and more scattered vocational enrollments; hence, lesser concern for the need for joint actions in connection with instructional materials.

There were significant differences between the percentages from any two regions favoring mandatory action in only two activities, items 4 and 10. In item 4, the percentage of North Atlantic region responses favoring mandatory action exceeded that of the western region by 10%; and in item 10, the western region responses favoring mandatory actions exceeded those of the North Atlantic region by 11%. In both cases, the difference was significant at the .05 level, but not at the .01 level.

Summing up these two significant differences as to mandatory action, the North Atlantic region leaders seemed to emphasize more strongly the establishment of curriculum laboratories, while the western region leaders emphasized more strongly the provision for a coordinated national program of development of related subject matter for apprentices

in the less common occupations. Both of these activities are essential to alleviating the old problem of inadequate instructional materials in related subjects for apprentices.

The percentages of responses indicating voluntary action by leaders from the regions revealed three significant differences, as follows:

1. Item 4 The percentages of North Atlantic region leaders favoring voluntary action - 10% higher than the southern region leaders.
2. Item 7 North Atlantic region leaders favoring voluntary action - 10% higher than the central region leaders.
3. Item 8 North Atlantic region leaders favoring voluntary action - 13% higher than the western region leaders.

These differences, too, were significant at the .05 level, but not at the .01 level. In general, these differences seemed to reflect greater interest in instructional materials activities in the North Atlantic region than in the other three regions.

Indecision and Judgments of Unimportance - The percentage of responses indicating unimportance were higher in the instructional materials activities than in any previous classification, ranging from 3% on the first ranking activity, to a high of 24% on item 5, to develop suggested trade extension courses of study in major occupations and/or industries.

Responses indicating indecision ranged from a low of 4% on item 1 to a high of 19% on item 6, to plan and prepare courses of study and curricula for various vocational education programs in all services.

Another high percentage of leaders' responses indicating indecision occurred in item 9, to establish sound minimum standards for formats and kinds of instructional materials. The extent of indecision pointed up old and strong doubts among vocational educators, as to the place of the Federal Office or the States in matters dealing with courses of study and with uniform formats.

Summary of Findings on Instructional Materials Activities - All activities were rated important, but the percentages of responses favoring voluntary action were notably higher than those favoring mandatory action. The activities concerned with exchange of materials and distribution of annotated lists of materials were rated important, overwhelmingly.

Local and State leaders attached importance to instructional materials activities in greater percentages than did Federal leaders, apparently because they are more directly involved and concerned in this connection, at the operating level. Local leaders favored mandatory action to a greater extent than the Federal leaders.

Again, there was little difference among the leaders from the four regions. North Atlantic region leaders generally placed greater emphasis on instructional materials activities, while central region leaders showed least concern.



### Physical Facilities Activities

Table X shows the data on responses to five cooperative activities dealing with physical facilities. The order of the activities was made on the basis of descending rank, according to the percentages of total responses indicating importance, including those favoring mandatory and voluntary action. The table also shows the number and percentages of responses from three administrative levels and from four geographic regions, as to importance, mandatory or voluntary action, as to unimportance and indecision.

TABLE X

## TABULAR SUMMARY OF RESPONSES TO FIVE PHYSICAL FACILITIES ACTIVITIES

Item 1 - Rank 1.5 Prepare and publish manuals and bulletins showing suggested minimum laboratory and shop layouts, equipment, and tools that should be provided for approved programs in all services, through the assistance of representative advisory National and State committees.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	214	33	0	0	104	33	110	37	51	34	67	43	59	29	37	30
	Voluntary	358	56	24	83	176	56	158	53	91	60	76	49	112	56	70	58
Unimportant		33	5	2	7	15	5	16	5	3	2	6	4	14	7	9	7
Undecided		37	6	3	10	21	6	13	5	6	4	7	4	17	8	6	5
<b>TOTALS</b>		642	100	29	100	316	100	297	100	151	100	156	100	202	100	122	100

Item 2 - Rank 1.5 Develop criteria for evaluating space and equipment in various vocational fields.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	159	25	3	11	78	25	78	26	42	28	50	32	36	18	29	24
	Voluntary	409	64	23	79	201	64	185	63	96	63	93	60	134	67	78	64
Unimportant		33	5	1	3	14	4	18	6	6	4	5	3	12	6	9	7
Undecided		40	6	2	7	22	7	16	5	8	5	7	5	19	9	6	5
<b>TOTALS</b>		641	100	29	100	315	100	297	100	152	100	155	100	201	100	122	100

TABLE X (Continued)

Item 3 - Rank 3 Work with manufacturers of school equipment for vocational programs, to get the kind of equipment that is in keeping with goals of the program and the experience of the several States.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	103	16	1	3	49	15	53	18	17	11	31	20	30	15	24	20
	Voluntary	424	66	19	66	209	66	196	66	104	68	106	68	132	65	74	60
Unimportant		52	8	5	17	25	8	22	7	11	7	9	6	20	10	11	9
Undecided		65	10	4	14	34	11	27	9	21	14	10	6	20	10	13	11
<b>TOTALS</b>		644	100	29	100	317	100	298	100	153	100	156	100	202	100	122	100

Item 4 - Rank 4.5 Prepare manual on principles and methods of selecting, obtaining, placing, and inventorying shop and laboratory equipment.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	107	17	2	7	49	16	56	19	22	14	35	23	33	17	16	13
	Voluntary	382	60	14	48	186	59	182	61	87	57	87	56	126	63	77	63
Unimportant		69	11	6	21	42	13	21	7	18	12	21	14	15	8	12	10
Undecided		80	12	7	24	36	12	37	13	25	17	11	7	25	12	17	14
<b>TOTALS</b>		638	100	29	100	313	100	296	100	152	100	154	100	199	100	122	100

TABLE X (Continued)

Item 5 - Rank 4.5 Prepare State plans to include methods and procedures for obtaining local industrial recommendations for minimum laboratory and shop layouts, equipment, and tools.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	114	18	3	11	43	14	68	23	32	21	29	19	29	15	22	18
	Voluntary	309	49	11	41	139	45	159	54	75	50	73	48	97	49	59	49
Unimportant		136	22	10	37	82	27	44	15	28	19	37	24	43	22	25	21
Undecided		70	11	3	11	42	14	25	8	14	10	14	9	28	14	14	12
<b>TOTALS</b>		629	100	27	100	306	100	296	100	149	100	153	100	197	100	120	100

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory																
	Voluntary																
Unimportant																	
Undecided																	
<b>TOTALS</b>																	

Only five activities dealing with physical facilities were considered to have meaningful and practical value for the purposes of this study. All of them were indicated as important by most of the leaders, ranging from 89% on the first two ranking activities, to 67% on the last two. The two top ranking activities were concerned with preparation of suggested shop and laboratory layouts and with developing criteria for evaluating space and equipment in various vocational fields. Item 5 suggested that State plans be prepared to include methods and procedures for obtaining local industrial recommendations for minimum laboratory and shop layouts, equipment, and tools.

Item 2, if carried out, might be deemed to serve a greater need than item 1, because there have been produced and distributed several State and equipment vendor publications, showing suggested shop and laboratory layouts and minimum tool and equipment lists, while little has been done on any broad scale to develop criteria for evaluating space and equipment.<sup>15</sup> The third ranking item called for enlisting the aid of equipment vendors in the selection of suitable equipment for vocational purposes.

#### Comparison of Judgments of Leaders from Three Administrative Levels -

There was little difference between the percentages of Federal, State, and local leaders' responses ascribing importance (mandatory and

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<sup>15</sup>References for School Shop Planning and Layout, Kansas State Board for Vocational Education, Topeka, 1956.

voluntary) to the activities, items 1 and 2. There were significant differences between the percentages of State and Federal leaders' responses and between the percentages of local and Federal leaders' responses ascribing importance on items 3 and 4. There were significant differences also between the percentages of local and Federal leaders' responses and between the percentages of local and State leaders' responses adjudging importance on item 5.

The percentages of local leaders' responses indicating importance were consistently higher than those of Federal and State leaders, on the five physical facilities activities, and percentages of State leaders' responses were higher than those of Federal leaders. Like instructional materials, physical facilities are a matter of more immediate and constant concern to local leaders than to Federal leaders, and of more concern to State leaders than to Federal leaders. It is interesting to note, however, that in one instance, a slightly greater percentage of Federal leaders than State and local leaders rated an activity important. The exception occurred in item 2, "Develop criteria for evaluating space and equipment in various vocational fields." This case can be understood more readily in the realization that the Federal Office has traditionally been more interested in, and concerned with, broader program functions, such as criteria for evaluation, than with more specific standards or other details or program, such as specific shop layouts, or tool and equipment lists.

The percentages of State leaders' responses favoring mandatory

action were significantly different statistically; that is, higher than those of Federal leaders in the first four of the activities. The percentages of local leaders' responses favoring mandatory action were significantly different, higher than Federal leaders' responses in all five activities. Local leaders' responses were also slightly, but consistently higher in percentages than State leaders advocating mandatory action. Here again was an expression of need for cooperative assistance from those who are on the local operating level.

The percentages of Federal leaders' responses favoring voluntary action were much higher than those of State and local leaders by 27% and 30%, respectively, in item 1; and by 15% and 16% in item 2. State and local leaders' responses favoring voluntary action were higher than Federal leaders' responses by 9% and 12%, respectively, on item 3; by 11% and 13%, respectively, on item 4; and by 4% and 13% on item 5. These two comparisons presented a mixed reaction as to Federal participation in cooperative activities. It can be explained in part by the high total percentage of Federal responses indicating unimportance and indecision on items 3, 4, and 5. The logical deduction would be a substantial number of Federal leaders feel that the first two ranking items are not only important, but warrant mandatory action because of their broad far-reaching implications. At the same time, they also feel that items 3, 4, and 5 are of somewhat doubtful importance as cooperative Federal-State activities, because of their specific nature and large local responsibility.

Comparison of Responses from the Four Regions - No significant differences existed between the percentages of responses from any two regions, as to the importance of the five physical facilities activities. In general, the southern region leaders emphasized the importance of these activities more than the other three regions. The North Atlantic region leaders, second to those in the southern region, emphasized the importance of these activities more than the leaders from the central and western regions.

In one instance only was there a significant difference between percentages of responses of any two regions favoring mandatory action. The central region leaders' responses favoring mandatory action were 10% less than the North Atlantic responses on item 2. Likewise, there was only one instance of a significant difference between regions, in percentages of responses favoring voluntary action. This difference occurred in activity 1, where southern region responses favoring voluntary action were 11% less than those of the North Atlantic region. With these two exceptions, it can be concluded that the geographical location of leaders has little to do with any differences of opinion that might exist relative to these five physical facilities activities as cooperative actions.

