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THE DEMAND FOR AND SELECTED SOURCES OF TEACHERS IN VOCATIONAL AND TECHNICAL EDUCATION, STATE DIRECTOR SURVEY.

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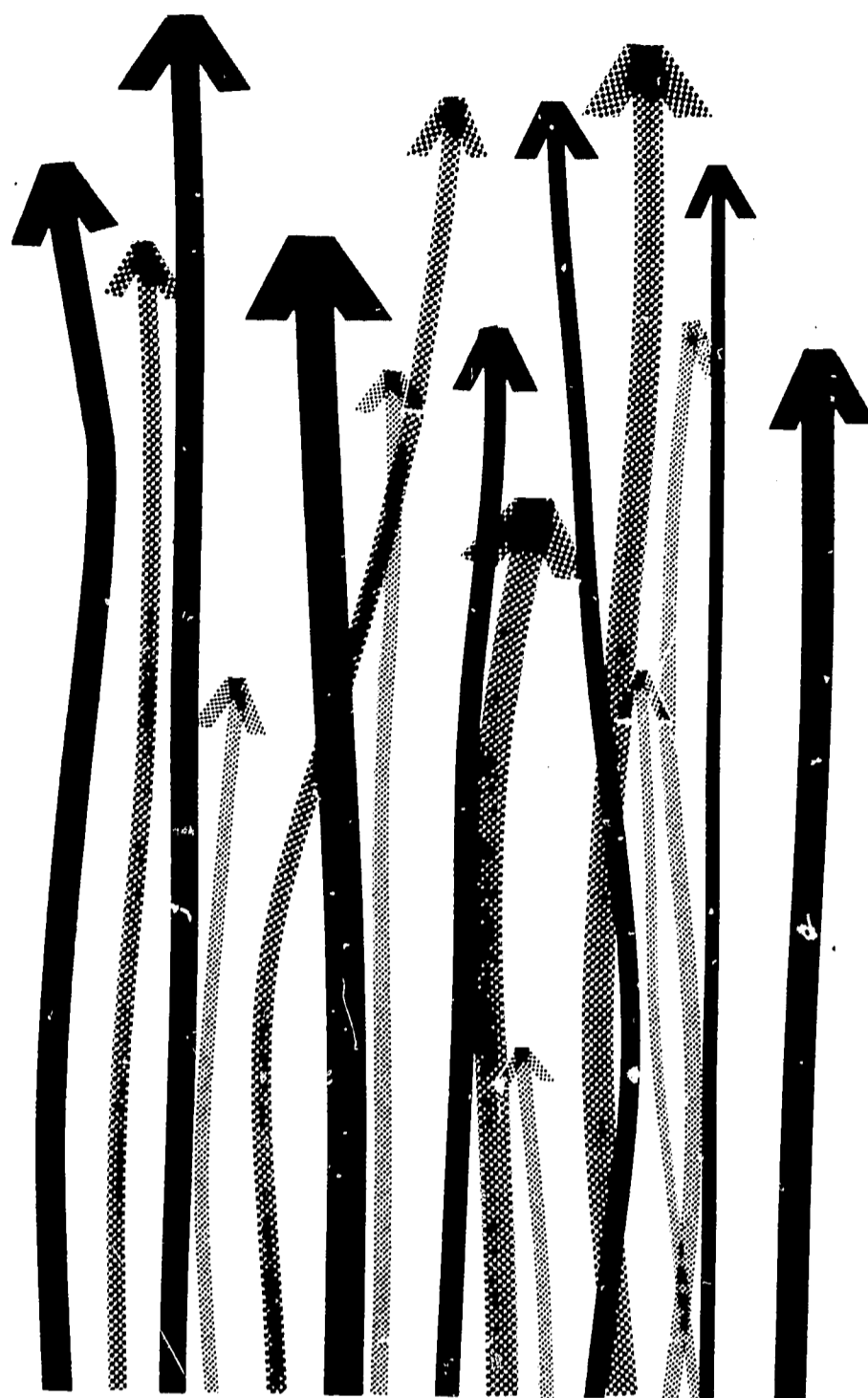
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A QUESTIONNAIRE WAS MAILED TO THE STATE DIRECTOR OF VOCATIONAL EDUCATION IN EVERY STATE AND TERRITORY OF THE UNITED STATES TO OBTAIN DATA CONCERNING THE NUMBER AND TYPE OF FULL-TIME HIGH SCHOOL AND POST-HIGH SCHOOL VOCATIONAL TEACHERS CURRENTLY EMPLOYED AND THE PROJECTED NUMBER OF TEACHERS THAT WOULD BE NEEDED DURING THE NEXT 3 YEARS. THEY WERE ALSO ASKED TO INDICATE SPECIFIC AREAS OF GREATEST TEACHER NEED IN THE FUTURE. ALL BUT KENTUCKY AND MASSACHUSETTS RESPONDED. ESTIMATED INCREASES IN NEED FOR HIGH SCHOOL TEACHERS FROM 1965 TO 1968 WERE--AGRICULTURE, 5.3 PERCENT, BUSINESS AND OFFICE EDUCATION, 28 PERCENT, DISTRIBUTIVE EDUCATION, 49.2 PERCENT, HOME ECONOMICS, 13.7 PERCENT, AND TRADE AND INDUSTRIAL EDUCATION, 43.1 PERCENT. ESTIMATES OF INCREASED NEED FOR POST-HIGH TEACHERS FOR THIS PERIOD WERE--AGRICULTURE, 113 PERCENT, BUSINESS AND OFFICE EDUCATION, 37 PERCENT, DISTRIBUTIVE EDUCATION, 73.5 PERCENT, HEALTH OCCUPATIONS, 40.2 PERCENT, HOME ECONOMICS, 66 PERCENT, TECHNICAL EDUCATION, 39.7 PERCENT, AND TRADE AND INDUSTRIAL EDUCATION, 23.2 PERCENT. DATA FROM QUESTIONNAIRES WERE TABULATED BY REGIONS. (PS)

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# THE DEMAND FOR TEACHERS IN VOCATIONAL AND TECHNICAL EDUCATION

**March 1967**

The Center for Vocational and Technical Education  
The Ohio State University  
980 Kinnear Road  
Columbus, Ohio 43212

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The Center for Vocational and Technical Education has been established as an independent unit on The Ohio State University campus with a grant from the Division of Adult and Vocational Research, U. S. Office of Education. It serves a catalytic role in establishing a consortium to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach, and interinstitutional in its program.

The major objectives of The Center follow:

1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;
2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;
3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;
5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and in-service education program;
6. To provide a national information retrieval, storage, and dissemination system for vocational and technical education linked with the Educational Research Information Center located in the U. S. Office of Education;
7. To provide educational opportunities for individuals contemplating foreign assignments and for leaders from other countries responsible for leadership in vocational and technical education.

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**The Demand for and Selected Sources of  
Teachers in Vocational and Technical Education**

**STATE DIRECTOR SURVEY**

**January, 1967**

**The Center for Research and Leadership Development  
in Vocational and Technical Education  
980 Kinnear Road  
Columbus, Ohio 43212**

## PREFACE

This publication represents the first phase of a three-phased study concerning the teacher supply problem in vocational and technical education. State directors assisted in reporting the current situation and identified the areas in which the greatest number of teachers will be needed in the future. Other phases of the project will examine potential sources of teaching talent, including studies involving the military service and selected industrial concerns.

This publication was prepared by Dr. James W. Hensel, Center Specialist in Agricultural Education. Center Specialists in Business and Office Education, Distributive Education, Home Economics Education, Technical Education, and Trade and Industrial Education cooperated in reviewing the survey results. Assistance was also provided by Cecil Johnson, Research Associate, and Urban Oen, Research Assistant at The Center.

We recognize that the difficulties of terminology, time, and space may restrict the usefulness of this publication. However, it is hoped that this material will provide some insight concerning the present and future situation for teachers in vocational and technical education programs.

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## INTRODUCTION

The Vocational Education Act of 1963 (Public Law 88-210) provided the impetus for a new era in vocational education in the United States. Vocational educators now have a mandate to provide a greater quantity and a higher quality of vocational education than has heretofore been possible. The Declaration of Purpose of the Act clearly provides the framework for the task:

Sec. I. It is the purpose of this part to authorize Federal grants to States to assist them to maintain, extend, and improve existing programs of vocational education, to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue their vocational training on a full-time basis, so that persons of all ages in all communities of the State--those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, and those with special educational handicaps--will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training.

Probably the single most critical problem that states are facing as they attempt to live up to the purposes of the Vocational Education Act of 1963 is the shortage of qualified instructors. Many state directors have found that as additional vocational and technical education programs are considered, the major factor which has limited full expansion has been the limited supply of teachers. The teacher supply problem was foreseen by leaders of vocational and technical education at the time Public Law 88-210 was signed by the President. Their concern was justified by early reports from around the nation which indicated that there were many more teaching positions than could be filled with the current supply of qualified personnel.

In the early summer of 1965, representatives from the American Vocational Association and The Center for Vocational and Technical Education met in Columbus, Ohio, to outline the framework for a coordinated effort to study the supply and demand for teachers in vocational and technical education.

This report is one segment of a larger project designed at that time entitled "The Demand for and Selected Sources of Teachers in Vocational and Technical Education." The data included in this survey were provided by state directors of vocational education during the latter part of 1965 and the early months of 1966.

## II

### INTRODUCTION TO STATE DIRECTORS STUDY

#### Purpose and Objectives

The purpose of this study was to determine the present supply and projected demand for teachers in vocational and technical education at the high school and post high school level.

Specific objectives of the study were:

- a. to establish data concerning the current teacher situation in vocational education at the high school and post high school level;
- b. to estimate the demand for teachers in vocational and technical education for the next three years;
- c. to identify the areas in vocational education which will have the greatest need for new instructors in the future.

One of the problems in vocational and technical education is the lack of trained teachers. However, the extent of this shortage has not been documented. Projected trends in teacher demand have usually been made at the local or state level and no national picture concerning all vocational fields has been forthcoming. This study documents the magnitude of the need for teachers in vocational and technical education, and predicts teacher need for the next three years.

#### Procedure

A questionnaire was mailed to each state director of vocational education in every state and territory of the United States. The questionnaire was designed to permit the state director to ask state supervisors or others closely associated with each vocational area to indicate the number and type of full-time high school and post high school vocational teachers currently employed and to project the number of teachers that would be needed during the next three years. They were also asked to indicate areas of greatest teacher need in the future.

A cover letter from Lowell Burkett, Executive Secretary of the AVA, was sent with the questionnaire. The letter explained the purpose, procedure and importance of the study. (see appendix)

The respondents were asked to estimate the trend in demand for teachers by marking the questionnaire with a ++ for a substantial increase; + for a moderate increase; 0 for no change; and - for a decrease in demand.

For tabulation purposes, the responses were assigned the following numerical values:



- = 0      There will be a decrease in demand
- 0 = 1      The demand will remain the same
- + = 2      There will be a moderate increase in demand
- ++ = 3     There will be a substantial increase in demand

The results of questionnaires were reviewed with Specialists at The Center for Vocational and Technical Education to (1) insure proper interpretation of the data and (2) secure suggestions on the method of reporting.

Data from the questionnaires were tabulated by regions rather than by states. Researchers assumed that individual states knew their own teacher needs. Regional tabulation gives individual states the opportunity to compare their teacher needs with the needs of states in the same region. For the purpose of grouping the states, the regional organization of the Division of Vocational and Technical Education was used. Only Massachusetts and Kentucky did not return a survey form.

Regional Organization - Division of Vocational and Technical Education

REGION I	REGION IV	REGION VII
Connecticut	Florida	Arkansas
Maine	Georgia	Louisiana
Massachusetts	South Carolina	New Mexico
New Hampshire	Tennessee	Oklahoma
Rhode Island	Alabama	Texas
Vermont	Mississippi	
		REGION VIII
REGION II	REGION V	Colorado
New York	Illinois	Idaho
New Jersey	Michigan	Montana
Pennsylvania	Indiana	Utah
Delaware	Ohio	Wyoming
	Wisconsin	
REGION III	REGION VI	REGION IX
Kentucky	Iowa	Arizona
Maryland	Kansas	Oregon
North Carolina	Minnesota	California
Virginia	Missouri	Nevada
West Virginia	Nebraska	Hawaii
*Puerto Rico	North Dakota	Alaska
	South Dakota	Washington

\*Hereafter in the report, Puerto Rico shall be referred to as a state and was included with the total states reporting.

## Limitations

1. This study did not include manpower training programs and totals of the report may not agree with the results of concurrent studies.
2. No attempt was made to define "post high school education" in the questionnaire and recipients were forced to inject their own meaning.
3. Data were limited to full-time teachers because of the difficulty of calculating time equivalents for part-time instructors.
4. Poor returns by certain vocational services presented additional problems in tabulating the data.
5. The design of the questionnaire was such that it was not possible to distinguish between high school and post high school programs in health occupations and technical education. It was assumed that these programs were primarily offered at the post high school level.
6. It is assumed that vocational teachers reported by state directors or supervisors were teachers in public institutions with reimbursable programs. The questionnaire made no provision for the inclusion of non-public school teachers.
7. It is recognized that projections for the future are only "best estimates," but they are hopefully meaningful since the estimates have been made by the supervisors or directors most closely associated with each of the vocational programs.
8. The questionnaire was designed to allow state supervisors to report the total number of teachers employed in each vocational service area and to report the number of teachers employed in each instructional area within the vocational service area. In some instances these figures do not correspond.
9. One of the major difficulties of the project was in the identification of instructional programs which meant the same to every state. The terms used in this study may have been difficult for a particular state to understand especially if their programs were not usually identified under these categories.

### III

## PRESENTATION OF DATA

### Agriculture

#### Full-Time Teachers Employed, 1965, and Projected Number of Teachers Needed in 1968 by State and Educational Level in Agricultural Education

Data in Table 1 provide a state-by-state report of the total number of agriculture teachers employed in 1965 as full-time high school teachers and full-time post high school teachers. This table also reported the projected number of full-time high school and post high school teachers that would be needed to fill teaching positions in 1968. A few states did not report in these categories and these were recorded in the table as NR or "not reported."

Texas employed the largest number of full-time high school teachers with a total number of 1,152. Pennsylvania employs 111 full-time post high school teachers in agriculture, the largest number reported by any state. Many states projected a marked increase in the number of full-time post high school teachers that would be needed in 1968.

#### The Current Employment and Projected Demand for High School Teachers in Agricultural Education

State directors of vocational and technical education reported 9,800 full-time teachers of vocational agriculture employed in forty-nine states during the 1965-1966 school year. Data in Table 2 indicate that forty-four states reported 905 beginning (new and replacement) full-time teachers were placed in teaching positions in 1965. These data represent a yearly change in personnel of about 9.2 percent of the total employed in the field of vocational agriculture. This figure corresponds with a similar study conducted by the Professional Recruitment Committee, Agriculture Section, American Vocational Association, where a turnover of 9.5 percent was reported.<sup>1</sup>

The supply of teachers in the field of vocational agriculture was apparently insufficient as there were 97 high school teaching positions remaining unfilled as school began in September, 1965.

The respondents projected that there would be a need for 10,320 full-time teachers of high school vocational agriculture in the forty-nine states by September, 1968. If the projected trend is accurate, there would be a

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<sup>1</sup> Ralph J. Woodin, "Survey of Teacher Supply," Professional Recruitment Committee, Agriculture Section, American Vocational Association. The Ohio State University, 1966. 0

need for 520 additional vocational agriculture teachers within the next three years to fill newly created positions. These figures represent a 5.3 percent growth in the numbers of high school teachers of vocational agriculture beyond current needs.