Indecision and Judgments of Unimportance - Percentages of total responses indicating unimportance ranged from a low of 5% to a high of 22% on item 5. Percentages of responses indicating indecision ranged from 6% on item 1 to 12% on item 4. These percentages, in general,



were not as high as in the instructional materials activities, but were higher than in the first three classifications of activities, administration, supervision, and teacher education.

There was little percentage difference among the leaders of the four regions, as to unimportance and indecision. The percentages of Federal leaders' responses in this respect were consistently higher than those of State and local leaders.

Summary of Findings on Physical Facilities Activities - All five activities received substantial percentages of responses indicating importance. Very few significant differences in percentages of responses appeared, either between administrative levels or regional groups. In general, leaders from the local administrative level and those from the southern region tended to emphasize the importance of the activities more than leaders from other categories.

Federal leaders, in favoring mandatory action on items 1 and 2, indicated a more general interest in the broader aspects of criteria and standards regarding physical facilities than those from the State and local levels. The last three items were decidedly favored by local and State leaders, showing a greater concern with the more specific phases of physical facilities closer to the operating level of programs.

Generally, this classification of activities provides for more variation in local prerogative and choice than any of the other six classifications. No Federal money is involved in the building of the shop laboratory or in the purchase of equipment and tools. Hence, there is

less likelihood of direct Federal interest and participation in these activities, except as previously stated, in the broad aspects of maintaining high standards of space, layout, and equipment.

#### Public Relations Activities

Nine cooperative activities classified as public relations are arranged in descending rank order in table XI, according to the percentages of total responses adjudging the activities as important. More detailed data in table XI shows the responses suggesting mandatory or voluntary action by total responses, by three administrative levels, and by four geographical regions. Also included in table XI are data showing numbers and percentages of responses indicating unimportance and indecision.

TABLE XI

## TABULAR SUMMARY OF RESPONSES TO NINE PUBLIC RELATIONS ACTIVITIES

Item 1 - Rank 1 Establish more and better communication between the vocational education divisions and general education on National and State levels.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	257	40	4	14	121	38	132	45	60	41	61	40	77	38	57	48
	Voluntary	355	56	23	80	184	59	148	51	79	54	91	59	118	58	59	48
Unimportant		16	3	1	3	6	2	9	3	7	4	0	0	7	3	2	2
Undecided		7	1	1	3	4	1	2	1	1	1	1	1	2	1	2	2
<b>TOTALS</b>		635	100	29	100	315	100	291	100	147	100	153	100	204	100	120	100

Item 2 - Rank 2 Prepare promotional materials, including films and film strips, that can be used to explain and demonstrate effective vocational education programs to business, industry, labor, education, students, and parents.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	187	29	2	7	85	27	100	34	42	28	45	29	56	28	42	35
	Voluntary	403	64	22	76	209	66	172	59	97	66	101	66	126	62	73	61
Unimportant		27	4	3	10	12	4	12	4	4	3	5	3	10	5	5	4
Undecided		19	3	2	7	10	3	7	3	5	3	3	2	11	5	0	0
<b>TOTALS</b>		636	100	29	100	316	100	291	100	148	100	154	100	203	100	120	100

TABLE XI (Continued)

Item 3 - Rank 3 Bring representative advisory committees, administrators, and supervisors and laymen together for evaluation and suggestions for program improvement.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	155	24	4	14	84	26	67	23	41	28	35	23	42	21	35	29
	Voluntary	431	68	24	83	206	65	201	69	91	61	111	73	142	70	78	65
Unimportant		34	5	1	3	18	6	15	5	11	7	5	3	14	7	4	3
Undecided		16	3	0	0	9	3	7	3	6	4	2	1	5	2	3	3
<b>TOTALS</b>		636	100	29	100	317	100	290	100	149	100	153	100	203	100	120	100

Item 4 - Rank 5 Collect needed data and prepare bulletin for laymen on accomplishments of vocational education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	189	30	3	11	88	28	98	34	41	27	49	32	54	27	43	36
	Voluntary	370	58	23	82	193	61	154	53	94	64	95	62	117	58	56	47
Unimportant		51	8	2	7	25	8	24	8	7	5	8	5	24	12	11	9
Undecided		25	4	0	0	11	3	14	5	6	4	2	1	7	3	10	8
<b>TOTALS</b>		635	100	28	100	317	100	290	100	148	100	154	100	202	100	120	100

TABLE XI (Continued)

Item 5 - Rank 5 Prepare frequent news and feature releases from annual State reports and other sources, describing the character, extent, and development and results of various programs of vocational and practical arts education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import- ant	Mandatory	126	20	3	10	60	19	63	22	30	20	36	24	35	17	23	19
	Voluntary	436	68	22	76	225	71	189	65	107	72	97	63	143	70	82	68
Unimportant		39	6	2	7	19	6	18	6	4	3	16	10	11	5	7	6
Undecided		37	6	2	7	14	4	21	7	8	5	5	3	15	8	8	7
<b>TOTALS</b>		638	100	29	100	318	100	291	100	149	100	154	100	204	100	120	100

Item 6 - Rank 5 Plan, organize, and publish suggested programs of public relations, using all media, for National and State use.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import- ant	Mandatory	132	21	2	7	64	20	66	23	28	20	35	23	34	17	33	28
	Voluntary	429	67	20	69	219	69	190	66	108	73	105	68	138	68	72	60
Unimportant		51	8	6	21	21	7	24	8	8	5	9	6	20	10	11	9
Undecided		23	4	1	3	12	4	10	3	3	2	5	3	11	5	4	3
<b>TOTALS</b>		635	100	29	100	316	100	290	100	147	100	154	100	203	100	120	100

TABLE XI (Continued)

Item 7 - Rank 7 Cooperate in providing vocational education representation and working relationships in National, regional, and State meetings of the National Manpower Council, trade associations, labor, and other interested organizations.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	174	28	3	10	76	24	95	33	44	30	39	25	49	24	40	34
	Voluntary	365	58	20	69	188	60	157	54	83	56	88	58	124	62	62	53
Unimportant		83	13	5	17	46	15	32	11	19	13	26	17	23	11	14	12
Undecided		10	1	1	4	4	1	5	2	2	1	0	0	6	3	2	1
<b>TOTALS</b>		632	100	29	100	314	100	289	100	148	100	153	100	202	100	118	100

Item 8 - Rank 8 Exchange reports of good public relations projects in bulletin issued by the United States Office of Education.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	97	15	1	4	48	15	48	16	23	16	23	15	28	14	22	18
	Voluntary	434	68	16	57	221	70	197	68	108	73	109	71	137	67	75	63
Unimportant		61	10	8	29	26	8	27	9	7	5	13	8	23	11	14	12
Undecided		42	7	3	10	20	7	19	7	9	6	9	6	15	8	8	7
<b>TOTALS</b>		634	100	28	100	315	100	291	100	147	100	154	100	203	100	119	100

TABLE XI (Continued)

Item 9 - Rank 9 Conduct periodic national or regional conferences on methodology, developments, trends, and research in public relations.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	78	13	2	7	40	13	36	12	18	12	24	16	15	7	19	16
	Voluntary	401	63	19	66	203	64	179	62	99	67	94	61	132	65	71	60
Unimportant		110	17	5	17	54	17	51	18	25	17	22	14	40	20	20	17
Undecided		46	7	3	10	20	6	23	8	6	4	14	9	16	8	9	7
<b>TOTALS</b>		635	100	29	100	317	100	289	100	148	100	154	100	203	100	119	100

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory																
	Voluntary																
Unimportant																	
Undecided																	
<b>TOTALS</b>																	

Percentages of total responses indicating importance (mandatory and voluntary) ran quite high on the nine public relations activities, ranging from 76%, on the last ranking activity, up to 96%, on the first. It should be noted that 40% of the total responses favored mandatory action on item 1, "Establish more and better communication between the vocational education divisions and general education on National and State levels." Lack of effective communication has been commonly regarded for a long time as one of the deterrents in the more rapid and effective development and promotion of vocational education in the public schools. The second ranking activity (93%) is closely related to the first in that effective promotional materials is one medium of good communication.

#### Comparison of Judgments of Leaders from Three Administrative Levels -

In general, State leaders seemed more inclined, and Federal leaders less inclined, to attach importance to public relations as cooperative activities than the leaders of the other two levels. However, percentages indicating any significant differences between the Federal group, on the one hand, and the local and State groups, on the other, occurred in the cases of items 6 and 8. The former is concerned with, "Plan, organize, and publish suggested programs of public relations, using all media, for National and State use." Item 8, rather closely related, was, "Exchange reports of good public relations projects in bulletin issued by the United States Office of Education." Lack of adequate help and facilities to carry out such extensive action, even



with the help of the States, might deter the Federal Office from inviting such a joint activity. It should be noted, in this connection, the American Vocational Association has published a public relations guide for vocational educators.<sup>16</sup>

The general difference implied in the preceding paragraph became more evident when the leaders of the three administrative levels expressed their preferences regarding mandatory action. In every activity but one, there was a significant difference between the percentages of local leaders' or State leaders' responses favoring mandatory action over those of the Federal leaders. Apparently, State and local leaders desire Federal leadership, if only to the extent of indicating "shouldness" of these and other public relations cooperative activities, previously discussed.

#### Comparison of Judgments of Same Leaders by Their Regional Locations -

In no case was there a statistically significant difference between the percentages of responses of any two regions in ascribing importance to joint action in public relations. Likewise, there was no significant difference between the percentages of responses favoring mandatory action between any two regions on any of the activities. Generally, there was no evidence that vocational education leaders significantly differed

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<sup>16</sup>Your Public Relations, a Guide for Vocational Educators. Prepared by the Committee on Research and Publications, American Vocational Association, 1954, Washington, D. C.

in opinion about the nine public relations cooperative activities, because of geographical or sectional differences.