### High School Teachers by Teaching Area

The current status and projected demand for full-time teachers in each major instructional area in agricultural education at the high school level is reported in Table 3. Forty-eight states and Puerto Rico reported that 9,671 teachers were currently employed as regular vocational agriculture instructors. Most respondents felt that the regular program would show a moderate increase in demand for teachers. Horticulture and Agribusiness appeared to be the areas where the respondents anticipated the greatest demand for teachers in the future. Thirty-five states predicted the number of full-time teachers in Horticulture would make a moderate to substantial increase while the number of teachers in Agricultural Mechanics would make a moderate increase.

Only those teachers who were employed on a full-time basis for specialized programs were reported under categories other than the regular program. Therefore, the data in Table 3 do not indicate the extent to which courses in Horticulture, Off-farm Agricultural Occupations, or other courses were taught as a portion of the duties of the regular vocational agriculture instructor. There is reason to believe that specialized courses are often added to the regular program in addition to the normal activities of an instructor, rather than employing additional teachers on a full-time basis for these courses.

There were several miscellaneous programs which were reported by a single, or at most, two states and were not tabulated. These include Fruit Farm, Landscaping, Floriculture, Vegetable Growing, found in Region II; Conservation, Crop and Soil Technology in Region VIII; Disadvantaged Youth in Region V; Animal Industries in Regions IV and VIII; Leadership in Region IV; Coordination for Agricultural Occupations in Regions VI and VII.

### Current Employment and Projected Demand for Full-Time Post High School Teachers in Agricultural Education

The current status and projected demand for full-time teachers in agricultural education at the post high school level were reported in Table 4. Twenty-five states reported 351 full-time teachers employed at the post high school level in agricultural education. Fifty-three beginning (new and replacement) teachers in seventeen states entered full-time post high school vocational agriculture programs in 1965. Four states reported a shortage in the supply of teachers and seven teaching positions remained unfilled in September, 1965.

It was projected that 397 additional full-time post high school teachers would be needed during the next three-year period which would mean an increase of 113 percent over current numbers.

### Employment and Demand for Post High School Teachers by Instructional Area

Data in Table 5 indicate that in eighteen states, the large majority of the post high school teachers were currently employed full time, teaching regular vocational agriculture classes. The questionnaires have been interpreted to include young farmer programs.

Agriculture Mechanics was the second largest post high school teaching area with thirteen states employing forty-eight full-time teachers. Nine states reported a total of forty teachers employed full time in post high school farm management programs.

The projected three-year demand for full-time post high school vocational agriculture teachers (1965-1968) is reported in Table 5. The number of full-time post high school teachers in Horticulture, Agricultural Mechanics, regular Vocational Agriculture, Farm Management, and Agribusiness, were projected to make moderate to substantial increases over the next three-year period. It would appear from these data that there will be a rapid expansion of agricultural programs at the post high school level in the next three years.

One or two states projected a demand for teachers in the areas of Crop and Soil Technology, Agricultural Technology and Technicians, and Coordinator for Agricultural Occupations. This information was not reported in Table 5, as these programs represented a very small proportion of the projected employment opportunities.

### Areas of Agricultural Education Having the Greatest Future Need for Instructors

State directors were asked to report the three areas of agricultural education which they felt would have the greatest need for new instructors in the future. As shown in Table 6, of the forty-six states responding to this question, thirty-five states indicated that Agricultural Mechanics (including Machinery and Equipment) and Horticulture (including Ornamental Horticulture) were the projected areas of greatest teacher need. A further analysis of Table 6 indicated a wide range of off-farm agricultural occupations would also need a substantial increase in the number of new instructors.

## Business and Office Education

### Full-Time Teachers Employed, 1965, and Projected Number of Teachers Needed in 1968 by State and Educational Level in Business and Office Education

The total number of full-time high school and post high school teachers of business and office education employed in 1965 by states were reported in Table 1. Also reported in the table are the projected demands for full-time high school and post high school teachers. Those states not reporting or reporting that the requested information was not available are represented in the table by NR - "not reporting" or NA - "not available."

New York employed the largest number of high school business and office education teachers with a total of 4,444. California employed 3,628. California employed 775 full-time post high school business and office education teachers. A large number of states projected an increase in the number of high school and post high school teachers needed in 1968.

### The Current Employment and Projected Demand for High School Teachers in Business and Office Occupations

State directors of vocational and technical education reported 25,160 full-time teachers of business and office education employed in forty-two states during the 1965-1966 school year. Data in Table 7 indicate that thirty-four states reported 3,283 beginning (new and replacement) full-time teachers were placed in teaching positions in 1965. These data represent a yearly change in personnel of about 12.6 percent of the total employed in the field of business and office education.

The supply of business and office education teachers apparently was insufficient as 103 teaching positions remained unfilled when school began in September, 1965.

State directors in forty-four states projected a need for 32,196 full-time high school teachers of business and office education by September, 1968. These data represent a need for 7,036 additional business and office education teachers within the next three years to fill newly created teaching positions. These figures represent a 28.0 percent growth in the number of high school business and office education teachers beyond current needs.

### High School Teachers by Teaching Area

The current status and projected demand for full-time teachers in each of the major instructional areas in business and office education at the high school level were reported in Table 8. Office - Clerical Practice and Data Processing appeared to be the areas where the respondents anticipated the greatest demand for teachers in the future. Thirty-three states projected that the number of full-time teachers in Office - Clerical Practice

would make a moderate to substantial increase and the number of teachers in Data Processing would make a moderate increase.

Sixteen states reported 10,104 teachers of business and office education were unclassified as to instructional area, indicating that these teachers taught in several instructional areas.

#### Current Employment and Projected Demand for Full-Time Post High School Teachers in Business and Office Education

The current status and projected demand for full-time post high school teachers of business and office education is reported in Table 9. Thirty-four states reported 2,049 full-time post high school teachers employed in September, 1965. Twenty states reported 473 beginning (new and replacement) teachers entered business and office education in 1965. Four states indicated a shortage of business and office education teachers and 56 teaching positions remained unfilled in September, 1965.

State directors projected that 758 additional full-time post high school teachers are needed in the next three years. These data represent an increase of 37.0 percent over current numbers.

#### Employment and Demand for Post High School Teachers by Instructional Area

Data in Table 10 indicate that 1,331 teachers of business and office occupations at the post high school level in thirteen states were not classified by instructional area, indicating these teachers taught in more than one instructional area. Shorthand - Transcription was the second largest teaching area with sixteen states employing 210 full-time teachers. Fifteen states employed 186 full-time Typewriting teachers at the post high school level.

The projected trend in demand for full-time post high school business and office occupations teachers for the next three years (1965-1968) was reported in Table 10. The number of Data Processing teachers was projected to make a moderate to substantial increase over the next three years while the number of Office - Clerical Practice teachers was projected to make a moderate increase.

In 1965, there was also a program in Region IV in Management. This information was not reported in Table 10 as the program represented a very small proportion of the projected employment opportunities.

#### Areas of Business and Office Occupations Having the Greatest Future Need for New Instructors

State directors were asked to report the three areas of business and office occupations which they felt would have the greatest future need for new instructors. Data in Table 11 reported that of the forty-six states

responding to this question, twenty-eight states indicated that Office - Clerical Practice was the projected area of greatest teacher need. Twenty-seven states indicated that Data Processing teachers would be the second area of greatest teacher need. A further analysis of Table 11 indicated several of the instructional areas will have a substantial increase in need for additional teachers.



## Distributive Education

### Full-Time Teachers Employed, 1965, and Projected Number of Teachers Needed in 1968 by State and Educational Level in Distributive Education

The data in Table 1 provide a state-by-state report of the number of full-time high school and post high school teachers of distributive education currently employed and the number of teachers needed in 1968. Those states not reporting are represented by NR. A study of Table 1 revealed that New York employs the largest number of high school distributive education teachers with a total of 470 teachers employed. New York also employed the largest number of post high school teachers with a total of 94 full-time teachers.

A majority of the states indicated an increase in demand for full-time high school and post high school teachers during the next three years.

### The Current Employment and Projected Demand for High School Teachers in Distributive Education

State directors of vocational and technical education reported 2,818 full-time teachers of distributive education were employed in forty-seven states during the 1965-1966 school year. Data in Table 12 indicate that forty-four states reported 795 beginning (new and replacement) teachers were placed in teaching positions in 1965. These data represent a yearly change in distributive education personnel of about 28.2 percent of the total distributive education teachers employed.

Fifty teaching positions were unfilled as school began in September, 1965, indicating that the supply of distributive education teachers was insufficient.

The respondents projected a need for 4,205 distributive education teachers in forty-eight states and Puerto Rico by September, 1968. These projections indicated a need for 1,387 additional distributive education teachers within the next three years to fill newly created teaching positions. These data represent a 49.2 percent growth in the numbers of high school distributive education teachers beyond current needs.

### High School Teachers by Teaching Area

The current status and projected demand for full-time high school teachers in each major instructional area of distributive education were reported in Table 13. Thirty-five states reported a total of 1,597 teachers currently employed as regular distributive education instructors and the respondents felt that regular programs would have a moderate to substantial increase in demand for teachers. Thirteen states reported 936 teachers employed in retail programs in 1965, and the area was projected to have a moderate to substantial increase in demand for teachers. Five states

reported 195 teachers employed in 1965 in Cooperative and Preparatory distributive education programs, and the respondents projected that the demand for full-time high school teachers in this area would have a moderate to substantial increase. Five states employed eighty teachers in the Sales and Services programs, and the demand for Sales and Services teachers was projected to have a moderate to substantial increase in the demand for additional teachers.

A program in Socio-Economic distributive education was conducted in Region VII and two states in Region IX indicated a demand for teachers in the area of Marketing and Merchandising. This information was not reported in Table 13 as these programs represented a very small proportion of the projected employment opportunities.

#### Current Employment and Projected Demand for Full-Time Post High School Teachers in Distributive Education

The current status and projected demand for full-time post high school teachers in distributive education were reported in Table 14. Thirty-four states reported 321 full-time distributive education teachers employed at the post high school level in 1965. Twenty-five states reported eighty-four beginning (new and replacement) teachers were placed in teaching positions in 1965. Eight states reported twenty-eight teaching positions remained unfilled in September, 1965, indicating an insufficient teacher supply.

The respondents indicated that 236 additional full-time post high school teachers would be needed during the three-year period of 1965-1968, representing an increase of 73.5 percent over current needs.

#### Employment and Demand for Post High School Teachers by Instructional Area

Data in Table 15 indicate that thirteen states employed 107 full-time distributive education teachers in Retail programs. The respondents projected that the number of teachers needed in Retail programs at the post high school level would make moderate to substantial gains in the 1965-1968 period. Twenty-seven states employed 148 teachers in 1965 in regular distributive education courses at the post high school level and the respondents projected that the number of teachers needed in regular distributive education courses at the post high school level would make a moderate to substantial increase during the next three-year period.

Bank Teller, Insurance and Real Estate, City Superintendent of Adult Distributive Education, Restaurant Management, Hotel Management and Preparatory programs were offered in a few states, but were not reported in Table 15 because of the limited number of programs.

Areas of Distributive Education Having  
Greatest Future Need for New Instructors

State directors were asked to report the three areas of distributive education which they felt would have the greatest need for new instructors in the future. As the data in Table 16 indicate, twenty-three of the forty-one state directors responding to this question indicated the high school Cooperative programs, seventeen indicated Post High School programs, and fifteen indicated Adult Education programs. Further analysis of Table 16 indicated several other areas of distributive education were projected to have a substantial increase in demand for new instructors.

## Health Occupations

### Full-Time Teachers Employed, 1965, and Projected Number of Teachers Needed in 1968 by State and Educational Level in Health Occupations

Data in Table 1 provide a state-by-state report of the total number of health occupations teachers employed. Those states not reporting are represented by NR. New York reported a total of 612 health occupations instructors employed in 1965. This represents the largest number of teachers employed by a state. A majority of the states project an increase in the number of health occupations teachers needed by 1968.

### The Current Employment and Projected Demand for Health Occupations Teachers

State directors of vocational and technical education in forty-six states reported 2,109 full-time health occupations teachers employed in September, 1965. Data in Table 17 indicate that forty-one states reported 364 beginning (new and replacement) teachers were placed in teaching positions in 1965. These data indicate an annual change in personnel of about 17.3 percent of the total number of teachers employed in health occupations.

Sixteen states reported fifty-nine unfilled teaching positions in September, 1965, indicating the supply of health occupations teachers was insufficient.

The respondents in forty-five states projected that there would be a need for 2,957 full-time health occupations teachers by September, 1968. These data indicate a need for 848 full-time teachers in addition to current needs or an increase of 40.2 percent in the number of full-time health occupations teachers.

### Health Occupations Teachers by Instructional Area

The current status and projected demand for full-time health occupations teachers were reported in Table 13. Forty-six states reported 1,815 full-time teachers were currently employed as Practical Nurse - Vocational Nurse instructors and most respondents indicated that this instructional area would show a moderate to substantial increase in demand for teachers during the next three years. Six states reported 799 full-time instructors employed in the Professional Nurse instructional area. The demand for Professional Nurse instructors was projected to make a moderate to substantial increase in the future. Twenty-five states reported 181 full-time teachers in the Dental Assistant instructional area and thirty-four states projected that the need for instructors in this area would make a moderate to substantial increase.

There were several miscellaneous programs which were reported by a single, or at most, two states and, therefore, were not tabulated. These included: Dental Hygienist, Medical Secretary, Nursemaids, Junior Vocational Nursing, Cooperative Health Occupations, Food Service, Health Aide, Hospital Science, Inhalation Therapist, Psychiatric Technical, Supervisor, Radio-Therapist, Technical and Massage.

Areas of Health Occupations Having the  
Greatest Future Need for New Instructors

State directors were asked to report the three areas of health occupations which they felt would have the greatest need for new instructors in the future. The data in Table 19 indicate that thirty-eight of the forty-three states responding to this question indicated that practical nursing would be the area of greatest future teacher need. Twenty-three states projected that the area of Dental Assistant would also be an area of great teacher need in the future.

## Home Economics

### Full-Time Teachers Employed, 1965, and Projected Number of Teachers Needed in 1968 by State and Educational Level in Home Economics

Data in Table 1 provide a state-by-state report of the number of full-time high school and post high school teachers of home economics employed in 1965 and the projected number of full-time teachers needed in 1968. Those states not reporting are represented by NR. New York employed the largest number of full-time high school teachers with a total of 2,833 teachers. Pennsylvania employed the largest number of full-time post high school teachers with a total of 547 teachers.

A majority of the respondents projected an increase in the number of full-time high school and post high school teachers needed by 1968.

### The Current Employment and Projected Demand for High School Teachers in Home Economics

State directors of vocational and technical education reported 20,856 full-time teachers of home economics employed in forty-seven states during the 1965-1966 school year. Data in Table 20 indicate that forty-five states reported 3,177 beginning (new and replacement) teachers were placed in teaching positions in 1965. These data represent a yearly change in personnel of about 15.2 percent of the total employed as full-time high school home economics instructors.

Fourteen states indicated that as of September, 1965, fifty-six teaching positions remained unfilled indicating a shortage of home economics teachers.