On the other hand, the leaders from the various regions significantly differed among themselves concerning voluntary action on four activities. In the third ranking activity, the southern region leaders' percentage of responses favoring voluntary action was 12% higher than that of the North Atlantic region, a statistically significant difference at the .05 level. In three other activities, items 4, 6, and 8, the percentages of North Atlantic region leaders' responses were greater by 17%, 13%, and 10%, than those of western region leaders. All were statistically significant differences. All three activities are somewhat related; items 4 and 6 were concerned with collecting needed data and preparing a bulletin for public relations, and using all media for National and State use; and item 8 with exchanging reports of good public relations projects in bulletins issued by the United States Office of Education. The publication, "Your Public Relations - a Guide for Vocational Educators," produced and distributed by the American Vocational Association (see footnote 16), will probably have considerable influence upon any joint activities, such as items 4, 6, and 8, in public relations classification.

Indecision and Judgments of Unimportance - There were no significant differences between the percentages of responses indicating indecision between any two levels of leaders or between any two of the regions.

There were significant differences between the State and Federal leaders'

responses ascribing unimportance and between the local and Federal leaders' responses, in items 6 and 8. No significant differences appeared in the responses indicating unimportance of any activities between any two of the regions.

Summary of Findings on Public Relations Activities - The fact that at least three-quarters of the leaders ascribed importance to the nine public relations activities revealed a definite sentiment toward the need for cooperative action in public relations in vocational education. Observation of vocational education programs on all three administrative levels, over the past twenty years, would bear out the facts revealed in these data. Much needs to be done to acquaint people in all walks of life with the purposes and outcomes of vocational education. Perhaps one of the principal reasons for inadequacy in the area of public relations activities has been limited staff and facilities for this purpose, on all three levels, because of the need to devote available funds to the operation of programs.

The fact that 96% of the total respondents ascribed importance to item 1 confirms the repeated recommendation that better communication should exist between vocational education leaders and general education administrators. Greater percentages of State and local leaders than Federal leaders adjudged importance in this regard, showing greater concern with real problems of relationship with school administrators closer to the operating level.

In general, the percentages of North Atlantic leaders ascribing

importance exceeded those of the other regions, while the central region leaders' responses ran consistently lower, percentage-wise. This greater concern might be attributed to the greater concentration of vocational education programs in the North Atlantic region, and hence, a more evident need for more action in public relations. Less concern among the leaders of the central region about the importance of these activities can be attributed, in part, to a more conservative viewpoint, with respect to increased Federal-State cooperative activities.

#### Research Activities

The seventeen research activities are ranked in table XII according to the percentages of total responses ascribing importance (mandatory and voluntary) to each activity. The number and percentages of responses are also shown for opinions expressed indicating importance by administrative level and geographical region. Other data show the number and percentages of responses favoring mandatory or voluntary action and those indicating unimportance and indecision, by totals, administrative levels, and by regions.

TABLE XII

## TABULAR SUMMARY OF RESPONSES TO SEVENTEEN RESEARCH ACTIVITIES

Item 1 - Rank 1 Conduct research on administrative problems, such as costs of instruction, teaching loads, schedules, administrative units, size of schools, and relative advantages and disadvantages of different types of vocational schools.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	186	29	1	3	85	27	100	34	42	28	44	29	54	27	45	37
	Voluntary	398	62	25	87	207	65	166	56	98	64	98	63	128	64	66	54
Unimportant		34	5	1	3	15	5	18	6	6	4	11	7	7	3	9	7
Undecided		23	4	2	7	10	3	11	4	6	4	2	1	12	6	2	2
<b>TOTALS</b>		641	100	29	100	317	100	295	100	152	100	155	100	201	100	122	100

Item 2 - Rank 2.5 Conduct research to identify the vocational training needs of boys and girls leaving school after reaching a compulsory school age.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	219	34	2	7	92	29	125	42	53	35	56	36	62	32	46	38
	Voluntary	360	56	21	75	197	62	142	48	88	58	85	55	119	59	61	50
Unimportant		38	6	3	11	16	5	19	6	9	6	10	6	9	4	9	7
Undecided		23	4	2	7	12	3	9	4	2	1	4	3	11	5	6	5
<b>TOTALS</b>		640	100	28	100	317	100	295	100	152	100	155	100	201	100	122	100

TABLE XII (Continued)

Item 3 - Rank 2.5 Develop criteria to guide States in establishing sound programs of research in all services.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	191	30	7	24	97	31	87	30	36	24	58	38	55	28	38	33
	Voluntary	381	60	21	70	195	62	165	56	95	63	88	56	117	59	73	61
Unimportant		38	6	1	3	10	3	27	9	13	8	7	4	14	7	4	3
Undecided		28	4	1	3	12	4	15	5	8	5	3	2	13	6	4	3
<b>TOTALS</b>		638	100	30	100	314	100	294	100	152	100	156	100	199	100	119	100

Item 4 - Rank 4 Conduct research in post-high school, area, and regional vocational school programs, as to the amount of training and kind of administrative units needed to make such training feasible and effective.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	171	26	1	3	79	25	91	31	43	28	48	31	46	23	33	28
	Voluntary	402	63	27	91	200	63	175	59	97	63	93	59	128	64	75	62
Unimportant		45	7	1	3	27	9	17	6	9	6	10	6	16	8	9	8
Undecided		24	4	1	3	9	3	14	4	4	3	6	4	10	5	3	2
<b>TOTALS</b>		642	100	30	100	315	100	297	100	153	100	157	100	200	100	120	100

TABLE XII (Continued)

Item 5 - Rank 5 Conduct studies to identify the essential characteristics of all types of successful vocational education programs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	157	24	4	14	72	23	81	27	29	19	34	22	49	24	43	35
	Voluntary	409	64	18	62	213	67	178	60	100	66	103	66	133	66	67	55
Unimportant		43	7	3	10	20	6	20	7	12	8	11	7	11	5	8	7
Undecided		33	5	4	14	13	4	16	6	11	7	7	5	9	5	4	3
<b>TOTALS</b>		642	100	29	100	318	100	295	100	152	100	155	100	202	100	122	100

Item 6 - Rank 6 Conduct continuous study of the needs for service and supervision in vocational education and make recommendations regarding the amounts and kinds of service and supervision needed on the Federal, State, and local levels.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	193	30	3	10	98	31	92	31	41	27	60	38	47	24	43	36
	Voluntary	366	57	26	87	180	57	160	54	86	57	83	53	126	63	61	51
Unimportant		58	9	1	3	25	8	32	11	20	13	10	6	18	9	10	8
Undecided		23	4	0	0	12	4	11	4	5	3	4	3	9	4	5	5
<b>TOTALS</b>		640	100	30	100	315	100	295	100	152	100	157	100	200	100	119	100

TABLE XII (Continued)

Item 7 - Rank 7.5 Prepare and distribute summaries of studies in vocational education and lists of research problems for study.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	145	23	2	7	95	30	48	16	25	17	39	25	47	23	33	27
	Voluntary	406	63	24	83	199	63	183	62	103	68	107	69	118	58	69	57
Unimportant		45	7	2	7	13	4	30	10	13	9	6	4	14	7	12	10
Undecided		45	7	1	3	11	3	33	12	10	6	3	2	23	12	8	6
<b>TOTALS</b>		641	100	29	100	318	100	294	100	151	100	155	100	202	100	122	100

Item 8 - Rank 7.5 Conduct pilot studies in selected centers, to develop new techniques for evaluating the effectiveness of supervision and other aspects of a local program.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	102	16	1	4	58	18	43	15	27	18	30	19	23	12	21	17
	Voluntary	444	70	24	86	216	69	204	69	100	66	110	71	140	70	86	70
Unimportant		54	8	2	6	26	8	26	9	14	9	10	6	20	10	9	7
Undecided		38	6	1	4	16	5	21	7	10	7	5	4	17	8	6	6
<b>TOTALS</b>		638	100	28	100	316	100	294	100	151	100	155	100	200	100	122	100



TABLE XII (Continued)

Item 9 - Rank 9 Evaluate the contribution of vocational education to family life education, and see how all vocational services can work together in meeting the concerns of the family, in relation to current economic standards.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	136	21	0	0	65	21	71	24	34	23	45	29	31	16	26	22
	Voluntary	390	61	19	63	200	63	171	58	87	57	90	57	133	66	74	61
Unimportant		70	11	6	20	35	11	29	10	19	12	14	9	20	10	14	12
Undecided		46	7	5	17	16	5	25	8	13	8	8	5	16	8	6	5
<b>TOTALS</b>		642	100	30	100	316	100	296	100	153	100	157	100	200	100	120	100

Item 10 - Rank 10 Develop plans for providing employment information and placement of vocational students.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	115	18	1	4	42	13	72	24	22	15	34	22	34	17	25	20
	Voluntary	390	62	19	67	196	62	175	60	90	61	101	65	118	58	73	60
Unimportant		72	11	7	25	47	15	18	6	16	11	11	7	28	14	15	12
Undecided		60	9	1	4	30	10	29	10	20	13	9	6	22	11	9	8
<b>TOTALS</b>		637	100	28	100	315	100	294	100	148	100	155	100	202	100	122	100

TABLE XII (Continued)

Item 11 - Rank 11.5 Study the need and practicability of a nationwide plan for area vocational schools, with Federal subsidy for building construction and equipment.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	212	33	3	10	83	26	126	43	60	40	54	35	61	30	35	29
	Voluntary	275	43	11	38	158	50	106	36	65	44	66	43	86	42	56	46
Unimportant		113	18	14	48	54	17	45	15	18	12	28	18	43	21	18	15
Undecided		38	6	1	4	19	7	18	6	6	4	6	4	13	7	12	10
<b>TOTALS</b>		638	100	29	100	314	100	295	100	149	100	154	100	203	100	121	100

Item 12 - Rank 11.5 Conduct a study to identify the GENERAL RELATED INFORMATION needed by young workers in cooperative programs.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	126	20	2	7	51	16	73	25	28	19	37	24	36	18	23	19
	Voluntary	354	56	11	39	184	59	159	54	83	55	88	57	111	56	69	57
Unimportant		110	17	11	39	55	18	44	15	29	19	21	14	35	18	21	17
Undecided		47	7	4	15	24	7	19	6	11	7	8	5	17	8	9	7
<b>TOTALS</b>		637	100	28	100	314	100	295	100	151	100	154	100	199	100	122	100

TABLE XII (Continued)

Item 13 - Rank 13.5 Study and develop plans for training special groups; such as, the retired, the low-income families, mixed groups of adolescents, and the young married group.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import-ant	Mandatory	127	20	1	3	59	19	67	23	22	14	42	27	32	16	31	25
	Voluntary	349	54	20	69	178	56	151	51	93	62	79	51	111	55	58	48
Unimportant		106	17	5	17	53	17	48	16	25	17	25	16	33	16	22	18
Undecided		60	9	3	11	28	8	29	10	11	7	9	6	27	13	11	9
<b>TOTALS</b>		642	100	29	100	318	100	295	100	151	100	155	100	203	100	122	100