The state directors projected that by September, 1968, there would be a need for 23,715 full-time teachers of home economics. According to these projections 2,859 additional home economics teachers will be needed during the next three years to fill newly created positions or an increase of about 13.7 percent in the number of home economics teachers will be needed beyond current needs.

### High School Teachers by Instructional Area

The current status and projected demand for full-time home economics teachers by each instructional area is reported in Table 21. Forty-six states reported that 15,913 full-time high school home economics teachers were employed in regular programs in September, 1965. The demand for teachers of regular home economics programs was projected to make a moderate increase by 1968. Twenty-nine states reported 133 full-time teachers employed in Food Service programs and the demand for Food Service instructors was projected to make a moderate to substantial increase in the future.

Only those teachers who were employed on a full-time basis for specialized programs were reported under categories other than the regular program. Therefore, the data in Table 21 do not indicate the extent to which home economics wage-earning courses were taught as a portion of the duties of the regular vocational home economics instructor. There is reason to believe that specialized courses are often added to the regular program in addition to the normal activities of an instructor, rather than employing additional teachers on a full-time basis for these courses.

Programs in the areas of Rest-home Aides and Health Services are offered in a few states but are not reported in Table 21, due to the small number of programs offered. Geriatrics, Visiting Homemaker and Institutional Services programs were projected by a few states to require a moderate number of teachers in the future. However, these programs are not reported in Table 21 due to the small number of states projecting a demand.

#### Current Employment and Projected Demand for Full-Time Post High School Teachers in Home Economics

The current status and projected demand for full-time post high school home economics teachers were reported in Table 22. Nineteen states reported 1,095 full-time post high school teachers were employed in September, 1965. Six states reported sixty-one beginning (new and replacement) teachers were placed in teaching positions in home economics at the post high school level in 1965.

State directors of vocational and technical education projected that an additional 721 teachers would be needed by 1968 to fill newly created teaching positions at the post high school level. These data represent an increase of about 66 percent above current teacher needs.

#### Employment and Demand for Post High School Teachers by Instructional Area

Data in Table 23 indicate that eighteen states reported 1,931 full-time home economics instructors were employed in Regular Home Economics programs at the post high school level in 1965. Respondents projected that the demand for home economics teachers in the regular program area would make a moderate increase in the future. Nine states currently employ seventeen teachers in the Food Services area at the post high school level and a moderate to substantial increase was projected in the number of teachers needed for this area in the future.

A few states, in no case more than two, offered programs in Clothing Maintenance, Special Needs and Occupational Preparation. This information was not reported in Table 23, as these programs represented a very small proportion of the number of programs offered.

A few states projected a demand for teachers in Health Service, Geriatric Aides and Hotel-Motel programs. These programs are not reported in Table 23 because of the small number of states projecting a demand.

Area of Home Economics Having the  
Greatest Future Need for Instructors

State directors were asked to report the three areas of home economics which they felt would have the greatest need for new instructors in the future. The data in Table 24 indicate that of the forty-three states responding to this question, twenty-four indicated that the Food Services area would have the greatest need for new instructors. Twenty-one respondents indicated the Homemaking area and sixteen indicated the area of Child Care and Development. Table 24 indicated that a large number of Home Economics occupations would need additional instructors in the future.



## Technical Education

### Full-Time Teachers Employed, 1965, and Projected Number of Teachers Needed in 1968 by State and Educational Level in Technical Education

Table 1 reported the number of technical education teachers employed in 1965 and the projected number of technical education teachers needed in 1968 on a state-by-state basis. Those states not reporting are represented by NR. According to the responding states, California employed the largest number of full-time technical education teachers with a total of 500. A majority of the states projected an increase in demand for full-time technical education instructors.

### The Current Employment and Projected Demand for Teachers in Technical Education

State directors of vocational and technical education reported 3,317 full-time technical education instructors employed in forty-three states during the 1965-1966 school year. Data in Table 25 indicate that thirty-eight states reported 563 beginning (new and replacement) teachers were placed in teaching positions in 1965. These data represent an annual change in personnel of about 16.9 percent. Fourteen states reported sixty-three unfilled teaching positions in September, 1965, indicating that the teacher supply was insufficient.

Forty-one states projected that there would be a need for 4,633 full-time technical education instructors in 1968. These data represent an increase of 1,316 instructors during the 1965-1968 period or an increase in the number of full-time technical education instructors of about 39.7 percent above current needs.

### Technical Education Teachers by Teaching Area

The current status and projected demand for full-time technical education instructors in each of the major instructional areas were reported in Table 26. Thirty-six states reported that 585 instructors were currently employed in Electronics Engineering Technical programs, and the respondents projected that the demand for instructors in this area would make a moderate to substantial increase in the future. Twenty-two states reported 201 full-time Data Processing instructors were currently employed and projected that the demand for Data Processing instructors would make a moderate to substantial increase in the future. Twenty-five states reported 286 instructors currently employed in Mechanical Drafting and Design programs and projected that the demand for Mechanical Drafting and Design instructors would make a moderate increase in the future.

The following miscellaneous programs were reported by a single, or at most, two states and, therefore, were not tabulated: Regular Health Occupations, Dental Hygiene, Feeds and Fertilizers, Forest Products Technology,

Agricultural Technology, General Agriculture, Regular Home Economics, Marine Technology, Welding Technology, Aeronautical Engineering, Petroleum Engineering, Physical Science, Hydraulics and Pneumatics, Pre-technical courses, Trade and Industrial, Engineering Aide, Technical English, Technical Math, Social Studies, Commercial Science, Communications Skills, Science and Math, Technical Writing, Library Science, Law Enforcement, Urban Development, Industrial Supervision, Radiation Technology, General Aviation, Restaurant and Hotel Management, Tool and Die Technology, Tool Design, Mechanics and Metals, Machine Tool, Instrument Repair, Scientific Glass Blowing, Traffic and Transportation, Surveying, X-Ray Technician, Civil Structural Technology, Aeronautical Drafting, Electronic Drafting, Monumental Drafting, Highway Construction, Wood Industries, Electronic Computer, Sanitary Engineering, T.V. Studio Technician, Radio and T.V. Broadcast Technician, Business and Office Machines, Technical Secretary, Regular Distributive Education, Technical Illustrator, Commercial Illustrator, Textile Technician, Business Technology, Stenographer, and General Business.

Additional programs were projected by a few states as areas of potential teacher demand. The programs are not tabulated in Table 26 due to the small number of states projecting a demand. These programs are: Horticulture, Farm Mechanics, Supervisor of Food Technology, Fashion Design, Building Construction, Highway, Technical Writing, Interior Decorating, Practical Nursing, Medical Technician, Dental Technician, Dental Assistant, Beauty Culture, Assistant in Child Care Centers, Associate Degree, Dental Laboratory, and Mortuary Science.

#### Areas of Technical Education Having the Greatest Future Need for New Instructors

State directors reported the three areas of technical education which they felt would have the greatest need for new instructors in the future. As the data in Table 27 indicate, of the thirty-eight responding to this question, twenty-five projected Electronics would have the greatest future teacher need. Data Processing and Mechanical Technology were also projected as other areas of future teacher need. Further analysis of Table 27 revealed several other areas of technical education which would have a future need for new instructors.

## Trade and Industrial Education

### Full-Time Teachers Employed, 1965, and Projected Number of Teachers Needed in 1968 by State and Educational Level in Trade and Industrial Education

Data in Table 1 provide a state-by-state report of the number of full-time high school and post high school trade and industrial education teachers employed in 1965 and the projected number of teachers needed at these two educational levels in 1968. Those states not reporting are represented by NR. According to the responding states, New York employed the largest number of high school trade and industrial education teachers with a total of 2,943 teachers employed. California employed the largest number of full-time post high school trade and industrial education teachers with a total of 2,200 teachers employed.

A majority of the states projected an increase in demand for full-time high school and post high school trade and industrial education teachers during the next three-year period.

### The Current Employment and Projected Demand for High School Teachers in Trade and Industrial Education

State directors of vocational and technical education reported 10,680 full-time teachers of trade and industrial education employed in forty-five states during the 1965-1966 school year. Data in Table 28 indicate that forty-one states reported 2,331 beginning (new and replacement) full-time teachers were placed in teaching positions in 1965. These data represent an annual change in personnel of about 20.9 percent of the total employed in trade and industrial education.

The supply of teachers in the field of trade and industrial education was apparently insufficient as there were 101 high school teaching positions remaining unfilled as school began in September, 1965.

The respondents projected that there would be a need for 15,288 full-time teachers of high school trade and industrial education in forty-six states by September, 1968. If the projected trend is accurate, there would be a need for 4,608 additional trade and industrial education teachers within the next three years to fill newly created positions. These figures represent a 43.1 percent growth in the number of high school teachers of trade and industrial education beyond current needs.

### High School Teachers by Teaching Area

The current status and projected demand for full-time teachers in each of the major instructional areas in trade and industrial education at the high school level were reported in Table 29. Forty-three states reported 1,390 full-time instructors employed in Auto Mechanics programs in 1965 and the demand for Auto Mechanics instructors was projected to make a moderate to substantial increase in the future. Sixteen states reported 806 full-time

Industrial Cooperative instructors employed in 1965 and projected that the demand for Industrial Cooperative instructors would make a moderate to substantial increase in the future. The areas of Carpentry and Machine Shop employed a large number of instructors and were projected to have a moderate increase in future need for instructors.

#### Current Employment and Projected Demand for Full-Time Post High School Trade and Industrial Education Teachers

The current status and projected demand for full-time teachers in trade and industrial education at the post high school level were reported in Table 30. Thirty-seven states reported 7,705 full-time post high school trade and industrial education teachers were employed in September, 1965. Twenty-eight states reported 458 beginning (new and replacement) teachers were placed in teaching positions at the beginning of the 1965 school year. Nine states reported thirty-nine unfilled teaching positions in September, 1965, indicating a shortage of trade and industrial education teachers at the post high school level.

It was projected that 1,799 additional full-time teachers would be needed during the next three years or an increase of 23.3 percent above current numbers.

#### Employment and Demand for Post High School Trade and Industrial Education Teachers

Data in Table 31 indicate that thirty-two states employed 601 full-time post high school teachers in Auto Mechanics programs in 1965. Thirty-five states projected that the Auto Mechanics area would make a moderate increase in demand for additional teachers in the future. Twenty-five states employed 359 full-time instructors in Machine Shop programs and projected that the Machine Shop area would make a moderate increase in future demand for additional teachers. Twenty-six states employed 178 Drafting teachers and projected that this instructional area would make a moderate demand for new instructors in the future.

#### Areas of Trade and Industrial Education Having the Greatest Future Need for New Instructors

The state directors were asked to report the three areas of trade and industrial education which they felt would have the greatest future need for new instructors. As shown in Table 32, of the forty-three states responding to this question, twenty-six projected that the Automotive programs, including Auto Mechanics and Auto Body Repair would be the area of greatest future teacher need. Twenty-nine states indicated that the Metal Trades, including Machine Shop and Welding, was the projected area of greatest teacher need. Further analysis of Table 32 indicated that a wide range of trade and industrial education occupations were projected to have an increase in the number of new instructors needed in the future.

## IV

### SUMMARY

The study was conducted to document the magnitude of the need for vocational and technical education teachers and to predict the demand for teachers in the next three years. The study also asked state directors to identify the instructional areas in vocational education which they felt would have the greatest need for teachers in the future.

#### Purpose and Objectives

The purpose of this study was to determine the present supply and projected demand for teachers in vocational and technical education at the high school and post high school level.

Specific objectives of the study were:

- a. to establish data concerning the current teacher situation in vocational education at the high school and post high school level;
- b. to estimate the demand for teachers in vocational and technical education for the next three years;
- c. to identify the areas in vocational education which will have the greatest need for new instructors in the future.

The findings of the study were reported by vocational service area and no attempts were made to compare services.

#### Agriculture

State directors estimated that the number of high school teachers of agricultural education would expand from 9,800 in 1965 to 10,320 in 1968, an increase of 5.3 percent. The number of post high school agricultural education teachers was projected to expand from 351 in 1965 to 748 in 1968, an increase of 113 percent. The areas of Agricultural Mechanization, Horticulture and Off-Farm Agricultural Occupations were expected to have the greatest need for additional instructors.

#### Business and Office Education

The number of high school teachers of business and office education were projected to expand from 25,160 in 1965 to 32,196 in 1968, an increase of 28 percent. The number of post high school teachers were expected to increase from 2,049 in 1965 to 2,807 in 1968, an increase of 37.0 percent. State directors also projected that the areas of Office-Clerical Practice, Data Processing and Stenographic-Secretarial would have the greatest need for additional teachers.

### Distributive Education

State directors projected that the number of high school distributive education teachers would expand from 2,818 in 1965 to 4,205 in 1968, an increase of 49.2 percent. The number of post high school teachers were projected to expand from 321 in 1965 to 557 in 1968, an increase of 73.5 percent. The areas of distributive education which will have the greatest need for new instructors in the future include high school cooperative programs, post high school programs, and several areas of adult education.

### Health Occupations

The number of teachers in the health occupations were expected to expand from 2,109 in 1965 to 2,957 in 1968, an increase of 40.2 percent. The instructional areas of Practical Nursing, Dental Assistants, and Medical Laboratory Assistants were projected as having the greatest demand for additional teachers.

### Home Economics

State directors projected that the number of high school home economics teachers would expand from 20,856 in 1965 to 23,715 in 1968, an increase of 13.7 percent. The number of post high school teachers were projected to expand from 1,095 in 1965 to 1,816 in 1968, an increase of 66.0 percent. State directors projected that the instructional areas of Food Services, Homemaking and Child Care and Development would have the greatest need for additional teachers.

### Technical Education

Projections indicate that the number of technical education instructors would expand from 3,317 in 1965 to 4,633 in 1968, an increase of 39.7 percent. The instructional areas of Electronics, Data Processing and Mechanical Technology were expected to have the greatest need for additional teachers.

### Trade and Industrial Education

State directors projected that the number of high school trade and industrial education teachers would expand from 10,680 in 1965 to 15,288 in 1968, an increase of 43.1 percent. The number of post high school teachers were projected to expand from 7,705 in 1965 to 9,504 in 1968, an increase of 23.3 percent. State directors also projected that the Automotive Programs, including Auto Mechanics and Auto Body Repair, and the Metal Trades, including Machine Shop and Welding, would have the greatest future need for new instructors.

In conclusion, it would appear that the reported shortage of qualified instructors in vocational and technical education is real. The state directors predicted an increased demand for instructors in all of the vocational and technical areas by 1968. Both high school and post high school programs are being expanded in all areas and teachers will be needed to fill the new positions.

**APPENDIX A**



TABLE 1

FULL-TIME TEACHERS EMPLOYED, 1965, AND PROJECTED NUMBER OF TEACHERS NEEDED IN 1968 BY STATE AND EDUCATIONAL LEVEL

State	Educational Level	Agriculture		Business and Office		Distributive		Health Occupations	
		Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968
Alabama	HS*	380	450	160	210	53	200	39	30
Alaska	PHS**	0	0	45	60	2	25	3	5
Arizona	HS	2	7	15	30	4	8	10	20
Arkansas	PHS	0	0	3	4	0	0	NR	NR
California	HS	49	60	47	90	40	60	10	20
	PHS	3	9	13	30	4	8	NR	NR
	HS	311	310	3	25	11	20	NR	NR
	PHS	1	4	6	35	4	5	NR	NR
	HS	256	300	3628	4600	75	135	NR	NR
	PHS	36	50	775	1160	51	95	NR	NR
Colorado	HS	71	85	55	150	38	60	22	48
	PHS	8	24	21	50	0	5	10	15
Connecticut	HS	34	41	166	720	33	50	10	20
	PHS	1	2	22	31	1	5	13	20
Delaware	HS	18	20	167	180	11	22	10	15
	PHS	0	0	0	20	0	4	13	20
Florida	HS	263	275	1300	1700	65	110	76	106
	PHS	4	15	100	140	18	28	10	15
Georgia	HS	349	355	311	650	43	83	38	54
	PHS	25	39	57	63	1	27	NR	NR
Hawaii	HS	41	41	126	141	8	12	NR	NR
	PHS	0	0	0	0	0	0	13	16
Idaho	HS	75	85	40	70	14	22	70	100
	PHS	2	10	4	12	4	8	25	40
Illinois	HS	449	470	600	1200	104	150	43	75
	PHS	14	60	NR	NR	2	10	NR	NR
Indiana	HS	269	320	NR	200	38	70	25	40
	PHS	0	10	NR	25	3	5	43	60
Iowa	HS	248	248	31	76	40	55	NR	NR
	PHS	1	2	5	15	6	15	NR	NR
Kansas	HS	189	189	26	42	21	29	35	60
	PHS	3	10	4	7	3	5	NR	NR
Kentucky	HS	NR	NR	NR	NR	NR	NR	NR	NR
	PHS	NR	NR	NR	NR	NR	NR	NR	NR
Louisiana	HS	297	307	814	895	43	55	38	12
	PHS	0	0	0	0	1	3	NR	NR

\*High School  
\*\*Post High School



TABLE 1 (continued)

State	Educational Level	Agriculture		Business and Office		Distributive		Health Occupations	
		Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968
Maine	HS	21	25	0	0	3	10	9	12
	PHS	0	5	0	0	0	3	0	0
Maryland	HS	64	69	893	952	20	32	10	15
	PHS	3	5	6	NR	0	2	0	0
Massachusetts	HS	NR	NR	NR	NR	NR	NR	NR	NR
	PHS	NR	NR	NR	NR	NR	NR	NR	NR
Michigan	HS	223	260	777	1162	283	225	103	120
	PHS	8	35	139	207	23	39	59	75
Minnesota	HS	302	320	1300	1500	46	30	0	0
	PHS	51	85	70	100	4	12	0	0
Mississippi	HS	310	310	0	150	21	31	0	0
	PHS	1	12	0	25	2	5	0	0
Missouri	HS	243	265	98	130	60	80	31	50
	PHS	0	0	14	33	6	10	65	100
Montana	HS	63	63	275	275	10	25	4	4
	PHS	0	0	6	10	1	3	0	0
Nebraska	HS	122	135	70	165	12	30	8	NR
	PHS	3	8	5	40	1	5	0	0
Nevada	HS	15	19	12	30	8	16	11	11
	PHS	0	0	0	0	0	0	0	0
New Hampshire	HS	11	14	NR	NR	1	5	13	15
	PHS	8	8	3	NR	0	1	45	90
New Jersey	HS	38	47	1600	1850	69	90	27	37
	PHS	0	0	11	57	2	10	612	575
New Mexico	HS	59	69	653	748	19	20	62	72
	PHS	0	5	18	23	2	5	28	35
New York	HS	259	275	4444	5000	470	610	158	300
	PHS	3	NR	202	NR	94	NR	32	40
North Carolina	HS	613	644	0	0	173	298	0	0
	PHS	0	0	0	0	NR	NR	0	0
North Dakota	HS	72	76	305	275	9	25	0	0
	PHS	0	10	18	25	2	6	0	0
Ohio	HS	366	380	NR	NR	129	220	0	0
	PHS	3	20	NR	NR	7	50	0	0
Oklahoma	HS	392	410	19	250	39	64	0	0
	PHS	0	0	0	80	0	10	0	0

TABLE 1 (continued)

State	Educational Level	Agriculture		Business and Office		Distributive		Health Occupations	
		Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968
Oregon	HS	110	120	400	440	38	68	21	35
	PHS	8	15	20	30	5	10		
Pennsylvania	HS	288	315	2829	3264	75	150	88	150
	PHS	111	128	30	50	1	15		
Puerto Rico	HS	123	123	228	275	22	32	18	15
	PHS	0	40	19	15	4	8		
Rhode Island	HS	9	12	193	218	5	20	7	9
	PHS	0	3	0	0	0	0		
South Carolina	HS	300	325	154	250	18	30	23	33
	PHS	0	25	3	30	1	3		
South Dakota	HS	65	80	3	30	12	25	3	4
	PHS	0	0	0	4	0	6		
Tennessee	HS	283	283	660	700	58	90	63	107
	PHS	0	30	5	15	0	5		
Texas	HS	1152	1077	57	275	259	425	12	20
	PHS	0	0	11	45	2	12		
Utah	HS	56	58	233	250	32	42	20	24
	PHS	1	4	14	17	1	6		
Vermont	HS	22	22	150	180	7	8	15	20
	PHS	0	0	0	0	0	0		
Virginia	HS	328	340	1280	1500	192	243	82	91
	PHS	5	12	23	30	4	7		
Washington	HS	154	169	849	919	70	95	72	144
	PHS	27	40	155	210	16	30		
West Virginia	HS	104	115	30	200	9	12	21	27
	PHS	0	0	0	15	0	2		
Wisconsin	HS	282	282	NR	NR	0	0	50	124
	PHS	21	30	210	75	41	41		
Wyoming	HS	50	52	159	179	8	13	2	2
	PHS	0	2	13	19	1	3		
Total	HS	9800	10320	25160	32196	2818	4205	2109	2957
	PHS	351	748	2049	2807	321	557		

TABLE 1 (continued)

State	Educational Level	Home Economics		Technical		Trade and Industrial	
		Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968
Alabama	HS	445	645	37	30	228	326
	PHS	0	50			282	562
Alaska	HS	32	40	8	9	11	20
	PHS	0	0			15	35
Arizona	HS	232	300	31	55	56	90
	PHS	27	60			4	30
Arkansas	HS	391	400		0	50	50
	PHS	0	0	0		37	87
California	HS	NR	NR	500	700	1,000	1,200
	PHS	NR	NR			2,200	2,500
Colorado	HS	77	89		75	61	80
	PHS	13	18	52		47	55
Connecticut	HS	82	90	94	NR	NR	210
	PHS	0	0			NR	25
Delaware	HS	92	100		15	60	90
	PHS	0	0	10		0	25
Florida	HS	800	900	229	273	388	478
	PHS	6	8			85	175
Georgia	HS	578	625	57	100	135	231
	PHS	9	15			173	325
Hawaii	HS	91	98			NR	NR
	PHS	0	0	NR	NR	NR	NR
Idaho	HS	124	130		29	15	19
	PHS	0	0	25		34	50
Illinois	HS	724	810	57	85	313	360
	PHS	0	10			6	30
Indiana	HS	600	700	23	37	188	213
	PHS	85	135			0	10
Iowa	HS	293	293	116	168	56	85
	PHS	86	86			14	50
Kansas	HS	175	225		75	107	107
	PHS	4	9	59		49	49
Kentucky	HS	NR	NR	NR	NR	NR	NR
	PHS	NR	NR			NR	NR
Louisiana	HS	528	618		47	0	0
	PHS	0	10	35		213	238

TABLE 1 (continued)

State	Educational Level	Home Economics		Technical		Trade and Industrial	
		Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968
Maine	HS	190	220	5	12	39	58
	PHS	NR	NR			49	100
Maryland	HS	75	95	62	102	325	565
	PHS	0	0			180	210
Massachusetts	HS	NR	NR	NR	NR	NR	NR
	PHS	NR	NR			NR	NR
Michigan	HS	602	632	230	325	197	300
	PHS	4	5			53	70
Minnesota	HS	891	918	NR	NR	42	52
	PHS	NR	NR			237	296
Mississippi	HS	489	549	51	76	92	140
	PHS	0	75			45	75
Missouri	HS	380	425	64	80	225	250
	PHS	70	100			8	25
Montana	HS	64	69	11	13	11	11
	PHS	0	0			4	4
Nebraska	HS	166	175	45	50	56	71
	PHS	0	4			11	100
Nevada	HS	22	28	31	45	25	30
	PHS	0	0			0	6
New Hampshire	HS	107	110	0	0	27	40
	PHS	10	12			27	65
New Jersey	HS	1206	1596	172	222	385	490
	PHS	46	300			50	85
New Mexico	HS	97	120	11	17	22	25
	PHS	0	20			4	4
New York	HS	2833	3350	NR	NR	2943	3679
	PHS	10	NR			660	660
North Carolina	HS	773	821	NR	NR	454	1123
	PHS	0	0			0	0
North Dakota	HS	133	148	38	44	2	6
	PHS	0	0			43	10
Ohio	HS	610	850	52	110	560	1090
	PHS	12	28			0	0
Oklahoma	HS	359	379	133	174	246	276
	PHS	0	10			0	30

TABLE 1 (continued)

State	Educational Level	Home Economics		Technical		Trade and Industrial	
		Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968	Employed 1965	Projected Need 1968
Oregon	HS	65	65	33	50	23	40
Pennsylvania	PHS	14	14			46	70
	HS	1239	1289			365	266
Puerto Rico	PHS	547	572	110	176	NR	NR
	HS	646	686			183	275
Rhode Island	PHS	0	0	18	26	3	25
	HS	132	148			55	55
South Carolina	PHS	0	0	4	53	0	0
	HS	321	360			224	275
	PHS	0	20	140	255	61	70
South Dakota	HS	NR	NR			21	30
	PHS	NR	NR	11	20	19	35
Tennessee	HS	458	480			291	375
	PHS	45	100	49	59	0	0
Texas	HS	1845	2045			564	864
	PHS	4	8	180	180	75	40
	HS	284	304			136	225
Utah	PHS	0	0	41	55	86	110
	HS	89	120			74	101
	PHS	0	0	7	NR	0	0
Virginia	HS	764	800			263	350
	PHS	0	0	69	90	102	179
Washington	HS	379	440			30	90
	PHS	102	127	125	200	650	850
West Virginia	HS	150	180			116	134
	PHS	0	10	15	18	0	1
Wisconsin	HS	155	175			0	0
	PHS	1	10	275	475	329	329
Wyoming	HS	68	75			6	15
	PHS	0	0	2	8	5	10
Total	HS	20856	23715	3317	4633	10680	15288
	PHS	1095	1816			5906	7705

TABLE 2

**THE CURRENT EMPLOYMENT AND PROJECTED DEMAND FOR  
FULL-TIME HIGH SCHOOL TEACHERS IN AGRICULTURAL EDUCATION**

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	7	5	5	7	49
States reporting programs	5	4	5	6	5	7	5	5	7	49
Teachers employed in 1965	97	603	1232	1885	1589	1241	2211	315	627	9800
States reporting	3	4	5	6	5	7	4	5	5	44
Number of new and replacement teachers in 1965	10	67	103	185	184	162	87	32	75	905
States reporting	1	1	3	5	4	4	2	0	1	21
Number of unfilled teaching positions in 1965	2	4	34	18	11	15	11	-	2	97
States reporting	5	4	5	6	5	7	5	5	7	49
Projected number of teachers needed in 1968	114	657	1291	1998	1715	1313	2173	343	716	10320

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky

TABLE 3

**EMPLOYMENT AND DEMAND FOR TEACHERS IN AGRICULTURAL EDUCATION  
AT THE HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA**

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	5	5	7	49
<b>Regular Vocational Agriculture Program</b>										
States reporting programs	5	4	5	6	5	7	5	5	7	49
Teachers currently employed	97	563	1190	1875	1582	1240	2211	310	603	9671
States projecting demand	5	4	4	5	5	7	5	5	5	43
Demand mean score**	2.0	2.0	1.5	1.6	2.2	2.0	1.4	1.6	2.0	1.8
<b>Horticulture</b>										
States reporting programs	0	4	5	1	2	1	1	1	1	16
Teachers currently employed	-	20	8	10	19	1	2	1	5	66
States projecting demand	4	2	5	5	5	2	4	5	3	35
Demand mean score	2.5	2.5	2.4	2.4	2.6	2.5	2.0	1.8	2.7	2.3
<b>Forestry</b>										
States reporting programs	0	0	1	0	1	0	0	1	0	3
Teachers currently employed	-	-	1	-	1	-	-	1	-	3
States projecting demand	4	1	3	4	3	1	2	5	3	26
Demand mean score	2.0	1.0	2.0	2.0	1.3	2.0	1.0	0.8	2.0	1.6
<b>Agricultural Mechanics</b>										
States reporting programs	0	4	3	0	3	1	0	1	2	14
Teachers currently employed	-	23	6	-	9	2	-	1	21	62
States projecting demand	3	2	4	5	5	3	4	5	4	35
Demand mean score	2.7	1.0	2.0	2.2	2.2	2.3	1.8	1.4	2.3	2.0
<b>Agribusiness (including distribution, supply, sales, and service)</b>										
States reporting programs	0	0	2	0	1	0	0	1	0	4
Teachers currently employed	-	-	2	-	13	-	-	1	-	16
States projecting demand	1	0	2	2	4	1	1	1	0	12
Demand mean score	2.0	-	1.5	3.0	2.8	2.0	2.0	3.0	-	2.4

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 4

**THE CURRENT EMPLOYMENT AND PROJECTED DEMAND FOR FULL-TIME  
POST HIGH SCHOOL TEACHERS IN AGRICULTURAL EDUCATION**

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	7	5	5	7	49
States reporting programs	2	2	2	3	4	4	1	3	4	25
Teachers employed in 1965	9	114	8	30	46	58	1	11	74	351
States reporting	1	1	1	3	4	3	0	1	3	17
Number of new and replacement teachers in 1965	1	3	1	9	19	6	-	2	12	53
States reporting	0	0	1	1	1	1	0	0	0	4
Number of unfilled teaching positions in 1965	-	-	1	2	1	3	-	-	-	7
States reporting	4	1	3	6	5	4	2	4	4	33
Projected number of teachers needed in 1968	18	128	17	162	155	105	9	40	114	748

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky

TABLE 5

**EMPLOYMENT AND DEMAND FOR TEACHERS IN AGRICULTURAL EDUCATION  
AT THE POST HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA**

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	5	5	7	49
<b>Regular Vocational Agriculture Program</b>										
States reporting programs	1	2	2	2	2	3	0	2	4	18
Teachers employed	1	125	28	8	17	55	-	3	64	301
States projecting demand	2	2	3	5	3	5	2	5	4	31
Demand mean score**	2.5	2.0	2.3	2.0	2.0	2.8	1.0	1.8	2.5	2.2
<b>Horticulture</b>										
States reporting programs	1	1	0	0	2	0	1	0	1	6
Teachers employed	2	3	-	-	5	-	1	-	2	13
States projecting demand	2	2	3	6	5	2	3	5	3	31
Demand mean score	2.5	2.0	1.7	2.3	2.4	3.0	1.7	2.2	2.3	2.2
<b>Forestry</b>										
States reporting programs	1	0	1	1	0	0	0	1	0	4
Teachers employed	2	-	1	2	-	-	-	2	-	7
States projecting demand	3	0	2	5	3	1	3	5	3	25
Demand mean score	1.7	-	2.0	2.2	1.7	2.0	1.3	1.0	2.0	1.7
<b>Agricultural Mechanics</b>										
States reporting programs	1	2	0	1	4	1	0	2	2	13
Teachers employed	1	4	-	14	10	2	-	4	13	48
States projecting demand	2	2	3	6	5	3	3	5	4	33
Demand mean score	1.5	2.0	1.7	2.3	2.4	3.0	1.3	2.2	2.5	2.2
<b>Farm Management</b>										
States reporting programs	2	0	2	1	2	1	0	0	1	9
Teachers currently employed	1	-	8	5	22	1	-	-	3	40
States projecting demand	2	0	3	5	5	2	2	5	3	27
Demand mean score	2.0	-	2.3	2.2	2.4	2.5	1.5	1.4	2.3	2.1

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.