Item 14 - Rank 13.5 Develop a policy that will earmark Federal and State funds for research.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import-ant	Mandatory	263	41	7	24	124	39	132	45	63	41	71	46	78	39	48	40
	Voluntary	213	33	10	33	105	33	98	33	49	32	47	30	71	35	41	34
Unimportant		122	19	10	33	57	18	55	19	29	19	32	21	36	18	23	19
Undecided		42	7	3	10	28	10	11	3	11	8	5	3	16	8	8	7
<b>TOTALS</b>		640	100	30	100	314	100	296	100	152	100	155	100	201	100	120	100

TABLE XII (Continued)

Item 15 - Rank 15 Conduct research as to the character and type of instructional program needed for the so-called slow learner group.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	134	21	1	4	51	16	82	29	46	31	30	20	37	19	21	18
	Voluntary	324	52	17	61	161	51	146	51	76	52	79	52	102	50	59	50
Unimportant		108	17	7	25	62	20	39	14	12	8	33	21	37	19	24	20
Undecided		62	10	3	10	40	13	19	6	13	9	11	7	24	12	14	12
<b>TOTALS</b>		628	100	28	100	314	100	286	100	147	100	153	100	200	100	118	100

Item 16 - Rank 16 Establish national occupational area committees similar to the American Vocational Association Automotive Committee to develop pertinent data applicable to all States.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Important	Mandatory	109	17	2	7	41	13	66	22	29	19	27	17	31	16	21	18
	Voluntary	299	47	9	31	141	45	149	50	74	49	73	47	95	48	54	45
Unimportant		185	29	17	59	104	33	64	22	38	25	48	31	57	29	36	30
Undecided		45	7	1	3	26	9	18	6	11	7	8	5	16	7	9	7
<b>TOTALS</b>		638	100	29	100	312	100	297	100	152	100	156	100	199	100	120	100

TABLE XII (Continued)

Item 17 - Rank 17 Conduct a national study of the possible coordination of vocational training under Reserve Forces Acts (1955) with public vocational education programs at Federal, State, and local levels.

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import- ant	Mandatory	122	19	1	4	51	16	70	24	29	19	34	22	25	13	33	27
	Voluntary	244	39	10	36	124	40	110	38	65	44	54	35	80	41	42	34
Unimportant		230	36	14	50	119	38	97	33	49	33	58	38	78	40	40	33
Undecided		35	6	3	10	17	6	15	5	6	4	7	5	13	6	7	6
<b>TOTALS</b>		631	100	28	100	311	100	292	100	149	100	153	100	196	100	122	100

NATURE OF RESPONSES		TOTAL RESPONSES		ADMINISTRATIVE LEVELS						GEOGRAPHIC REGIONS							
		All Levels and Regions		Federal		State		Local		North Atlantic		Southern		Central		Western	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Import- ant	Mandatory																
	Voluntary																
Unimportant																	
Undecided																	
<b>TOTALS</b>																	

All seventeen research activities were designated as important by at least three-quarters of the leaders, with the exception of item 16 (64%) and item 17 (58%). The activity, rated important most frequently, concerned research on administrative problems, such as costs of instruction, teaching loads, schedules, administrative units, sizes of schools, and relative advantages and disadvantages of different types of vocational schools. Item 2, ranked 2.5, involved research to identify the vocational training needs of boys and girls leaving school after reaching a compulsory school age. Item 3, also ranked 2.5, proposed the development of criteria to guide the States in establishing sound programs of research in all services. The fourth ranked activity recommended research in post-high school, area, and regional vocational school programs, as to the amount of training and kind of administrative units needed to make such training feasible and effective.

These four activities are concerned with research problems involving (1) administrative problems, (2) needs of out-of-school youth, (3) programs of research, and (4) administration of post-high school area schools. All of these are current problems in vocational education and have given many vocational educators great concern, especially since the close of World War II. Each of these four activities has been given consideration as to present and future cooperative action between the States and the Federal Office.

The Division of Vocational Education of the United States Office of Education held a four-day research conference in Washington, D. C. ,

in June 1955, with representatives of trade and industrial education from a number of different States.<sup>17</sup> The purpose of the conference was to stimulate more research activity and to set up ways and means by which activities might be implemented and reported. The early results of this conference indicate that concerted cooperative action is well underway. In fact, practically every activity in this classification has been listed and discussed, at least as to priority for action between the States and the Federal Office. Item 4 is being currently studied by a doctoral candidate at the Pennsylvania State University. It would seem that the leaders' emphasis of importance of these activities has already stimulated some action.

Although the percentages of responses favoring mandatory action were comparatively low, as might be expected in the research classification, item 14 drew 41% of leaders' responses favoring mandatory action. It is concerned with the development of a policy that would earmark Federal and State funds for research. Although the present acts provide for research in the form of studies and investigations, earmarked Federal funds would probably give considerable impetus in the States to greater development of research programs.

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<sup>17</sup>Misc. 3495, Research and Studies in Trade and Industrial Education, a Report, Division of Vocational Education, United States Office of Education, Washington, D. C.

Comparison of Judgments of Leaders from Three Administrative Levels -

Local leaders were more generally inclined to ascribe research activities as important than Federal and State leaders. Substantially higher percentages of local leaders' responses favoring importance over those of Federal leaders occurred in eleven of the seventeen activities, the differences ranging from 11% to 34%. All of these were statistically significant differences. Percentages of State leaders' responses indicating importance were higher than those of Federal leaders. Significant differences between these two groups are found in seven activities, items 5, 9, 11, 12, 14, 16, and 17.

Percentages of responses of State and local leaders favoring mandatory action exceeded those of Federal leaders in every activity. In practically every activity there was a significant difference between the responses of each of these two groups and Federal responses. Obviously, State and local leaders were expressing a need and desire for assistance through research activities.

Percentages of Federal leaders' responses favoring mandatory action ranged from 0% in item 9, to 24% in items 3 and 14. State leaders' responses favoring mandatory action ranged from a low of 13%, on items 10 and 16, to a high of 39% on item 14. Local responses favoring mandatory action ranged from a low of 15%, on item 8, to a high of 45% on item 14. Although none of the percentages of responses favoring mandatory action exceeded those favoring voluntary action, there were enough percentages of responses favoring mandatory action



to convey "shouldness" to practically all the research activities.

Comparison of Judgments of Same Leaders by Their Regional Locations -

The greatest percentages of responses indicating importance of the research activities occurred among southern region leaders. The percentages of central region leaders' responses indicating importance were lowest among the leaders of the four regions. Even though these differences were notable, there were statistically significant differences of responses between regions in only three activities, items 10, 11, and 15. In item 10, the percentages of southern leaders' responses exceeded North Atlantic and central region leaders' responses by 11% and 12%, respectively. This activity recommended a cooperative activity to develop plans for providing employment information and placement of vocational students. In general, it seems that more liberal southern leaders desire cooperative activity in the research classification, while more conservative central region leaders are not concerned in as great percentages.

In item 11, the percentages of North Atlantic responses indicating importance exceeded southern, central, and western region leaders' responses by 10%, 16%, and 13%, respectively. Item 11 provided for a joint action to study the need and practicability of a nationwide plan for area vocational schools, with Federal subsidy for building construction and equipment. It is interesting to note here that an area vocational school bill, S. 4301, was introduced into the 84th Congress on July 27, 1956, and a similar bill, S. 1298, was introduced into the

85th Congress on February 20, 1957. The October 1956 issue of the American Vocational Journal carries some of the results of a national survey of the States, on various types of area vocational schools now in operation. North Atlantic region leaders in greater percentages ascribe importance to this activity, probably because of the increasing demand for higher skilled technicians and tradesmen in this highly industrialized region.

There is only one instance of a significant difference in the percentages of responses favoring voluntary actions between the regions. This occurs in item 13, where the North Atlantic region leaders' responses exceed those of western region leaders by 14%. Item 13 proposed a joint action which would study and develop plans for training special groups; such as, the retired, the low-income families, mixed groups of adolescents, and the young married group.

The percentages of North Atlantic region leaders' responses favoring mandatory action exceed those of southern, central, and western region leaders by 11%, 14%, and 15%, respectively, on item 15, which recommends research as to the character and type of instructional program needed for the so-called slow learner. This activity was originally suggested by a jury member from New York State, in the North Atlantic region. It is surmised that larger school units and greater enrollments in more thickly-populated areas probably stimulate greater need and interest in the problem of education for the slow learner.

In twelve instances there were significant differences between

percentages of responses favoring mandatory action between any two regions on the various research activities. These occurred as shown below:

<u>Item</u>	<u>Comparisons of Leaders Responses Favoring Mandatory Action</u>	<u>Difference</u>
3	Southern region exceeds North Atlantic by	14%
5	Western region exceeds North Atlantic by and central region by	16% 11%
6	Southern region exceeds North Atlantic by and central region by	11% 14%
6	Western region exceeds central region by	12%
11	North Atlantic region exceeds western region by	11%
13	Southern region exceeds North Atlantic region by and western region exceeds North Atlantic region by	13% 11%
15	North Atlantic region exceeds southern region by and central region by and western region by	11% 12% 13%

Indecision and Judgments of Unimportance - Substantial percentages of responses ascribing unimportance were recorded for items 16 and 17, 29% and 36%, respectively. Item 16 proposed the establishment of national occupational area committees, similar to the American Vocational Association Automotive Committee, to develop pertinent data applicable to all States. Item 17 recommended a joint activity to conduct a national study of the possible coordination of vocational training under Reserve Forces (1955), with public vocational education programs at Federal, State, and local levels. In all probability, more emphasis will be placed on these two activities, as time goes on, particularly in

item 17, because serious questions are being raised by Congress as to duplication and inefficiency in training programs, both military and civilian.

Significant differences in percentages of responses indicating unimportance were found between Federal, State, and local leaders' responses in seven activities, items 10, 11, 12, 14, 15, 16, and 17. A lesser percentage of Federal leaders feel that these activities are important than State and local leaders.

Responses indicating indecision ranged from a low of 4%, on item 1, to a high of 10%, on item 15, that dealing with an instructional program for the so-called slow learner group. It is possible that more explanation and discussion of this activity would be needed to help respondents give a more decisive opinion of item 15, as a cooperative activity.