TABLE 5 (continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	7	49
<b>Agribusiness (including supply and service, sales and service, feed, fertilizer, and processing)</b>										
States reporting programs	0	0	0	0	2	1	0	1	0	4
Teachers currently employed	-	-	-	-	7	1	-	3	-	11
States projecting demand	0	0	0	2	3	1	1	1	0	8
Demand mean score	-	-	-	2.0	2.3	2.0	2.0	2.0	-	2.1
<b>Animal and Poultry Production</b>										
States reporting programs	1	0	0	1	0	0	0	0	0	2
Teachers currently employed	1	-	-	4	-	-	-	-	-	5
States projecting demand	2	0	0	1	0	0	0	1	0	4
Demand mean score	1.0	-	-	3.0	-	-	-	1.0	-	1.5

TABLE 6

**AREAS OF AGRICULTURAL EDUCATION WHICH WILL HAVE THE  
GREATEST NEED FOR NEW INSTRUCTORS IN THE FUTURE**

AREA	No. States Sub-Totals	No. States Total (N = 46)
<b>Agricultural Mechanization</b>		35
Agricultural Mechanics	34	
Agricultural Machinery and Equipment	1	
<b>Horticulture and Ornamental Horticulture</b>		35
Horticulture and Ornamental Horticulture	33	
Fruit and Vegetable Production	2	
<b>Off-Farm Agricultural Occupations</b>		31
Agricultural Resources	11	
Conservation and Forestry (8)		
Recreation (3)		
Agri-Business Occupations	7	
Sales and Service Occupations	7	
Agricultural Supplies	4	
Food Handling and Distribution	1	
Agricultural Processing	1	
<b>Production Agriculture</b>		13
Farm Management	11	
Plant and Animal Science	2	
<b>Regular High School Vocational Agriculture</b>		8
<b>Technical Agriculture Education</b>		4
Area Technical Schools	2	
Post High School	1	
Crop and Soil Technology	1	
<b>General Agriculture</b>		3
<b>Adult and Young Farmer Classes</b>		2
<b>Total*</b>		131

\*Each state indicated two or three areas of greatest need, thereby giving a large total figure.

TABLE 7

**THE DEMAND FOR FULL-TIME HIGH SCHOOL TEACHERS IN  
BUSINESS AND OFFICE OCCUPATIONS EDUCATION**

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	4	7	5	5	7	48
States reporting programs Teachers employed in 1965	3 509	4 9040	4 2431	5 2585	2 1377	7 1833	5 1546	5 762	7 5077	42 25160
States reporting Number of new and replacement teachers in 1965	1 25	4 848	2 236	5 412	2 943	4 63	5 99	5 154	6 503	34 3283
States reporting Number of unfilled teaching positions in 1965	0 -	2 33	1 10	2 15	0 -	2 33	1 3	0 -	1 9	9 103
States reporting Projected number of teachers needed in 1968	3 1118	4 10294	4 2927	6 3710	3 2562	7 2218	5 2193	5 924	7 6250	44 32196

States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region V-Ohio

TABLE 8

**EMPLOYMENT AND DEMAND FOR TEACHERS IN BUSINESS AND OFFICE OCCUPATIONS  
AT THE HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA**

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	4	7	5	5	7	48
<b>Accounting, Bookkeeping, Record Keeping</b>										
States reporting programs	0	4	2	4	1	2	3	3	2	21
Teachers currently employed	-	1790	110	451	60	310	104	116	36	2977
States projecting demand	1	4	2	5	3	6	5	3	5	34
Demand mean score**	3.0	1.25	2.0	2.2	2.33	1.66	2.2	2.66	1.8	2.0
<b>Typewriting</b>										
States reporting programs	0	4	2	4	1	2	2	3	2	20
Teachers currently employed	-	2485	278	971	155	523	254	213	97	4976
States projecting demand	1	4	2	5	3	6	5	3	5	34
Demand mean score	3.0	1.25	2.0	2.0	2.33	1.66	2.0	2.33	2.0	1.94
<b>Shorthand - Transcription</b>										
States reporting programs	0	4	2	4	1	3	3	4	3	24
Teachers currently employed	-	1447	143	495	133	133	143	105	48	2647
States projecting demand	1	5	2	5	3	6	5	3	5	35
Demand mean score	3.0	1.4	2.5	1.8	2.33	2.33	2.2	2.33	1.8	2.06
<b>Office - Clerical Practice</b>										
States reporting programs	0	4	2	4	1	3	3	4	2	23
Teachers currently employed	-	833	60	251	227	113	66	90	32	1672
States projecting demand	1	4	2	5	3	6	4	3	5	33
Demand mean score	3.0	1.5	3.0	2.6	2.66	2.66	2.25	2.33	2.2	2.39

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region V-Ohio

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 8 (continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	4	7	5	5	7	48
<b>General Business Subjects</b>										
States reporting programs	0	4	2	4	0	2	2	2	2	18
Teachers currently employed	-	3100	537	466	-	314	115	47	42	4621
States projecting demand	14	4	3	0	2	6	5	3	5	29
Demand mean score	2.0	1.5	2.33	-	1.5	2.33	2.0	1.66	2.0	1.86
<b>Data Processing</b>										
States reporting programs	0	4	2	0	1	1	1	0	1	10
Teachers currently employed	-	33	10	-	4	2	1	-	3	53
States projecting demand	2	4	3	5	3	5	4	3	6	35
Demand mean score	2.0	3.0	2.66	3.0	2.33	1.8	1.5	2.33	1.5	2.2
<b>Not Classified</b>										
States reporting programs	3	0	1	1	1	4	1	1	4	16
Teachers currently employed	509	-	1280	311	600	1423	814	275	4892	10104
<b>Cooperative Office Education</b>										
States reporting programs	0	0	0	0	2	0	1	2	1	6
Teachers currently employed	-	-	-	-	222	-	57	27	7	313
States projecting demand	0	0	0	0	2	0	2	1	0	5
Demand mean score	-	-	-	-	2.5	-	2.5	3.0	-	2.6
<b>Office Education</b>										
States reporting programs	0	1	0	0	1	0	0	0	2	4
Teachers currently employed	-	5	-	-	13	-	-	-	38	56
States projecting demand	0	0	0	0	0	1	0	0	0	1
Demand mean score	-	-	-	-	-	1.0	-	-	-	1.0
<b>Business Economics</b>										
States reporting programs	0	1	1	1	0	0	0	0	0	3
Teachers currently employed	-	1	18	61	-	-	-	-	-	80
States projecting demand	0	2	1	1	0	0	0	0	0	4
Demand mean score	-	1.0	1.0	2.0	-	-	-	-	-	1.25

TABLE 9

THE DEMAND FOR FULL-TIME POST HIGH SCHOOL TEACHERS IN  
BUSINESS AND OFFICE OCCUPATIONS EDUCATION

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	4	7	5	5	7	48
States reporting programs	2	3	3	5	2	6	3	5	5	34
Teachers employed in 1965	25	243	48	210	349	115	35	58	966	2049
States reporting	0	1	2	2	2	5	2	4	2	20
Number of new and replacement teachers in 1965	-	12	16	50	200	42	9	14	130	473
States reporting	0	0	1	1	1	0	0	0	1	4
Number of unfilled teaching positions in 1965	-	-	6	15	30	-	-	-	5	56
States reporting	1	3	3	6	3	7	4	5	5	37
Projected number of teachers needed in 1968	31	127	60	333	307	224	183	108	1434	2807

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region V-Ohio

TABLE 10

**EMPLOYMENT AND DEMAND FOR TEACHERS IN BUSINESS AND OFFICE OCCUPATIONS  
AT THE POST HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA**

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	4	7	5	5	7	48
<b>Accounting, Bookkeeping, Record-Keeping</b>										
States reporting programs	0	2	1	3	1	2	3	3	0	15
Teachers currently employed	-	9	5	37	18	24	8	15	-	116
States projecting demand	1	3	2	4	3	6	4	3	4	30
Demand mean score**	2.0	1.66	2.0	2.25	1.66	2.0	2.75	2.33	1.75	2.07
<b>Typewriting</b>										
States reporting programs	0	3	0	3	1	2	3	3	0	15
Teachers currently employed	-	58	-	48	22	30	12	16	-	186
States projecting demand	1	3	2	4	2	6	4	3	4	29
Demand mean score	2.0	1.66	2.0	2.0	2.0	1.66	2.0	2.33	1.5	1.89
<b>Shorthand - Transcription</b>										
States reporting programs	0	3	0	3	1	3	3	3	0	16
Teachers currently employed	-	67	-	37	58	23	17	14	-	210
States projecting demand	1	3	2	4	3	6	4	3	4	30
Demand mean score	2.0	1.66	2.0	1.75	2.0	1.83	2.75	2.33	1.75	2.0
<b>Office - Clerical Practice</b>										
States reporting programs	0	2	0	3	1	2	2	4	0	14
Teachers currently employed	-	64	-	32	15	18	6	9	-	144
States projecting demand	1	3	2	4	3	6	3	3	4	29
Demand mean score	2.0	1.66	2.0	2.5	2.0	1.83	3.0	2.33	2.25	2.17
<b>General Business Subjects</b>										
States reporting programs	0	2	1	4	0	1	2	2	0	12
Teachers currently employed	-	31	19	52	-	8	7	10	-	127
States projecting demand	1	3	2	0	2	6	4	3	4	25
Demand mean score	2.0	1.66	2.0	-	1.0	1.5	2.0	1.66	1.75	1.68
<b>Data Processing</b>										
States reporting programs	1	2	2	2	2	1	0	1	2	13
Teachers currently employed	3	6	5	13	35	1	-	3	25	91
States projecting demand	3	3	3	4	4	5	3	3	5	33
Demand mean score	2.33	2.66	2.0	3.0	3.0	1.8	2.0	2.66	2.2	2.39
<b>Not Classified</b>										
States reporting programs	1	0	1	1	1	4	0	1	4	13
Teachers currently employed	22	-	23	57	210	82	-	6	931	1331
<b>Commercial Occupations</b>										
States reporting programs	0	1	0	0	1	0	0	0	1	3
Teachers currently employed	-	8	-	-	6	-	-	-	7	21
States projecting demand	0	0	0	0	0	0	0	0	0	0
Demand mean score	-	-	-	-	-	-	-	-	-	-
<b>Cooperative Office Education</b>										
States reporting programs	0	0	0	0	2	0	0	0	0	2
Teachers currently employed	-	-	-	-	13	-	-	-	-	13
States projecting demand	0	0	0	0	2	0	1	0	0	3
Demand mean score	-	-	-	-	2.5	-	2.0	-	-	2.33

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region V-Ohio

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 10

**EMPLOYMENT AND DEMAND FOR TEACHERS IN BUSINESS AND OFFICE OCCUPATIONS  
AT THE POST HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA**

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	4	7	5	5	7	48
<b>Accounting, Bookkeeping, Record-Keeping</b>										
States reporting programs	0	2	1	3	1	2	3	3	0	15
Teachers currently employed	-	9	5	37	18	24	8	15	-	116
States projecting demand	1	3	2	4	3	6	4	3	4	30
Demand mean score**	2.0	1.66	2.0	2.25	1.66	2.0	2.75	2.33	1.75	2.07
<b>Typewriting</b>										
States reporting programs	0	3	0	3	1	2	3	3	0	15
Teachers currently employed	-	58	-	48	22	30	12	16	-	186
States projecting demand	1	3	2	4	2	6	4	3	4	29
Demand mean score	2.0	1.66	2.0	2.0	2.0	1.66	2.0	2.33	1.5	1.89
<b>Shorthand - Transcription</b>										
States reporting programs	0	3	0	3	1	3	3	3	0	16
Teachers currently employed	-	67	-	37	58	23	11	14	-	210
States projecting demand	1	3	2	4	3	6	4	3	4	30
Demand mean score	2.0	1.66	2.0	1.75	2.0	1.83	2.75	2.33	1.75	2.0
<b>Office - Clerical Practice</b>										
States reporting programs	0	2	0	3	1	2	2	4	0	14
Teachers currently employed	-	64	-	32	15	18	6	9	-	144
States projecting demand	1	3	2	4	3	6	3	3	4	29
Demand mean score	2.0	1.66	2.0	2.5	2.0	1.83	3.0	2.33	2.25	2.17
<b>General Business Subjects</b>										
States reporting programs	0	2	1	4	0	1	2	2	0	12
Teachers currently employed	-	31	19	52	-	8	7	10	-	127
States projecting demand	1	3	2	0	2	6	4	3	4	25
Demand mean score	2.0	1.66	2.0	-	1.0	1.5	2.0	1.66	1.75	1.68
<b>Data Processing</b>										
States reporting programs	1	2	2	2	2	1	0	1	2	13
Teachers currently employed	3	6	5	13	35	1	-	3	25	91
States projecting demand	3	3	3	4	4	5	3	3	5	33
Demand mean score	2.33	2.66	2.0	3.0	3.0	1.8	2.0	2.66	2.2	2.39
<b>Not Classified</b>										
States reporting programs	1	0	1	1	1	4	0	1	4	13
Teachers currently employed	22	-	23	57	210	82	-	6	931	1331
<b>Commercial Occupations</b>										
States reporting programs	0	1	0	0	1	0	0	0	1	3
Teachers currently employed	-	8	-	-	6	-	-	-	7	21
States projecting demand	0	0	0	0	0	0	0	0	0	0
Demand mean score	-	-	-	-	-	-	-	-	-	-
<b>Cooperative Office Education</b>										
States reporting programs	0	0	0	0	2	0	0	0	0	2
Teachers currently employed	-	-	-	-	13	-	-	-	-	13
States projecting demand	0	0	0	0	2	0	1	0	0	3
Demand mean score	-	-	-	-	2.5	-	2.0	-	-	2.33

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region V-Ohio

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 11

PROJECTED AREAS OF BUSINESS AND OFFICE OCCUPATIONS EDUCATION  
WHICH WILL HAVE THE GREATEST NEED FOR NEW INSTRUCTORS IN THE FUTURE

AREA	No. States Total (N=46)
Office - Clerical Practice	28
Data Processing	27
Stenographic - Secretarial	21
Business and Economics	12
Cooperative Office Education	12
Typewriting	9
Bookkeeping	7
Accounting	2
Adult	1
All Others	1
<b>Total*</b>	<b>120</b>

\*Each state indicated two or three areas of greatest need, thereby giving the large total figure.

TABLE 12

THE DEMAND FOR FULL-TIME HIGH SCHOOL TEACHERS  
IN DISTRIBUTIVE EDUCATION

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	3	4	5	6	5	7	5	5	7	49
States reporting programs	5	4	5	6	4	7	5	5	7	48
Teachers employed in 1965	49	625	416	258	554	200	371	102	243	2818
States reporting	3	4	4	6	4	7	5	5	6	44
Number of new and replacement teachers in 1965	17	55	104	115	221	50	87	52	94	795
States reporting	0	0	3	4	3	3	2	1	0	16
Number of unfilled teaching positions in 1965	-	-	5	10	19	9	6	1	-	50
States reporting	5	4	5	6	4	7	5	5	7	48
Projected number of teachers needed in 1968	93	872	617	544	665	274	584	162	394	4205

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky

TABLE 13

EMPLOYMENT AND DEMAND FOR TEACHERS IN DISTRIBUTIVE EDUCATION  
AT THE HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	5	5	7	49
States reporting programs	1	1	1	2	2	1	1	1	3	13
Teachers currently employed	5	415	9	86	197	60	39	10	115	936
States projecting demand	1	2	1	5	3	3	2	1	3	21
and mean score**	3.0	2.5	2.0	2.4	2.66	2.0	2.0	2.0	3.0	2.42
State										
States reporting programs	0	0	0	0	1	0	0	0	0	1
Teachers currently employed	-	-	-	-	1	-	-	-	-	1
States projecting demand	0	1	0	3	0	2	0	0	1	7
and mean score	-	3.0	-	2.66	-	1.0	-	-	1.0	2.0
and Services										
States reporting programs	1	1	0	0	0	1	0	1	1	5
Teachers currently employed	3	55	-	-	-	12	-	8	2	80
States projecting demand	1	1	0	4	1	4	1	1	1	14
and mean score	3.0	3.0	-	2.75	3.0	2.0	1.0	2.0	2.0	2.35
Distributive Education										
States reporting programs	3	3	3	4	5	5	4	4	4	35
Teachers currently employed	41	155	231	172	354	128	330	60	126	1597
States projecting demand	2	3	2	0	0	2	0	1	1	11
and mean score	2.5	3.0	2.5	-	-	3.0	-	3.0	3.0	2.81
Alternative and Preparatory										
States reporting programs	0	0	2	1	1	0	0	1	0	5
Teachers currently employed	-	-	176	11	3	-	-	5	-	195
States projecting demand	0	0	2	1	2	0	4	3	1	13
and mean score	-	-	2.5	2.0	2.5	-	2.5	2.33	2.0	2.38

States not reporting were: Region I-Massachusetts; Region III-Kentucky  
and mean score is a calculated regional average of the projected trend in demand for teachers over the next one-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 14

THE DEMAND FOR FULL-TIME POST HIGH SCHOOL TEACHERS  
IN DISTRIBUTIVE EDUCATION

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	7	5	5	7	49
States reporting programs	1	3	2	5	5	6	4	4	4	34
Teachers employed in 1965	1	96	8	25	77	22	9	7	76	321
States reporting	0	0	1	5	4	5	3	3	4	25
of new and replacement	-	-	2	12	27	11	4	5	23	84
Teachers in 1965										
States reporting	0	0	1	3	2	0	1	1	0	8
of unfilled teaching	-	-	1	6	18	-	2	1	-	28
positions in 1965										
States reporting	3	3	4	6	5	7	5	5	4	42
estimated number of teachers	9	29	19	93	145	59	35	25	143	557
employed in 1968										

States not reporting were: Region I-Massachusetts; Region III-Kentucky

TABLE 15

EMPLOYMENT AND DEMAND FOR TEACHERS IN DISTRIBUTIVE EDUCATION  
AT THE POST HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	5	5	7	49
<b>Detail</b>										
States reporting programs	0	1	0	4	3	1	1	1	2	13
Teachers currently employed	-	16	-	16	14	3	2	1	55	107
States projecting demand	0	1	1	4	4	5	1	1	3	20
Demand mean score**	-	3.0	2.0	2.5	2.5	2.2	3.0	2.0	2.33	2.4
<b>Wholesale</b>										
States reporting programs	0	0	0	0	3	0	0	0	0	3
Teachers currently employed	-	-	-	-	3	-	-	-	-	3
States projecting demand	0	1	0	4	4	4	0	1	2	16
Demand mean score	-	3.0	-	2.25	2.25	2.25	-	2.0	3.0	2.35
<b>Sales and Service</b>										
States reporting programs	0	1	0	2	1	1	1	0	1	7
Teachers currently employed	-	45	-	9	2	3	1	-	1	61
States projecting demand	1	0	0	5	2	5	2	1	3	19
Demand mean score	2.0	-	-	2.4	3.0	2.2	2.0	2.0	2.66	2.36
<b>Distributive Education</b>										
States reporting programs	1	3	2	3	5	5	4	2	2	27
Teachers currently employed	1	31	8	5	57	16	6	4	20	148
States projecting demand	2	3	1	2	3	2	1	2	0	16
Demand mean score	1.0	3.0	2.0	2.5	2.0	3.0	3.0	2.5	-	2.37
<b>Cooperative and Preparatory</b>										
States reporting programs	0	0	0	0	0	0	0	0	0	0
Teachers currently employed	-	-	-	-	-	-	-	-	-	-
States projecting demand	0	0	1	1	2	0	3	3	0	10
Demand mean score	-	-	2.0	2.0	2.5	-	2.0	2.0	-	2.1

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky  
 \*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 16

PROJECTED AREAS OF DISTRIBUTIVE EDUCATION WHICH WILL  
HAVE THE GREATEST NEED FOR NEW INSTRUCTORS IN THE FUTURE

AREA	No. States Total (N=41)
By School or Age Level	
Secondary	37
Cooperative - 23	
Preparatory - 11	
Project - 3	
Post-Secondary	17
Cooperative - 3	
Project - 1	
Mid-Management - 13	
Adult Education	15
Part-time Evening Classes for Employed Adults - 15	



TABLE 16 (continued)

AREA	No. States Total (N=41)
<b>I By Other Areas or Programs (no level indicated)</b>	
Sales and Service (General)	13
Retail Program	10
Wholesale Program	3
Youth With Special Needs	1
Specialized Programs	13
Food Service - 3	
Technical Sales - 1	
Service Station Management - 2	
Finance - 1	
Industrial Sales - 1	
Real Estate - 1	
Hotel and Motel - 1	
Foreign Trade - 1	
Insurance Underwriting - 1	
Special Areas - 1	
<b>Total*</b>	<b>109</b>

Each state indicated two or three areas of greatest need, thereby giving the large total figure.

TABLE 17

THE DEMAND FOR FULL-TIME TEACHERS IN HEALTH OCCUPATIONS

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	7	4	5	5	46
States reporting programs teachers employed in 1965	5 54	4 658	5 193	6 270	5 406	7 241	4 109	5 61	5 117	46 2109
States reporting number of new and replacement teachers in 1965	5 16	4 67	4 51	6 58	5 64	6 36	4 42	4 10	3 20	41 364
States reporting number of unfilled teaching positions in 1965	1 1	3 16	2 3	4 10	1 6	3 13	1 8	1 2	0 -	16 59
States reporting projected number of teachers needed in 1968	5 71	4 835	5 220	6 380	5 684	6 349	4 109	5 94	5 215	45 2957

States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VII-Arkansas; Region IX-California, Hawaii

**EMPLOYMENT AND DEMAND FOR TEACHERS IN  
HEALTH OCCUPATIONS BY INSTRUCTIONAL AREA**

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	4	5	4	46
<b>Dental Assistant</b>										
States reporting programs	1	3	2	3	4	3	3	2	4	25
Teachers currently employed	2	10	8	9	19	4	4	3	122	181
States projecting demand	4	3	3	4	5	5	3	3	4	34
Demand mean score**	2.25	2.33	2.0	2.75	2.2	2.2	2.0	2.33	2.0	2.23
<b>Dental Laboratory Assistant</b>										
States reporting programs	1	1	2	1	0	0	0	0	1	6
Teachers currently employed	1	2	4	2	-	-	-	-	15	24
States projecting demand	1	2	3	2	3	3	2	1	3	20
Demand mean score	2.0	1.5	1.66	2.0	2.0	1.33	1.5	3.0	2.0	1.7
<b>Medical Assistant</b>										
States reporting programs	0	4	1	2	2	2	1	0	3	15
Teachers currently employed	-	14	2	3	12	3	1	-	64	99
States projecting demand	0	5	2	4	4	3	1	2	4	25
Demand mean score	-	2.4	1.5	2.25	2.0	2.0	3.0	3.0	2.0	2.2
<b>Medical Laboratory Assistant</b>										
States reporting programs	0	1	3	3	1	3	0	0	1	12
Teachers currently employed	-	1	6	4	2	5	-	-	1	19
States projecting demand	2	2	4	3	4	4	3	1	2	25
Demand mean score	2.5	1.5	1.75	2.66	2.0	2.0	2.0	3.0	2.0	2.08
<b>Medical Records Technician</b>										
States reporting programs	0	0	0	1	0	0	0	0	1	2
Teachers currently employed	-	-	-	1	-	-	-	-	1	2
States projecting demand	0	0	0	1	0	1	0	0	1	3
Demand mean score	-	-	-	2.0	-	3.0	-	-	2.0	2.33
<b>Nurses Aide</b>										
States reporting programs	1	4	1	3	3	3	1	1	1	18
Teachers currently employed	3	27	1	8	6	31	7	1	36	120
States projecting demand	2	3	3	2	4	3	2	1	3	23
Demand mean score	2.5	2.0	1.33	2.5	2.0	1.66	2.5	3.0	2.33	2.08
<b>Operating Room Assistant</b>										
States reporting programs	0	0	2	4	1	0	1	0	2	10
Teachers currently employed	-	-	2	7	1	-	1	-	32	43
States projecting demand	0	2	2	2	3	3	2	3	2	19
Demand mean score	-	2.0	1.5	3.0	2.33	2.0	2.5	2.0	1.5	2.1
<b>Practical Nurse - Vocational Nurse</b>										
States reporting programs	5	4	5	6	4	7	4	5	6	46
Teachers currently employed	49	242	160	246	332	236	188	58	304	1815
States projecting demand	4	4	5	5	5	6	4	5	4	42
Demand mean score	2.5	3.0	2.4	2.8	2.8	2.33	2.5	1.6	1.75	2.4
<b>Professional Nurse</b>										
States reporting programs	0	0	3	0	0	0	0	0	3	6
Teachers currently employed	-	-	5	-	-	-	-	-	794	799
States projecting demand	0	0	3	0	0	0	0	1	3	7
Demand mean score	-	-	2.33	-	-	-	-	3.0	2.66	2.57
<b>X-Ray Technical</b>										
States reporting programs	0	0	1	0	0	0	0	0	2	3
Teachers currently employed	-	-	2	-	-	-	-	-	14	16
States projecting demand	0	0	1	0	0	0	0	1	2	4
Demand mean score	-	-	2.0	-	-	-	-	3.0	2.0	2.25

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VII-Arkansas; Region IX-California, Hawaii

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 18 (continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	4	5	5	46
Dispensing Optician Assistant										
States reporting programs	0	0	0	1	0	0	0	0	0	1
Teachers currently employed	-	-	-	1	-	-	-	-	-	1
States projecting demand	0	2	1	2	1	2	1	0	2	11
Demand mean score	-	1.0	1.0	1.0	2.0	1.5	1.0	-	1.5	1.27
Medical Records Technician										
States reporting programs	0	0	0	1	0	0	0	0	1	2
Teachers currently employed	-	-	-	1	-	-	-	-	1	2
States projecting demand	0	0	0	1	0	1	0	0	1	3
Demand mean score	-	-	-	2.0	-	3.0	-	-	2.0	2.33
Geriatric Nursing Assistant										
States reporting programs	0	0	0	1	0	0	0	0	0	1
Teachers currently employed	-	-	-	1	-	-	-	-	-	1
States projecting demand	0	0	0	1	2	0	0	0	0	3
Demand mean score	-	-	-	3.0	2.5	-	-	-	-	2.66
Physical Therapy Assistant										
States reporting programs	0	0	0	0	0	1	0	0	0	1
Teachers currently employed	-	-	-	-	-	1	-	-	-	1
States projecting demand	2	2	1	2	3	3	2	1	3	19
Demand mean score	3.0	1.5	2.0	1.5	2.33	2.0	1.5	2.0	2.33	2.05
Hospital Ward Clerk										
States reporting programs	0	0	1	0	0	0	0	0	0	1
Teachers currently employed	-	-	1	-	-	-	-	-	-	1
States projecting demand	0	0	1	0	0	0	0	2	0	3
Demand mean score	-	-	2.0	-	-	-	-	2.5	-	2.33

TABLE 19

PROJECTED AREAS OF HEALTH OCCUPATIONS WHICH WILL HAVE  
THE GREATEST NEED FOR NEW INSTRUCTORS IN THE FUTURE

AREA	No. States Total (N=43)
Practical Nursing	38
Dental Assistants	23
Medical Laboratory Assistant	11
Nurses Aide	10
Medical Assistant	10
Physical Therapist Assistant	7
Operating Room Assistant	6
Registered Nursing - Associate Degree (Technical Level)	6
Dental Laboratory Assistant	4
Home Health Aide	3
Medical Records Assistant	2
Basic programs	1
Specialist Aides	1
Medical Stenographer	1
X-Ray Technician	1
Optician	1
Food Service Worker	1
Cooperative Health Occupations	1
<b>Total*</b>	<b>127</b>

\*Each state indicated two or three areas of greatest need, thereby giving the large total figure.

TABLE 20

THE DEMAND FOR FULL-TIME HIGH SCHOOL TEACHERS IN  
HOME ECONOMICS

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	6	5	5	6	47
States reporting programs Teachers employed in 1965	5 600	4 5370	5 2408	6 3091	5 2691	6 2038	5 3220	5 617	6 821	47 20856
States reporting Number of new and replacement teachers in 1965	5 96	4 471	5 293	6 501	5 512	4 195	5 723	5 204	6 182	45 3177
States reporting Number of unfilled teaching positions in 1965	0 -	1 10	3 14	2 8	2 11	1 2	1 4	1 4	3 3	14 56
States reporting Projected number of teachers needed in 1968	5 688	4 6335	5 2582	6 3559	5 3167	6 2184	5 3562	5 667	6 971	47 23715

States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VI-South Dakota; Region IX-California.