Summary of Findings on Research Activities - Cooperative research activities were deemed to be important by the vocational education leadership of the country, as indicated by the high percentages of their responses ascribing importance to the suggested seventeen activities in this study. Activities of a broad administrative nature, including such action as obtaining earmarked Federal funds for research, received high percentages of favorable responses.

In general, greater percentages of local and State leaders expressed opinions favorable to the cooperative research activities than Federal leaders. This fact revealed a more widespread concern, close to the operating level, with the need for more information and guidance

relative to the direction programs should take. Federal leaders probably feel the inadequacy of funds and staff to assume a major or direct responsibility for the work, in such broad research activities as are included in this study.

Again, the slight, but nevertheless consistent predominance of favor toward Federal-State cooperative action was found in the percentages of southern region responses. A similar kind of difference was revealed in that percentages of favorable responses from the central region were slightly, but consistently fewer than from the other three regions. These consistent differences may be due to greater tradition of favor toward Federal-State cooperative activities in vocational education in the South, in the first case, and a traditionally more conservative, independent reaction from the midwestern States. However, it should be noted that these differences are not significant statistically, and therefore may be purely a matter of chance.

One more currently meaningful difference in regional responses was found where North Atlantic region leaders favored, in greater percentages of responses, the study of the need for area vocational schools. Some New England States have, for many years, used the area administrative unit in vocational education, rather than that confined by city or community boundary lines. The significant difference in percentages of North Atlantic responses, over those of the other regions in this regard, may express a desire for more help from the Federal Office in the promotion and development of area vocational

schools. It would seem, also, that the increased demands by industry and business for higher skills in the highly industrialized areas reflect, in the opinions of vocational education leaders from the New England States, in their constant effort to meet these demands.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study has been concerned with the problem of what cooperative activities should be engaged in between the Division of Vocational Education of the United States Office of Education and the State boards for vocational education, to carry out the provisions of the Smith-Hughes and George-Barden Acts. The basic purpose, to identify and assemble important mandatory and voluntary cooperative activities, that should be carried on between the two agencies has been accomplished as described in chapter III.

The need for the study has existed for some time, because of questions raised as to the need for continued Federal aid to vocational education. Even more important, serious questions have been raised as to the place of the Federal Office in the work of the States, in promoting and administering local programs of vocational education.

The work and proceedings of the study have been premised upon two basic assumptions, (1) that cooperation between the Federal Office and the States is inherent in the authorizing of Federal and State vocational legislation, and (2) that vocational education is a matter of national concern in the United States.

Thorough examination of the background of events leading up to the passage of the Smith-Hughes Act, in 1917, revealed that strong cooperative relationships and activities between the Federal Office and the States developed out of a specific social movement involving activities of labor, industry, and education. The relationships between the Federal Office and the States are best expressed by meaningful cooperative activities. Some of these are mandatory, as required by law and regulation, and some are voluntary, as engaged in by choice and mutual agreement.

Twenty-seven vocational education leaders and their staffs assisted in this study by contributing 446 suggested cooperative activities that might be carried on by the Federal Office and the States. These were refined and reduced to a list of 78 activities in seven classifications; namely, administration, supervision, teacher education, instructional materials, physical facilities, public relations, and research.

The relative importance of the 78 activities was obtained by submitting them to 1,228 vocational education leaders in top Federal, State, and local supervisory and administrative positions, for their review and estimate. Of this number, 656 responded. Comparisons of the percentages of responses of the leaders were analyzed and interpreted, so that the Federal and State offices might have some guide as to the direction of activity and leadership desired by vocational educators throughout the country. The activities were ranked in order of the percentages of total responses indicating importance in each of the



seven classifications and compared by totals of the various administrative levels and regions.

Summary of Important Findings of Fact and Interpretations - 1. The 78 cooperative activities in this study were rated important by a substantially predominant percentage of Federal, State, and local leaders in vocational education throughout the United States.

Apparently, a majority of vocational education leaders throughout the country favor a working relationship between the Federal Office and the States, at least to the extent that they should engage in a number of cooperative activities designed to promote and administer vocational education under the existing Federal acts.

2. Administration and supervision activities generally were adjudged important by a greater percentage of leaders than in the other classifications of activities.

Most of the respondents in this study have administrative and supervisory duties; hence, it is not surprising that greater predominance of opinion indicating the importance of these activities was found to exist. This finding presumably lends emphasis to the important part that administrative and supervisory activities play in the operation of the program.

3. The percentage of local leaders' responses adjudging the cooperative activities important were greater, generally, than those of State or Federal leaders. Percentages of State leaders' responses were greater, generally, than those of Federal leaders.

Numerous and varied detailed problems of operation exist at the local level in programs of vocational education; hence, local level leaders seemed to be emphasizing their interest in and need for Federal-State cooperative assistance in every way possible. To a somewhat lesser extent, the State level is also concerned with numerous and varied problems, hence the expression of many State leaders favoring cooperative action with the Federal Office.

4. A majority of vocational education leaders on all levels indicated by their responses that activities, generally, should be voluntary cooperative actions, rather than mandatory. A few exceptions existed with respect to annual financial and statistical reporting and to certain requirements for State plans.

In the pattern of American democratic thinking and action, vocational education leadership expressed a desire for voluntary cooperative action, rather than action required by law and regulation. At the same time, cognizance was given to the need for certain mandatory requirements on financial and statistical reporting and to certain minimum standards in State plans, to safeguard the effective use of Federal and State funds. There also seemed to be apparent an expression of confidence in the voluntary Federal-State-local relationship in vocational education, along with a desire for progressive leadership on Federal and State administrative levels.

5. A greater percentage of local leaders' responses than those from Federal and State levels favored mandatory action. With the

exception of existing mandatory activities now required by law and regulation, Federal leaders' responses were lesser in percentage in favor of mandatory action than those of State and local leaders.

Local leaders apparently do not fear Federal control and domination in vocational education. Perhaps many years of established cooperative relationships with both State and Federal offices have tended to alleviate any feeling of hazard in this regard. State leaders, likewise, seemed not to be possessed of undue fear of loss of control of program through certain mandatory activities, as long as those actions are joint or cooperative with the States. Federal leaders may be more conscious of the hazards of mandatory activities, because of their close proximity to the source of law and regulation in the program. Federal leaders also have greater opportunity to witness other kinds of Federal relationships in grants-in-aid programs, and therefore may see more clearly the possible hazards of unilateral mandatory actions, which inevitably lead to domination and control of a program.

6. Differences in percentages of responses from the regions were almost negligible in regard to adjudging the importance of the 78 activities. Percentages of southern leaders' responses favoring importance were slightly, but consistently greater, and central region leaders' responses were consistently fewer than those of the other regions. These differences, although consistent, may be purely a matter of chance. They are mentioned only for whatever it may mean to the reader.

The few significant differences in regional responses may be the result of our more mobile working population, a greater spread of industry, business, and agriculture, speeded communication and transportation, and generally improved and equalized educational opportunities throughout the country. At least some of this degree of uniformity of opinion among vocational education leaders can probably be attributed to the nationwide dissemination of more or less commonly accepted and understood philosophy and principles of vocational education.

7. Greater percentages of responses of Federal leaders than those of local leaders indicated concern with broader aspects of program activities, such as research and establishment of criteria for evaluation purposes. Greater percentages of responses of local leaders than those of Federal and State leaders showed concern for specific program operational activities, such as physical facilities and instructional materials. High percentages of State leaders' responses indicated concern with both, and a desire to serve as a close tie between the Federal and local leaders' problems.

#### General Conclusions

Seventy-eight cooperative activities between the United States Office of Education and the States were identified and designated as important, by a majority of the leadership in vocational education in the Nation. Further, the majority of the leaders expressed their opinions as favorable, generally, toward voluntary cooperative action,

rather than mandatory action, favoring mandatory action in a few instances where certain financial and administrative safeguards exist.

1. A body of identifiable cooperative activities exists as evidence of the Federal-State-local cooperative relationship in the promotion and administration of federally-reimbursed vocational education.

2. A clear-cut consensus exists among leaders in vocational education that certain activities carried on jointly by the Federal, State, and local levels of administration should be mandatory, but that the majority of such joint activities should be voluntary.

3. There is emphatic indication that local and State leaders in vocational education do not fear Federal control or domination in their programs, and further, that they desire increased leadership and cooperative action between all administrative levels, in the further promotion and administration of vocational education.

The findings of fact, the interpretations, and the general conclusions, established the validity of the hypothesis, and at the same time, carried out the purpose of this study.

#### Weaknesses of the Study

Several weaknesses were found to exist in the study. There was the inherent weakness encountered in any study which employs a written explanation and the mailing of a check list, to obtain expressions of opinion to form the data of a study. First, it appears that the author may have sacrificed some clarity and full understanding, for brevity, in

the transmittal letter of explanation. As compared with a personal interview technique, the use of a mailed check list is inadequate, in that it does not permit ready communication of ideas and interpretation. For example, a number of respondents corresponded with the author, relative to a basic question as to whether they should designate an activity as important if they felt that it should not be a cooperative activity. Personal interviews, which were possible only in a few cases, could have quickly cleared such a question for purposes of this study. Others apparently were not entirely clear as to what constituted mandatory action.

Another weakness appeared in the results of refining and reducing the preliminary list of suggested activities down to a practicable number of activities to be included in the final check list. In combining and refining the preliminary suggestions, the author apparently was too assiduous in some cases, with the result that some activities in the final list were really dual actions. An illustration of this weakness was found in item 11 in the classification of administration activities, table VI. It proposed a joint activity to work toward the establishment of a representative Federal board for education and adequate Federal vocational education staff to provide more in-service and leadership training for State staffs. Some respondents chose to divide this suggested activity into two different activities, in order that they might express a different opinion about each part. Some respondents designated the first clause as unimportant, but indicated the second clause

as important.

Despite the weaknesses revealed, it does not appear that the findings of fact and the general conclusions claimed in this study were seriously affected.

### Recommendations

1. The Federal Office and the State directors of vocational education should be informed fully of the results of this study, to encourage them to continue to work on existing cooperative activities, and to look forward to additional cooperative action on other activities, designated as important by vocational education leaders throughout the country.
2. The Federal Office should call together Federal leaders and selected State and local leaders to discuss and develop effective ways and means of implementing certain of the activities deemed to be of most immediate value in the program. Perhaps first attention should be devoted to the administration activities, because of their far-reaching effect throughout the whole program.
3. The existing annual regional conferences of State supervisors and teacher educators, in each of the four major service areas, should devote some time in each annual conference to an examination of the 78 cooperative activities in their classifications, with a view toward contributing, in part or wholly, to the implementation of certain of the activities deemed to be of immediate practical value.