TABLE 21

EMPLOYMENT AND DEMAND FOR TEACHERS IN HOME ECONOMICS  
AT THE HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	6	5	5	6	47
Regular										
States reporting programs	5	4	5	5	5	6	5	5	6	46
Teachers currently employed	355	1819	2348	2745	2686	1546	3213	418	783	15913
States projecting demand	5	4	3	4	5	6	4	5	6	42
Demand mean score**	2.2	2.5	1.33	1.75	2.6	1.83	2.25	1.8	2.0	2.05
Food Services										
States reporting programs	4	3	3	2	3	8	2	2	2	29
Teachers currently employed	14	28	13	3	47	19	3	3	3	133
States projecting demand	3	3	2	3	5	7	4	3	3	33
Demand mean score	3.0	3.0	2.0	2.33	2.8	2.57	2.5	2.0	2.0	2.52
Clothing Services										
States reporting programs	0	1	2	1	3	5	2	0	0	14
Teachers currently employed	-	16	6	1	9	9	4	-	-	45
States projecting demand	0	1	1	3	3	5	3	1	0	17
Demand mean score	-	1.0	2.0	2.0	2.33	2.4	2.0	2.0	-	2.12
Child Care and Development										
States reporting programs	0	4	2	1	2	1	2	1	1	14
Teachers currently employed	-	7	3	1	7	7	4	2	2	35
States projecting demand	0	3	2	4	2	2	2	2	2	19
Demand mean score	-	3.0	2.0	2.25	3.0	2.5	3.0	2.5	2.0	2.53
Housekeeping Assistant										
States reporting programs	1	0	0	1	1	2	2	0	0	7
Teachers currently employed	2	-	-	1	2	9	3	-	-	17
States projecting demand	1	0	0	2	1	1	1	0	0	6
Demand mean score	2.0	-	-	2.0	2.0	2.0	3.0	-	-	2.16

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VI-South Dakota; Region IX-California

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 21 (continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	6	5	5	6	47
Occupational Preparatory										
States reporting programs	0	0	1	1	2	0	0	1	1	6
Teachers currently employed	-	-	43	25	14	-	-	1	5	88
States projecting demand	0	0	0	0	2	0	1	1	1	5
Demand mean score	-	-	-	-	2.5	-	2.0	2.0	2.0	2.2
Special Needs										
States reporting programs	0	0	0	1	0	2	0	0	0	3
Teachers currently employed	-	-	-	2	-	6	-	-	-	8
States projecting demand	0	0	0	2	0	2	0	0	0	4
Demand mean score	-	-	-	2.0	-	2.5	-	-	-	2.25
Hotel-Motel Managers Aides										
States reporting programs	0	1	0	0	0	1	1	0	0	3
Teachers currently employed	-	2	-	-	-	1	1	-	-	4
States projecting demand	0	1	0	0	0	2	1	1	0	5
Demand mean score	-	2.0	-	-	-	1.5	3.0	2.0	-	2.0

TABLE 22

THE DEMAND FOR FULL-TIME POST HIGH SCHOOL TEACHERS  
IN HOME ECONOMICS

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	6	5	5	6	47
States reporting programs	1	3	0	3	4	3	1	1	3	19
Teachers employed in 1965	10	603	-	60	102	160	4	13	143	1095
States reporting	1	1	1	0	1	1	0	0	1	6
Number of new and replacement teachers in 1965	1	27	2	-	25	2	-	-	4	61
States reporting	0	0	0	0	0	0	0	0	0	0
Number of unfilled teaching positions in 1965	-	-	-	-	-	-	-	-	-	-
States reporting	1	2	1	6	5	4	4	1	3	27
Projected number of teachers needed in 1968	12	872	10	268	188	199	48	18	201	1816

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VI-South Dakota; Region IX-California.

TABLE 23

EMPLOYMENT AND DEMAND FOR TEACHERS IN HOME ECONOMICS  
AT THE POST HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	6	5	5	6	47
<b>Regular Home Economics</b>										
States reporting programs	1	3	0	2	4	3	1	1	3	18
Teachers currently employed	10	1482	0	15	101	163	4	13	143	1931
States projecting demand	2	3	2	3	3	4	3	3	4	27
Demand mean score**	1.0	2.0	1.5	2.33	2.0	1.75	2.33	2.0	2.0	1.92
<b>Food Services</b>										
States reporting programs	0	1	1	1	3	2	0	0	1	9
Teachers currently employed	-	2	2	4	6	2	-	-	1	17
States projecting demand	2	1	1	2	4	3	4	4	4	25
Demand mean score	2.0	2.0	2.0	3.0	2.25	2.66	2.75	2.5	2.0	2.4
<b>Child Care and Development</b>										
States reporting programs	0	1	0	1	1	0	0	1	3	7
Teachers currently employed	-	4	-	3	1	-	-	1	3	12
States projecting demand	1	2	1	3	2	1	2	2	3	17
Demand mean score	3.0	2.5	2.0	3.0	2.0	2.0	3.0	2.0	2.0	2.41
<b>Housekeeping Assistant</b>										
States reporting programs	0	3	0	1	0	1	0	0	0	5
Teachers currently employed	-	8	-	4	-	2	-	-	-	14
States projecting demand	0	0	0	0	0	1	1	0	1	3
Demand mean score	-	-	-	-	-	3.0	3.0	-	2.0	2.67
<b>Visiting Homemaker</b>										
States reporting programs	0	1	0	0	2	0	0	0	1	4
Teachers currently employed	-	2	-	-	3	-	-	-	4	9
States projecting demand	0	0	0	0	1	1	0	0	1	3
Demand mean score	-	-	-	-	3.0	2.0	-	-	3.0	2.67
<b>Housing and Home Furnishing</b>										
States reporting programs	0	0	0	0	0	0	0	0	0	0
Teachers currently employed	-	-	-	-	-	-	-	-	-	-
States projecting demand	0	0	1	1	2	1	1	0	0	6
Demand mean score	-	-	2.0	2.0	2.0	2.0	3.0	-	-	2.17
<b>Clothing Services</b>										
States reporting programs	0	0	0	0	0	0	0	0	0	0
Teachers currently employed	-	-	-	-	-	-	-	-	-	-
States projecting demand	0	0	1	1	4	2	3	0	0	11
Demand mean score	-	-	2.0	3.0	2.0	2.0	2.33	-	-	2.18
<b>Junior College and Technical Programs</b>										
States reporting programs	0	0	0	0	0	0	0	0	0	0
Teachers currently employed	-	-	-	-	-	-	-	-	-	-
States projecting demand	0	0	0	1	1	0	1	0	0	3
Demand mean score	-	-	-	2.0	3.0	-	2.0	-	-	2.33

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VI-South Dakota; Region IX-California.

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 24

**PROJECTED AREAS OF HOME ECONOMICS EDUCATION  
WHICH WILL HAVE THE GREATEST NEED FOR NEW  
INSTRUCTORS IN THE FUTURE**

AREA	No. States Total (N=43)
Food Services	24
Homemaking	21
Child Care and Development	16
Wage Earning Occupations	8
Occupational Preparatory	6
Home Management	6
Adult Education	5
High School	4
Post High School	4
Clothing Services	4
Economics and Management	3
Junior High School	3
Human and Family Development	3
Visiting Homemaking	2
Technical Occupations - Commercial Colleges	3
State Supervisory Staff	1
Dietetic Aides	1
Interior Decorator	1
Home Nursing Aides	1
Motel Aides	1
Special Needs	1
Teacher Education	1
Homemakers Assistants	1
Other Areas	1
<b>Total*</b>	<b>121</b>

\*Each state indicated two or three areas of greatest need, thereby giving the large total figure.

TABLE 25

**THE DEMAND FOR FULL-TIME TEACHERS IN  
TECHNICAL EDUCATION**

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	6	5	5	6	47
States reporting programs	4	3	4	6	5	6	4	5	6	43
Teachers employed in 1965	110	292	164	563	637	333	359	131	728	3317
States reporting	1	2	4	6	5	6	4	4	6	38
Number of new and replacement teachers in 1965	2	12	28	158	106	50	51	19	137	563
States reporting	0	1	1	5	1	2	2	0	2	14
Number of unfilled teaching positions in 1965	-	4	3	26	5	4	7	-	14	63
States reporting	2	3	4	6	5	6	4	5	6	41
Projected number of teachers needed in 1968	65	411	236	793	1032	437	418	180	1059	4633

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VI-Minnesota; Region IX-Hawaii

TABLE 26

**EMPLOYMENT AND DEMAND FOR TEACHERS IN  
TECHNICAL EDUCATION BY INSTRUCTIONAL AREA**

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	6	5	5	6	47
<b>Data Processing and Computer Programming</b>										
States reporting programs	0	2	1	0	2	1	0	0	1	7
Teachers currently employed	-	20	1	-	20	38	-	-	43	121
States projecting demand	0	2	1	0	2	1	0	0	1	7
Demand mean score**	-	2.5	2.0	-	3.0	2.0	-	-	3.0	2.57
<b>Mechanical and Industrial Technology</b>										
States reporting programs	1	1	3	5	3	2	0	1	1	17
Teachers currently employed	13	21	9	26	187	24	-	6	2	288
States projecting demand	1	1	3	5	3	2	0	1	1	17
Demand mean score	2.0	3.0	2.66	2.2	2.33	2.0	-	2.0	1.0	2.23
<b>Mechanical Drafting and Design</b>										
States reporting programs	2	3	3	5	0	2	5	2	3	25
Teachers currently employed	19	63	42	45	-	20	59	11	27	286
States projecting demand	3	3	3	5	0	2	5	2	3	26
Demand mean score	2.66	2.33	1.66	2.4	-	2.5	2.0	1.5	2.0	2.15
<b>Metallurgical</b>										
States reporting programs	0	2	0	0	2	0	0	1	0	5
Teachers currently employed	-	4	-	-	9	-	-	1	-	5
States projecting demand	0	2	0	0	2	0	0	1	0	5
Demand mean score	-	1.0	-	-	2.0	-	-	2.0	-	1.6
<b>Electrical</b>										
States reporting programs	2	2	2	3	2	1	2	1	1	16
Teachers currently employed	19	26	10	17	44	7	4	8	8	143
States projecting demand	3	2	2	3	2	1	1	1	1	16
Demand mean score	2.66	2.0	2.0	2.33	2.5	2.0	1.0	2.0	2.0	2.18
<b>Electronics Engineering Technician</b>										
States reporting programs	3	3	5	5	4	3	5	3	5	36
Teachers currently employed	29	69	81	91	44	64	105	50	52	585
States projecting demand	4	3	5	5	4	3	5	3	4	36
Demand mean score	2.5	2.66	2.6	2.2	2.75	2.33	2.0	2.33	2.25	2.38
<b>Chemical Engineering Technician</b>										
States reporting programs	1	2	3	3	2	1	0	1	0	13
Teachers currently employed	9	10	4	12	7	2	-	2	-	46
States projecting demand	3	2	3	3	2	1	0	1	0	15
Demand mean score	2.0	2.5	1.66	2.33	2.5	2.0	-	1.0	-	2.06
<b>Data Processing</b>										
States reporting programs	2	1	4	5	1	2	2	2	3	22
Teachers currently employed	10	2	18	29	4	33	87	12	6	201
States projecting demand	3	1	4	5	1	2	2	2	3	23
Demand mean score	3.0	2.0	2.75	2.4	2.0	2.5	3.0	2.5	3.0	2.65
<b>Mechanical Engineering Technician</b>										
States reporting programs	1	1	1	0	0	0	0	0	1	4
Teachers currently employed	4	1	18	-	-	-	-	-	1	24
States projecting demand	2	1	1	1	0	0	0	0	1	6
Demand mean score	2.5	1.0	2.0	2.0	-	-	-	-	3.0	2.17

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region VI-Minnesota; Region IX-Hawaii

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.



TABLE 26 (continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	6	5	5	6	47
<b>Civil Engineering Technician</b>										
States reporting programs	1	0	2	3	3	3	3	2	3	20
Teachers currently employed	2	-	7	9	9	11	10	5	17	70
States projecting demand	1	0	2	3	3	4	3	3	2	21
Demand mean score	2.0	-	2.0	2.0	2.33	1.25	2.0	2.0	1.5	1.85
<b>General Related</b>										
States reporting programs	1	1	1	1	0	0	1	0	0	5
Teachers currently employed	8	2	12	10	-	-	27	-	-	59
States projecting demand	1	1	1	1	0	0	1	0	0	5
Demand mean score	3.0	1.0	2.0	1.0	-	-	2.0	-	-	1.8
<b>Air Conditioning, Heating, and Refrigeration</b>										
States reporting programs	0	1	3	0	0	2	2	0	0	8
Teachers currently employed	-	9	18	-	-	3	9	-	-	39
States projecting demand	0	1	3	0	0	2	2	0	0	8
Demand mean score	-	2.0	1.33	-	-	1.5	2.0	-	-	1.62
<b>Instrumentation Technology</b>										
States reporting programs	0	3	1	0	1	0	3	1	1	10
Teachers currently employed	-	5	1	-	1	-	11	2	3	23
States projecting demand	1	3	1	1	1	0	3	1	0	11
Demand mean score	3.0	2.0	2.0	2.0	2.0	-	2.33	2.0	-	2.18
<b>Automotive</b>										
States reporting programs	0	1	0	0	1	0	0	1	0	3
Teachers currently employed	-	1	-	-	5	-	-	5	-	11
States projecting demand	1	1	0	0	1	0	0	1	0	4
Demand mean score	3.0	2.0	-	-	2.0	-	-	2.0	-	2.25
<b>Industrial Chemistry</b>										
States reporting programs	2	1	0	0	0	0	1	0	0	4
Teachers currently employed	3	1	-	-	-	-	7	-	-	11
States projecting demand	1	1	0	0	0	0	0	0	0	3
Demand mean score	2.0	2.0	-	-	-	-	3.0	-	-	2.33
<b>Architectural Drafting and Estimating</b>										
States reporting programs	0	0	0	0	2	1	0	0	0	3
Teachers currently employed	-	-	-	-	7	4	-	-	-	11
States projecting demand	0	0	0	0	0	1	0	0	0	1
Demand mean score	-	-	-	-	-	3.0	-	-	-	3.0
<b>Industrial Technology</b>										
States reporting programs	0	0	0	1	1	0	0	0	1	3
Teachers currently employed	-	-	-	4	3	-	-	-	129	136
States projecting demand	0	0	0	2	1	0	0	0	1	4
Demand mean score	-	-	-	2.0	3.0	-	-	-	3.0	2.5

TABLE 27

PROJECTED AREAS OF TECHNICAL EDUCATION WHICH WILL HAVE  
THE GREATEST NEED FOR NEW INSTRUCTORS IN THE FUTURE

AREA	No. States Total (N=38)
Electronics	25
Data Processing	17
Mechanical Technology	11
Drafting and Design	9
Instrumentation	7
Chemical Technician	7
Trade Education	4
Industrial Education	3
Health Occupations	3
Electrical	5
Technical Education	2
Refrigeration	2
Air Conditioning	2
Business and Office Occupations	2
Civil Engineering	3
Metalurgy	2
Metal Technology	1
Agriculture	1
Restaurant and Hotel Management	1
Architectural Drafting and Estimating	1
Highway Technology	1
Fluid Power	1
Mechanical Design	1
<b>Total*</b>	<b>111</b>

\* Each state reported two or three areas of greatest need, thereby giving the large total figure.