### Suggested Further Studies

1. More detailed studies should be made of needed cooperative activities in one or more of the seven general classifications of activities used in this study. For example, a study confined to administration activities alone would probably uncover much stronger impulse to implement action in certain administration activities. In fact, studies could be made to good effect, even within one activity in some cases, or within one or more of the four major service areas.

2. Some study should be given to the kinds of procedures and practices that might be effectively used in the implementation of cooperative activities between the Federal and State offices. It would be important to establish the "how" of certain cooperative action, as more or less effective than others.

3. The IBM card data on this study are still available for additional comparisons of responses from Federal representatives, State directors, head State supervisors, and teacher educators, in the four major service areas, and from local directors and supervisors in charge of local programs of vocational education. Such additional comparisons might reveal worthwhile significant differences in responses of groups of leaders, because of their concern with very specific responsibilities in vocational education programs.



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TOPEKA, KANSAS

November 1, 1955

W. M. ARNOLD  
ACTING SUPERVISOR, TRADE AND  
INDUSTRIAL EDUCATION

H. D. SHOTWELL  
SUPERVISOR BUSINESS EDUCATION

NORMAN G. EVANS  
SUPERVISOR VOCATIONAL  
REHABILITATION SERVICES

You are requested, as one of a select jury of skilled, experienced vocational educators, to assist in making a study of Federal-State cooperative activities in vocational education. It is expected that the results will help to answer serious questions that have been raised as to the continued need of the States for Federal professional and financial assistance in the administration and promotion of vocational education. An outline of the problem is attached to assist you in understanding the nature and purpose of the study.

The study, a doctoral thesis at Oklahoma A. & M. College, has the sponsorship of the American Vocational Association, the United States Office of Education, and the National Association of State Directors of Vocational Education. Its purpose is to identify specific cooperative activities that should continue to exist, or be newly established, between the vocational division of the United States Office of Education and the State boards for vocational education, so that these agencies might carry out their major responsibilities under the Federal acts.

A "cooperative activity" is defined as a planned, specific joint action, mandatory or voluntary, between the professional personnel of the vocational division of the United States Office of Education and the States, which will assist in administering and promoting vocational education in the States, under the present Federal and State acts. Cooperative activities, for purposes of this study, may be "mandatory" - those that are required by law and policy - or "voluntary" - those that are engaged in by choice and mutual agreement. Illustrations of existing or proposed activities are given in each of seven classifications; namely, General Administration, Supervision, Teacher Training, Instructional Materials, Physical Facilities, Public Relations and Research, and Miscellaneous.

You are requested to engage the assistance of your chief supervisors and teacher trainers in all reimbursed services to:

1. Add other suggested needed cooperative activities in any or all service fields, with due regard for program requirements and community needs in the States. A few significant additional activities will be of more importance and value than a great number of detailed activities.
2. Indicate with a check your estimate of the relative importance of each activity, including those which you have suggested, under the heading mandatory or voluntary, not both. Relative importance is to be judged by what real or meaningful value you think each activity has in the promotion and administration of vocational education. Your check under "mandatory" or "voluntary" should indicate your opinion as to which of the two the activity should be.

The nature of this study is such that it will require time and serious thought to suggest additional meaningful cooperative activities. I will appreciate very much your interest and help in returning one or more of the enclosed sets of forms by December 16, 1955.

Sincerely yours,

W. M. Arnold  
State Director

Enclosures

**FEDERAL - STATE COOPERATIVE ACTIVITIES IN VOCATIONAL EDUCATION  
PART I -- GENERAL ADMINISTRATION ACTIVITIES**

1. Position (Check one) Director ( ) Supervisor ( ) Teacher Educator ( )						
2. State _____ Name _____						
3. Position Level (Check one) Federal ( ) State ( ) Local ( )						
4. Vocational Service (Check one) Agric. ( ) H. Ec. ( ) T&I ( ) D. E. ( )						
5. Region (Check one) N. Atlantic ( ) Southern ( ) Central ( ) Western ( )						
<u>Please add other cooperative activities that should be engaged in and check in only one column after each activity.</u>						
	<b>Mandatory</b>			<b>Voluntary</b>		
	<b>(Check in only one column)</b>					
	Important	Unimportant	Undecided	Important	Unimportant	Undecided
1. Prepare, submit, and review Annual Financial, Statistical, and Descriptive Report.						
2. Prepare, submit, and review State Plan; also amendments.						
3. Joint preparation, review, and adoption of Policy Manual - Bulletin No. 1 - United States Office of Education.						
4. Annual Audit of Federal Vocational Education and State Matching Funds.						
5. Annual Spring Conference of State Directors in Washington, D. C.						
6. Periodic Workshop for State Directors on Administrative Problems in Vocational Education.						
7.						
8.						
9.						

**PART II -- SUPERVISION ACTIVITIES**

(Including Improvement of Instruction, Selection, Placement, and Follow-Up of Students)

	Mandatory (Check in only one column)			Voluntary		
	Important	Unimportant	Undecided	Important	Unimportant	Undecided
<u>Please add other cooperative activities that should be engaged in and check in only one column after each activity.</u>						
1. Annual Program Review by United States Office of Education Representative and State Supervisor in each State as presently done.						
2. Annual Regional Conference of State Supervisors and Teacher Trainers in each vocational service.						
3. Cooperative evaluation of entire state program in all services. (Kentucky Area Schools)						
4. Regional Program for improvement of technical preparation of Vocational teachers.						
5. Committee planning and preparation of Vocational Division Bulletin No. 250, "The Operation of a Local Program of Trade and Industrial Education".						
6.						
7.						
8.						
9.						



PART III -- TEACHER TRAINING ACTIVITIES

	Mandatory (Check in only one column)			Voluntary		
	Important	Unimportant	Undecided	Important	Unimportant	Undecided
Please add other cooperative activities that should be engaged in and check in only one column after each activity.						
1. Annual Regional Conference of State Supervisors and Teacher Trainers, each service.						
2. Inter-Regional Conference in the field of teacher training in Trade and Industrial Education -- (Report by United States Office of Education, 1948)						
3. Inter-State or Regional Workshops in technical training for vocational teachers and supervisors.						
4. Development of minimum standards for professional training of teachers, supervisors and local directors.						
5.						
6.						
7.						
8.						
9.						

**PART IV -- INSTRUCTIONAL MATERIALS ACTIVITIES**

	<b>Mandatory</b>			<b>Voluntary</b>		
	<b>(Check in only one column)</b>					
	<i>Important</i>	<i>Unimportant</i>	<i>Undecided</i>	<i>Important</i>	<i>Unimportant</i>	<i>Undecided</i>
<u>Please add other cooperative activities that should be engaged in and check in only one column after each activity.</u>						
1. State Plans prepared to include courses of Study.						
2. Preparation of Misc. 3243 - listing Trade and Industrial Education instructional materials available from all states.						
3. Establish joint State instructional materials laboratory to produce needed materials.						
4.						
5.						
6.						
7.						
8.						
9.						

PART V -- PHYSICAL FACILITIES ACTIVITIES

	Mandatory			Voluntary		
	(Check in only one column)					
	Important	Unimportant	Undecided	Important	Unimportant	Undecided
<u>Please add other cooperative activities that should be engaged in and check in only one column after each activity.</u>						
1. State plans prepared to include kinds of shop equipment to be provided.						
2. Prepare and publish Manuals showing laboratory and shop layouts, equipment, and tools.						
3. Establish State joint planning for minimum equipment by trades.						
4.						
5.						
6.						
7.						
8.						
9.						

PART VI -- PUBLIC RELATIONS AND RESEARCH

	Mandatory (Check in only one column)			Voluntary (Check in only one column)		
	Important	Unimportant	Undecided	Important	Unimportant	Undecided
<p><u>Please add other cooperative activities that should be engaged in and check in only one column after each activity.</u></p>						
1.	Preparation of Vocational Education Bulletin on Advisory Committees - Misc. 3277, Revised 1948.					
2.	United States Office of Education join with States in making a study of the impact of industrial trends on Trade and Industrial Education.					
3.						
4.						
5.						
6.						
7.						
8.						
9.						

PART VII -- MISCELLANEOUS

	Mandatory			Voluntary		
	(Check in only one column)					
	Important	Unimportant	Undecided	Important	Unimportant	Undecided
<u>Please add other cooperative activities that should be engaged in and check in only one column after each activity.</u>						
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						

## OUTLINE OF A PROBLEM IN EDUCATIONAL ADMINISTRATION

### FEDERAL - STATE COOPERATIVE ACTIVITIES IN VOCATIONAL EDUCATION

#### I. Problem Statement

- A. What cooperative activities should exist between the vocational division of the United States Office of Education and the State boards for vocational education to carry out the provisions of the Smith-Hughes and George-Barden Acts.

(A cooperative activity is defined as a planned joint action between the professional personnel of the vocational division of the United States Office of Education and the States, to assist in administering and promoting vocational education in the States, under the present Federal and State acts. Cooperative activities, for purposes of this study, are mandatory, those that are required by law and policy, and voluntary, those that are engaged in by choice and mutual agreement.)

#### II. Purpose of the Study

- A. To identify, select, define, and assemble specific mandatory and voluntary cooperative activities that should continue to exist or be newly established between the vocational division of the United States Office of Education and the State boards for vocational education, so that these agencies might carry out their major responsibility under the Federal acts, which is to promote and further develop vocational education.
- B. To obtain the judgment of the importance of the various mandatory and voluntary cooperative activities by vocational educators on local, State, and Federal levels, with due regard for program requirements and community needs in the States.

#### III. Basic Assumptions

- A. Vocational education, as a matter of national concern and as an essential to the security and well-being of the Nation, has been and is a continuing policy of the Federal Government, through laws passed by the Congress.

- B. The present status of vocational education in the United States is a result of the continued stimulation and assistance which has been given to the States, through Federal aid.
- C. High mobility of labor in the United States requires the joint attention and effort of the Federal Government and the States in the promotion and development of vocational education.
- D. Federal laws for the aid of vocational education have adequately provided the legal implementation for the development and administration of vocational education.
- E. The effective implementation of the policy of the Federal Government, with respect to vocational education, is dependent upon national acceptance of certain standards of operation.
- F. The continued promotion and development of vocational education is dependent upon the existence of certain mandatory and voluntary cooperative activities between the States and the Federal Government.

#### IV. Need for the Study

Differences in opinion about Federal-State activities in vocational education do exist among professional personnel in vocational education. Serious questions have been raised by vocational education leaders and others, as to the need for and desirability of mandatory and voluntary cooperative activities between the Federal Government and the States, in the administration of the Federal vocational education acts. These questions have great bearing on whether the purposes of the vocational education acts are being carried out and subsequently as to whether Federal aid to vocational education should be continued.

#### V. Hypothesis

Mandatory and voluntary cooperative activities between the vocational division of the United States Office of Education and the State boards for vocational education can be identified and their importance can be ascertained for the purpose of promoting and developing vocational education under the Smith-Hughes and George-Barden Acts.

## VI. Procedure and Methodology

- A. Purposively select a preliminary jury of vocational education leaders by means of objective qualifications.
- B. Obtain from the preliminary jury a list of most important mandatory and voluntary cooperative activities, within seven major classifications.
- C. Revise and refine the returns of the jury.
- D. Submit the revised list of mandatory and voluntary activities to a final jury of vocational education personnel purposively selected from Federal, State, and local levels, in all vocational services, to obtain their judgment as to the importance of the activities and as to whether the activities should be mandatory or voluntary. Unimportance will also be recorded.
- E. Prepare a report of the findings, which will indicate the consensus of vocational educators as to the importance of 78 suggested Federal-State cooperative activities. Comparisons of percentage of responses will be analyzed and interpreted as follows:
  - (1) Responses of all vocational leaders participating.
  - (2) Responses of Federal, State, and local leaders in all services.
  - (3) Responses from the four United States Office of Education vocational education regions, North Atlantic, southern, central, and western.
- F. Prepare a summary, including conclusions and recommendations.



EUSTACE  
SUPERVISOR AGRICULTURAL EDUCATION

HAZEL E. THOMPSON  
SUPERVISOR HOMEMAKING EDUCATION

CASTLE  
SUPERVISOR, INSTITUTIONAL  
ON-FARM TRAINING

## STATE BOARD FOR VOCATIONAL EDUCATION

W. M. ARNOLD, DIRECTOR AND EXECUTIVE OFFICER  
1025 KANSAS AVENUE

TOPEKA, KANSAS

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ACTING SUPERVISOR, TRADE AND  
INDUSTRIAL EDUCATION

H. D. SHOTWELL  
SUPERVISOR BUSINESS EDUCATION

NORMAN G. EVANS  
SUPERVISOR VOCATIONAL  
REHABILITATION SERVICES

January 9, 1956

You may remember that you were selected as one of a skilled jury of vocational educators to assist me in my doctoral thesis on Federal - State Cooperative Activities in Vocational Education.

It is important that I get as nearly 100% returns as possible from the members of the jury. Would you be good enough to review again the materials I sent you in November and return them to me at your earliest convenience? I am especially anxious to have your reactions as to additional suggestions of cooperative activities between the Federal Office and the States.

Thank you very much for your help.

Sincerely yours,

W. M. Arnold  
State Director

WMA:sc

EUSTACE  
SUPERVISOR AGRICULTURAL EDUCATION

HAZEL E. THOMPSON  
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March 21, 1956

TO: Vocational Educators

FROM: W. M. Arnold, State Director, Vocational Education,  
Topeka, Kansas

SUBJECT: The Need For and Value of Federal-State Cooperative  
Activities in Vocational Education.

This is to request your participation and help in a doctoral vocational education study at Oklahoma A. & M. College, with the sponsorship of the U. S. Office of Education, the American Vocational Association, and the National Association of State Directors of Vocational Education.

Serious questions have been raised in recent years, as to the need and the desire of the States for continued Federal professional and financial assistance in the administration and promotion of vocational education. In order to help to answer these questions, a series of Federal-State Cooperative Activities in seven different phases of vocational education have been developed through the assistance of a jury of experienced vocational educators.

In this study, a "cooperative activity" is defined as a planned, specific joint action, either mandatory or voluntary, between the professional personnel of the vocational division of the United States Office of Education and the State boards for vocational education, for the purpose of carrying out their major responsibilities, under the present Federal acts.

Please express your opinion about each activity according to the following pattern:

1. If in your opinion an activity is valuable and useful and should be carried on jointly by the Federal Office and the States, you should designate it as "Important."
2. Whenever you have decided that an activity is "Important," you are requested to indicate a check mark whether the activity should be mandatory or voluntary. "Mandatory" will mean that the activity should be required by law or regulation. "Voluntary" means that the activity should be carried on by choice.

3. If you consider an activity has little or no value in vocational education as a joint action, you should check it as "Unimportant."
4. If you are in doubt, check the column marked "Undecided."
5. In any case, only one check mark is to be made for each activity.

Your thoughtful response and the return of the attached instrument by April 9 will be very much appreciated. A summary of the study will be sent to you upon request.

FEDERAL-STATE COOPERATIVE ACTIVITIES IN VOCATIONAL EDUCATION  
PART I -- GENERAL ADMINISTRATION ACTIVITIES

Return to:

W. M. Arnold, 1025 Kansas Avenue, Topeka, Kansas

Position (Check one) 1. ( ) Director 2. ( ) Supervisor 3. ( ) Teacher Educator

& 3 State \_\_\_\_\_ Name \_\_\_\_\_

Position Level (Check one) 1. ( ) Federal 2. ( ) State 3. ( ) Local

Vocational Service (Check one) 1. ( ) Agr. 2. ( ) H. Ec. 3. ( ) T & I 4 ( ) D. E.

Region (Check one) 1. ( ) N. Atlantic 2. ( ) Southern 3. ( ) Central 4. ( ) Western

Check in only one column				1. If you think an activity is valuable and should be engaged in, check it as "Important." 2. Place the check under "Mandatory" if you believe the activity should be required by law or regulation. Check it under "Voluntary" if you feel it should be carried on by choice. 3. Check an activity as "Unimportant," if you think it has no value. 4. If you are in doubt as to the value of an activity, check the column marked "Undecided." 5. Please check in only one column for each activity.
MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
				Prepare, submit, and review Annual State Financial Statistical, and Descriptive Reports, including periodic revision of forms and content.
				Review and revise periodically the Policy Manual - Bulletin No. 1 - United States Office of Education.
				Conduct periodic national and regional workshops for State Directors on administrative problems and trends in the total educational program and their implications for Vocational Education.
				Make surveys continuously of national, state and local conditions as basis of plans for balanced total vocational education programs needed to meet changing conditions.

PART I -- GENERAL ADMINISTRATION ACTIVITIES 207  
(Continued)

Check in only one column				1. If you think an activity is valuable and should be engaged in, check it as "Important". 2. Place the check under "Mandatory" if you believe the activity should be required by law or regulation. Check it under "Voluntary" if you feel it should be carried on by choice. 3. Check an activity as "Unimportant" if you think it has no value. 4. If you are in doubt as to the value of an activity, check the column marked "Undecided". 5. Please check in only one column for each activity
MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
1	2	3	4	
11				Set up an organized plan of continuous communication of changes in policy, interpretations, data, plans, ideas, and program development in the states.
12				Work toward the establishment of a representative Federal Board for Education and adequate Federal vocational education staff to provide more in-service and leadership training for state staffs.
13				Develop patterns for cooperative program relationships between all vocational services on Federal and state levels.
14				Designate and use a national professional advisory committee composed of state directors of vocational education and chief state school officers.
15				Prepare periodically a publication of "Suggested Reimbursement Policies" for use in the states.

(Continued)

Check in only one column				1. If you think an activity is valuable and should be engaged in, check it as "Important". 2. Place the check under "Mandatory" if you believe the activity should be required by law or regulation. Check it under "Voluntary" if you feel it should be carried on by choice. 3. Check an activity as "Unimportant" if you think it has no value. 4. If you are in doubt as to the value of an activity, check the column marked "Undecided". 5. Please check in only one column for each activity.
MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
1	2	3	4	
16				Organize a suggested professional course in "The Administration of Local Programs of Vocational Education for School Administrators" for graduate study by school administrators.
17				Prepare a simplified outline of suggested content and method of preparation of revised State Plans, including date and frequency of submission.
18				<b>PART II -- SUPERVISION ACTIVITIES</b> Conduct annual program review in each service in each state by pre-planning so that maximum benefits can result in the improvement of instruction and in-service training of state staff.
19				Conduct an annual regional conference of state supervisors and teacher trainers and a national conference in each vocational service every five years.
20				Conduct periodic cooperative evaluation of entire state program in all services upon request of states.

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity, check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity.</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
21						Plan, organize, and conduct periodic national, regional and inter-state leadership development conferences for state supervisors in all services.
22						Conduct national, regional and state follow-up studies of graduates and drop-outs of vocational education programs.
23						Set up standards and minimum requirements for the selection of state supervisors and provide for their in-service training.
24						Plan and conduct visits, meetings, programs, conference and workshops to assist the states in identifying and solving the problems of the various vocational education services.
25						Plan and establish minimum standards and criteria for the selection and approval of training stations in cooperative programs, including a suggested list of approved jobs.

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity, check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
26						Plan and prepare a bulletin on "Effective Practices in State Supervision" to be used by all services.
27						Develop and distribute suggested nationally coordinated patterns of programs in supervisory training, including methods of providing them.
28						Develop and publish a national bulletin on selection of vocational students for various types of vocational programs
29						Prepare a national bulletin on "Organization and Operation of Technical Training Programs."
30						<p style="text-align: center;"><b>PART III -- TEACHER TRAINING ACTIVITIES</b></p> <p>Organize and conduct national, regional, or inter-state workshops for improvement of technical preparation of vocational teachers in service.</p>



PART III -- TEACHER TRAINING ACTIVITIES  
(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
31						Conduct periodic national workshops or conferences for teacher trainers in each field of vocational education.
32						Plan and prepare forms for exchange of data on vocational teachers trained and available for employment on regional or area basis.
33						Develop criteria and minimum standards for establishing evaluating, and accrediting pre-service vocational teacher education programs in institutions of higher learning in each service.
34						Develop criteria and minimum standards for selecting trainers for teacher education.
35						Cooperate in encouraging business and industry to provide practical work experience for vocational teachers.

## PART III -- TEACHER TRAINING ACTIVITIES

(Continued)

				Check in only one column	<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity, check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
				IMPORTANT	
MANDATORY		VOLUNTARY		UNDECIDED	
UNIMPORTANT					
1	2	3	4		
36					Develop criteria for the establishment of "graduate study programs" to serve teachers, teacher trainers and supervisors in one or more fields of vocational education.
37					Develop a suggested forty-hour practice teaching program with minimum standards for vocational teachers in various services, including the necessary training for student teacher supervisors.
38					Develop suggested in-service teacher education programs based on current developments and problems that new and experienced teachers face.
39					Plan ways that the states can work with first year teachers and draw from this implications for improvement of pre-service and in-service teacher training programs.
40					Work with states and teacher training institutions on programs of recruitment of new teachers and for expansion and improvement of teacher education programs.

## PART III -- TEACHER TRAINING ACTIVITIES

(Continued)

				Check in only one column	<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
				IMPORTANT	
MANDATORY		VOLUNTARY		UNDECIDED	
UNIMPORTANT					
1	2	3	4		
41					Seek a method of approach to the standardization of content in minimum professional courses required for state certification.
42					Conduct a national survey of activities engaged in and services provided by teacher educators.
43					Devise methods of coordinating teacher education more closely with operating program.
44					<p style="text-align: center;"><b>PART IV -- INSTRUCTIONAL MATERIALS ACTIVITIES</b></p> Prepare and distribute quarterly annotated lists of instructional materials, including audio-visual aids from all sources for use in all services.
45					Establish national, regional, or inter-state curriculum laboratories through special Federal and state appropriation for the purpose of producing necessary related instructional materials, using representative advisory assistance of all interested private and public organizations.

## PART IV -- INSTRUCTIONAL MATERIALS ACTIVITIES

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
46						Prepare instructional materials for use in much needed and undeveloped programs for slow learners.
47						Establish sound minimum standards for formats and kinds of instructional materials.
48						Plan and prepare courses of study and curricula for various vocational education programs in all services.
49						Plan and arrange for an exchange of instructional materials of proven worth between states.
50						Develop and exchange among states and cities effective procedures for state-wide curriculum work in the various vocational education fields.

## PART IV -- INSTRUCTIONAL MATERIALS ACTIVITIES

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
51						Provide for coordinated national program of development of related subject matter apprentice program in less common occupations.
52						Develop suggested trade extension courses of study in major occupations and/or industries.
53						Organize a joint committee, national in scope, to provide policy and support for needed instructional materials.
54						<p style="text-align: center;">PART V -- PHYSICAL FACILITIES ACTIVITIES</p> Prepare and publish manuals and bulletins showing suggested minimum laboratory and shop layouts, equipment, and tools that should be provided for approved programs in all services, through the assistance of representative advisory national and state committees.
55						Prepare state plans to include methods and procedures for obtaining local industrial recommendations for minimum laboratory and shop layouts, equipment, and tools.

## PART V -- PHYSICAL FACILITIES ACTIVITIES

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
56						Develop criteria for evaluating space and equipment in various vocational fields.
57						Work with manufacturers of school equipment for vocational programs to get the kind of equipment that is in keeping with goals of the program and the experiences of the several states.
58						Prepare manual on principles and methods of selecting, obtaining, placing, and inventorying shop and laboratory equipment.
59						<p style="text-align: center;">PART VI -- PUBLIC RELATIONS</p> Prepare frequent news and feature releases from annual state reports and other sources, describing the character, extent and development and results of various programs of vocational and practical arts education.
60						Cooperate in providing vocational education representation and working relationships in national, regional and state meetings of the National Manpower Council, trade associations, labor and other interested organizations.

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
61						Bring representative advisory committees, administrators and supervisors and laymen together for evaluation and suggestions for program improvement.
62						Prepare promotional materials, including films and film strips that can be used to explain and demonstrate effective vocational education programs to business, industry, labor, education, students, and parents.
63						Plan, organize and publish suggested programs of public relations, using all media for national and state use.
64						Conduct periodic national or regional conferences on methodology, developments, trends and research in Public Relations.
65						Establish more and better communication between the vocational education divisions and general education on national and state levels.

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity.</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
66						Exchange reports of good public relations projects in bulletin issued by the Office of Education.
67						Collect needed data and prepare bulletin for laymen on accomplishments of Vocational Education.
68						<p style="text-align: center;"><b>PART VII -- RESEARCH</b></p> <p>Conduct research as to the character and type of instructional program needed for the so-called slow learner group</p>
69						Conduct research to identify the vocational training needs of boys and girls leaving school after reaching a compulsory school age.
70						Study the need and practicability of a nation-wide plan for area vocational schools with Federal subsidy for building construction and equipment.



(Continued)

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		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
71						Conduct a study to identify the GENERAL RELATED INFORMATION needed by young workers in cooperative programs.
72						Conduct a national study of the possible coordination of vocational training under Reserve Forces Acts (1955) with public Vocational Education programs at Federal, state and local levels.
73						Conduct studies to identify the essential characteristics of all types of successful vocational education programs.
74						Conduct pilot studies in selected centers to develop new techniques for evaluating the effectiveness of supervision and other aspects of a local program.
75						Conduct research on administrative problems, such as costs of instruction, teaching loads, schedules, administrative units, size of schools, and relative advantages and disadvantages of different types of vocational schools.

## PART VII -- RESEARCH

(Continued)

		Check in only one column				<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity.</li> </ol>
		IMPORTANT				
		MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	
		1	2	3	4	
76						Develop plans for providing employment information and placement of vocational students.
77						Prepare and distribute summaries of studies in vocational education and lists of research problems for study.
78						Study and develop plans for training special groups, such as -- the retired, the low income families, mixed groups of adolescents and the young married group.
79						Evaluate the contribution of vocational education to family life education and see how all vocational services can work together in meeting the concerns of the family in relation to current economic standards.
80						Conduct research in post-high school, area, and regional vocational school programs as to the amount of training and kind of administrative units needed to make such training feasible and effective.

(Continued)

Check in only one column					<ol style="list-style-type: none"> <li>1. If you think an activity is valuable and should be engaged in, check it as "<u>Important</u>".</li> <li>2. Place the check under "<u>Mandatory</u>" if you believe the activity should be required by law or regulation. Check it under "<u>Voluntary</u>" if you feel it should be carried on by choice.</li> <li>3. Check an activity as "<u>Unimportant</u>" if you think it has no value.</li> <li>4. If you are in doubt as to the value of an activity check the column marked "<u>Undecided</u>".</li> <li>5. Please check in only one column for each activity.</li> </ol>
MANDATORY	VOLUNTARY	UNDECIDED	UNIMPORTANT	IMPORTANT	
1	2	3	4		
81					Establish national occupational area committees similar to the American Vocational Association Automotive Committee to develop pertinent data applicable to all states
82					Conduct continuous study of the needs for service and supervision in vocational education and make recommendations regarding the amounts and kinds of service and supervision needed on the Federal, state and local levels.
83					Develop criteria to guide states in establishing sound programs of research in all services.
84					Develop a policy that will earmark Federal and state funds for research.

EUSTACE  
SUPERVISOR AGRICULTURAL EDUCATION  
HAZEL E. THOMPSON  
SUPERVISOR HOMEMAKING EDUCATION  
CASTLE  
FIELD SUPERVISOR, INSTITUTIONAL  
ON-FARM TRAINING

**STATE BOARD FOR VOCATIONAL EDUCATION**

W. M. ARNOLD, DIRECTOR AND EXECUTIVE OFFICER  
1025 KANSAS AVENUE

TOPEKA, KANSAS

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INDUSTRIAL EDUCATION  
H. D. SHOTWELL  
SUPERVISOR BUSINESS EDUCATION  
NORMAN G. EVANS  
SUPERVISOR VOCATIONAL  
REHABILITATION SERVICES

April 25, 1956

TO: State Directors and State Supervisors, Vocational Services  
FROM: W. M. Arnold, State Director of Vocational Education  
SUBJECT: Follow-up Request on Study of Federal-State Cooperative  
Activities in Vocational Education

Last month your assistance was requested in this study, by asking you to return a checked list of cooperative activities.

Your participation and help in this vocational education study will be valuable in the future planning of the administration and promotion of vocational education. Therefore, it is important that a substantial percentage of the State leaders' responses is received and tabulated.

It will be very much appreciated if you will complete the instrument mailed to you last month and return it to me at your earliest convenience. If you have already done so, please disregard this follow-up request.

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SUPERVISOR BUSINESS EDUCATION  
NORMAN G. EVANS  
SUPERVISOR VOCATIONAL  
REHABILITATION SERVICES

April 30, 1956

TO: Teacher Educators, Vocational Services

FROM: W. M. Arnold, State Director of Vocational Education

SUBJECT: Follow-up Request on Study of Federal-State Cooperative  
Activities in Vocational Education

Last month your assistance was requested in this study, by asking you to return a checked list of cooperative activities.

Your participation and help in this vocational education study will be valuable in the future planning of the administration and promotion of vocational education. Therefore, it is important that a substantial percentage of the teacher educators' responses is received and tabulated.

It will be very much appreciated if you will complete the instrument mailed to you last month and return it to me at your earliest convenience. If you have already done so, please disregard this follow-up request.

## VITA

Walter Martin Arnold

Candidate for the Degree of

Doctor of Education

**Thesis: FEDERAL-STATE COOPERATIVE ACTIVITIES IN  
VOCATIONAL EDUCATION**

**Major Field: Educational Administration**

### Biographical:

**Personal data:** Born in Steelton, Pennsylvania, June 14, 1906, the son of Philip and Ella May Arnold.

**Education:** Attended grade school in Steelton, Philadelphia, and Bethlehem, Pennsylvania; graduated from Liberty High School, Bethlehem, in 1923; received the Bachelor of Science degree from the Pennsylvania State University, with a major in Vocational Industrial Education, in June 1929; received the Master of Education degree from the Pennsylvania State University, with a major in Vocational Education Administration and Supervision, in August 1935; completed requirements for the Doctor of Education degree in May 1957.

**Professional experience:** Completed machinist apprenticeship in 1924 and worked as journeyman machinist until 1926. Taught machine shop theory and related subjects in day and evening adult classes for eight years, in Boys' High School, Lancaster, Pennsylvania; served as Superintendent of Stevens Trade School, in Lancaster from 1937 to 1941; as Special Representative, Vocational Training for War Production Workers, United States Office of Education, Washington, D. C., 1941 to 1943; as Director of Vocational Education, Allentown Public Schools, Pennsylvania, 1943 to 1945; as Personnel Manager, Mack Manufacturing Corporation, Allentown, for four years; as State Supervisor, Trade and Industrial Education, Stillwater, Oklahoma, from 1950 to 1954; since 1954, served as State Director and Executive Officer for the Kansas State Board for Vocational Education.