TABLE 28

THE DEMAND FOR FULL-TIME HIGH SCHOOL TEACHERS  
IN TRADE AND INDUSTRIAL EDUCATION

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	7	5	5	6	48
States reporting programs Teachers employed in 1965	4	4	5	6	4	7	4	5	6	45
States reporting Number of new and replacement teachers in 1965	195	3753	1351	1358	1258	509	882	229	1145	10680
States reporting Number of new and replacement teachers in 1965	4	3	5	6	4	5	4	5	5	41
States reporting Number of unfilled teaching positions in 1965	60	950	358	203	277	115	216	117	35	2331
States reporting Number of unfilled teaching positions in 1965	1	0	3	4	3	0	0	0	0	11
States reporting Projected number of teachers needed in 1968	2	-	43	36	20	-	-	-	-	101
States reporting Projected number of teachers needed in 1968	5	4	5	6	4	7	4	5	6	46
States reporting Projected number of teachers needed in 1968	464	4525	2447	1825	1963	601	1215	350	1470	15288

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region IX-Hawaii

TABLE 29

EMPLOYMENT AND DEMAND FOR TEACHERS IN TRADE AND INDUSTRIAL EDUCATION  
AT THE HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	5	5	6	48
<b>Air Conditioning and Refrigeration</b>										
States reporting programs	0	3	4	5	1	3	3	0	1	20
Teachers currently employed	-	47	11	30	1	6	12	-	2	109
States projecting demand	3	4	5	6	3	5	2	1	2	31
Demand mean score**	1.33	1.75	2.2	2.0	2.33	1.8	2.5	1.0	1.5	1.9
<b>Aircraft Maintenance</b>										
States reporting programs	1	2	2	1	3	2	2	1	2	16
Teachers currently employed	2	72	2	18	13	8	3	2	6	126
States projecting demand	3	2	2	5	3	3	2	2	2	24
Demand mean score	.66	.5	1.0	1.2	1.0	.66	2.0	1.0	1.0	.95
<b>Auto (Body and Fender)</b>										
States reporting programs	1	4	4	4	3	5	3	2	3	28
Teachers currently employed	1	53	15	15	36	20	21	1	4	166
States projecting demand	3	4	5	6	4	6	2	1	3	34
Demand mean score	1.66	2.0	2.0	2.16	2.25	1.66	2.0	2.0	1.66	1.94
<b>Auto Mechanic</b>										
States reporting programs	5	4	5	6	3	7	4	3	6	43
Teachers currently employed	61	466	113	174	160	92	195	52	77	1390
States projecting demand	5	4	5	6	4	7	2	4	4	41
Demand mean score	2.2	2.5	2.6	2.66	2.5	1.71	2.0	2.0	1.75	2.22
<b>Baking</b>										
States reporting programs	1	3	2	0	2	0	0	0	1	9
Teachers currently employed	2	21	2	-	3	-	-	-	1	29
States projecting demand	3	3	2	4	3	2	0	1	2	20
Demand mean score	1.0	1.0	1.5	1.25	2.0	1.0	-	1.0	1.5	1.3
<b>Barbering</b>										
States reporting programs	0	1	3	2	0	0	1	0	0	7
Teachers currently employed	-	1	6	2	-	-	1	-	-	10
States projecting demand	3	1	3	5	2	2	1	1	2	20
Demand mean score	.66	1.0	1.66	1.2	1.0	1.0	1.0	1.0	1.0	1.1
<b>Building Trades and Construction Industry</b>										
States reporting programs	1	0	2	0	1	0	1	0	0	5
Teachers currently employed	3	-	45	-	22	-	50	-	-	120
States projecting demand	1	0	0	0	0	0	1	0	0	2
Demand mean score	3.0	-	-	-	-	-	3.0	-	-	3.0
<b>Carpentry</b>										
States reporting programs	5	4	4	6	2	6	3	2	6	38
Teachers currently employed	50	307	84	164	18	38	65	16	24	766
States projecting demand	5	4	5	6	3	6	1	2	5	37
Demand mean score	2.0	1.5	2.4	2.0	1.66	1.66	2.0	2.5	1.6	1.89
<b>Commercial Art</b>										
States reporting programs	1	4	2	2	3	4	2	1	1	20
Teachers currently employed	1	127	4	10	15	16	11	3	1	188
States projecting demand	4	4	4	5	4	4	2	1	2	30
Demand mean score	1.25	1.75	1.75	1.4	2.0	1.25	1.5	2.0	2.0	1.6

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region IX-Hawaii

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.

TABLE 29 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	5	5	6	48
<b>Commercial Food Preparation</b>										
States reporting programs	3	3	4	4	3	2	2	0	0	21
Teachers currently employed	6	25	17	15	23	9	6	-	-	101
States projecting demand	4	3	4	6	4	3	1	1	2	28
Demand mean score	1.5	2.33	2.25	1.66	2.25	1.33	2.0	1.0	2.0	1.85
<b>Cosmetology</b>										
States reporting programs	2	4	4	5	3	3	3	0	2	26
Teachers currently employed	12	263	36	106	58	15	72	-	19	581
States projecting demand	3	4	4	6	4	3	2	1	3	30
Demand mean score	2.0	2.25	2.75	2.16	1.75	1.33	2.0	2.0	1.33	2.0
<b>Diesel Mechanics</b>										
States reporting programs	0	3	2	2	1	1	2	0	2	13
Teachers currently employed	-	16	5	3	2	1	3	-	4	34
States projecting demand	3	3	3	5	2	3	1	1	3	24
Demand mean score	.66	1.33	1.66	1.6	2.5	1.33	2.0	1.0	1.33	1.46
<b>Drafting</b>										
States reporting programs	3	4	5	6	3	6	3	2	3	34
Teachers currently employed	8	111	62	54	95	34	34	22	8	428
States projecting demand	5	4	5	6	4	6	2	1	4	37
Demand mean score	2.2	2.5	2.6	2.33	2.0	1.83	2.0	3.0	1.75	2.19
<b>Dressmaking and Tailoring</b>										
States reporting programs	2	4	4	5	3	3	3	0	1	25
Teachers currently employed	7	164	34	24	23	19	9	-	1	281
States projecting demand	3	4	5	6	4	4	2	1	2	31
Demand mean score	1.33	1.0	1.6	1.66	1.5	1.25	1.5	1.0	2.0	1.45
<b>Electrical Appliance Repair</b>										
States reporting programs	0	0	3	0	2	0	1	0	0	6
Teachers currently employed	-	-	6	-	11	-	3	-	-	20
States projecting demand	0	0	3	1	3	1	0	0	0	8
Demand mean score	-	-	2.0	2.0	2.33	1.0	-	-	-	2.0
<b>Electrical - Industrial</b>										
States reporting programs	1	3	4	6	3	2	1	1	4	25
Teachers currently employed	1	266	29	38	35	12	17	1	6	405
States projecting demand	2	3	4	6	4	3	1	1	4	28
Demand mean score	2.0	2.0	2.5	2.16	2.0	1.66	2.0	1.0	1.5	1.96
<b>Electrical Lineman Training</b>										
States reporting programs	1	1	0	0	1	0	0	0	0	3
Teachers currently employed	2	2	-	-	2	-	-	-	-	6
States projecting demand	1	1	0	3	3	3	0	1	2	14
Demand mean score	2.0	1.0	-	1.33	1.33	1.33	-	1.0	1.5	1.35
<b>Electrical Wiring</b>										
States reporting programs	4	3	2	2	3	2	1	0	0	17
Teachers currently employed	36	39	24	15	17	17	5	-	-	153
States projecting demand	4	3	3	5	3	3	1	1	1	24
Demand mean score	2.0	.66	2.66	1.8	2.0	1.33	2.0	2.0	1.0	1.1
<b>Electronics</b>										
States reporting programs	2	0	1	2	1	1	2	0	2	11
Teachers currently employed	8	-	19	25	13	5	17	-	3	90
States projecting demand	1	0	2	2	1	1	2	0	3	12
Demand mean score	3.0	-	3.0	2.0	3.0	2.0	2.0	-	2.33	2.41

TABLE 29 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
<b>Fireman Training</b>										
States reporting programs	0	1	0	0	0	0	0	0	0	1
Teachers currently employed	-	2	-	-	-	-	-	-	-	2
States projecting demand	2	1	0	2	2	3	0	1	2	13
Demand mean score	1.0	1.0	-	1.0	1.5	1.0	-	1.0	1.5	1.14
<b>Fishery</b>										
States reporting programs	0	1	1	1	0	0	0	0	1	4
Teachers currently employed	-	30	3	1	-	-	-	-	1	35
States projecting demand	2	1	0	2	2	3	0	1	2	13
Demand mean score	1.0	1.0	-	1.0	1.5	1.0	-	1.0	1.5	1.14
<b>Food Service Worker</b>										
States reporting programs	0	4	1	0	2	1	1	0	0	9
Teachers currently employed	-	177	7	-	6	2	1	-	-	193
States projecting demand	4	4	1	4	3	2	0	1	2	21
Demand mean score	1.75	1.75	3.0	1.25	2.66	1.5	-	2.0	2.0	1.85
<b>Foundry</b>										
States reporting programs	0	0	0	1	2	0	0	0	0	3
Teachers currently employed	-	-	-	1	6	-	-	-	-	7
States projecting demand	0	0	0	1	3	0	0	0	0	4
Demand mean score	-	-	-	1.0	1.66	-	-	-	-	1.5
<b>Furniture Industries</b>										
States reporting programs	0	0	3	1	1	0	0	0	0	5
Teachers currently employed	-	-	27	1	2	-	-	-	-	30
States projecting demand	0	0	3	1	0	0	0	0	0	4
Demand mean score	-	-	1.0	1.0	-	-	-	-	-	1.0
<b>Heavy Equipment</b>										
States reporting programs	0	0	0	0	0	1	0	0	0	1
Teachers currently employed	-	-	-	-	-	1	-	-	-	1
States projecting demand	2	0	1	4	3	3	0	1	2	16
Demand mean score	.5	-	2.0	1.25	1.33	1.33	-	1.0	1.5	1.24
<b>Industrial Cooperative Training</b>										
States reporting programs	0	2	3	3	3	0	3	0	2	16
Teachers currently employed	-	85	206	214	136	-	157	-	8	806
States projecting demand	0	2	3	2	2	3	3	0	2	17
Demand mean score	-	2.5	3.0	3.0	3.0	2.0	2.0	-	2.5	2.53
<b>Laundry and Dry Cleaning</b>										
States reporting programs	0	0	1	2	0	0	1	0	0	4
Teachers currently employed	-	-	2	13	-	-	2	-	-	17
States projecting demand	0	0	1	2	1	0	1	0	0	5
Demand mean score	-	-	2.0	1.5	3.0	-	2.0	-	-	2.0
<b>Machine Tool Operator</b>										
States reporting programs	1	2	1	1	2	0	0	0	1	8
Teachers currently employed	2	8	7	2	48	-	-	-	1	68
States projecting demand	2	1	2	4	3	2	1	1	2	18
Demand mean score	1.0	2.0	3.0	2.0	2.66	1.5	2.0	1.0	2.0	2.0
<b>Machine Shop</b>										
States reporting programs	5	4	5	6	3	6	4	3	4	40
Teachers currently employed	61	267	69	72	140	68	21	7	38	743
States projecting demand	5	3	5	6	4	6	2	3	5	39
Demand mean score	1.6	1.66	2.2	2.33	2.0	2.16	2.5	1.66	1.6	1.97

TABLE 29 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
<b>Meat Cutter</b>										
States reporting programs	0	1	0	0	1	0	0	1	0	3
Teachers currently employed	-	13	-	-	1	-	-	1	-	15
States projecting demand	1	1	1	4	3	2	0	1	1	14
Demand mean score	0.0	1.0	2.0	1.0	1.33	1.0	-	2.0	1.0	1.14
<b>Mill and Cabinet Making</b>										
States reporting programs	1	1	4	2	1	3	1	0	0	13
Teachers currently employed	1	4	34	18	9	9	15	-	-	90
States projecting demand	0	1	4	2	2	3	2	0	0	14
Demand mean score	-	2.0	1.75	2.5	2.0	1.33	1.0	-	-	1.71
<b>Painting and Decorating</b>										
States reporting programs	2	3	2	2	3	1	0	0	1	14
Teachers currently employed	4	25	6	3	3	1	-	-	2	44
States projecting demand	3	2	2	5	4	2	0	1	2	21
Demand mean score	1.33	.5	2.0	1.2	1.5	1.0	-	1.0	1.0	1.24
<b>Photography</b>										
States reporting programs	0	2	0	1	0	1	2	0	2	8
Teachers currently employed	-	19	-	1	-	1	8	-	2	8
States projecting demand	2	2	1	5	2	3	2	1	1	19
Demand mean score	.5	1.5	2.0	1.0	1.5	1.0	1.5	1.0	1.0	1.16
<b>Plumbing</b>										
States reporting programs	1	3	4	1	1	1	2	0	2	17
Teachers currently employed	8	32	15	2	1	3	3	-	3	67
States projecting demand	3	3	4	5	2	3	2	1	3	26
Demand mean score	1.0	.66	2.25	1.8	1.0	1.0	2.0	2.0	1.0	1.42
<b>Printing</b>										
States reporting programs	5	4	5	4	3	5	3	2	3	34
Teachers currently employed	18	200	31	15	59	37	33	2	13	408
States projecting demand	5	3	5	5	4	5	2	1	4	34
Demand mean score	2.0	1.33	2.2	2.0	1.75	1.6	1.5	2.9	1.75	1.82
<b>Radio and TV Maintenance</b>										
States reporting programs	3	4	4	4	3	4	2	1	3	28
Teachers currently employed	7	134	19	37	14	16	33	19	5	284
States projecting demand	3	3	3	5	4	6	1	1	4	30
Demand mean score	2.0	2.33	2.66	2.4	2.0	1.66	3.0	3.0	1.75	2.13
<b>Sheet Metal</b>										
States reporting programs	5	4	4	6	2	4	2	0	3	30
Teachers currently employed	11	68	14	25	10	14	3	-	11	156
States projecting demand	5	3	4	6	4	5	2	1	4	34
Demand mean score	1.6	1.0	1.75	2.16	1.5	1.6	2.5	2.0	1.25	1.67
<b>Shoe Repairing</b>										
States reporting programs	0	3	3	4	2	1	1	0	0	14
Teachers currently employed	-	7	8	10	2	6	1	-	-	34
States projecting demand	3	2	3	5	4	3	1	1	1	23
Demand mean score	.66	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.91
<b>Small Engine Repair</b>										
States reporting programs	2	2	1	4	2	2	1	0	1	15
Teachers currently employed	3	15	2	20	2	8	1	-	1	52
States projecting demand	5	1	2	6	4	4	1	1	2	26
Demand mean score	2.0	2.0	3.0	2.16	1.75	1.75	2.0	1.0	1.0	1.92

TABLE 29. (continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
<b>Surveying</b>										
States reporting programs	0	1	0	1	0	0	0	0	0	2
Teachers currently employed	-	1	-	3	-	-	-	-	-	4
States projecting demand	1	2	1	5	2	2	0	1	2	16
Demand mean score	0.0	1.5	2.0	1.0	1.5	1.5	-	1.0	1.0	1.19
<b>Textile</b>										
States reporting programs	1	0	1	1	0	0	0	0	0	3
Teachers currently employed	1	-	1	13	-	-	-	-	-	15
States projecting demand	1	0	1	1	0	0	0	0	0	3
Demand mean score	2.0	-	2.0	2.0	-	-	-	-	-	2.0
<b>Trowel Trades</b>										
States reporting programs	1	4	5	6	1	0	2	0	0	19
Teachers currently employed	2	28	143	122	1	-	3	-	-	299
States projecting demand	3	3	5	6	2	2	2	1	2	26
Demand mean score	1.0	1.66	2.0	2.33	1.0	1.0	2.0	1.0	1.0	1.65
<b>Upholstery</b>										
States reporting programs	0	0	1	2	1	0	1	0	1	6
Teachers currently employed	-	-	1	4	1	-	4	-	2	12
States projecting demand	0	0	2	2	1	1	1	0	1	8
Demand mean score	-	-	1.5	1.5	1.0	1.0	2.0	-	1.0	1.37
<b>Watchmaking and Jewelry</b>										
States reporting programs	0	1	0	0	0	0	0	0	0	1
Teachers currently employed	-	22	-	-	-	-	-	-	-	22
States projecting demand	2	1	0	5	2	2	0	1	2	15
Demand mean score	.5	1.0	-	1.0	1.0	1.0	-	1.0	1.0	.93
<b>Welding</b>										
States reporting programs	1	4	5	6	3	4	4	1	3	31
Teachers currently employed	1	47	27	19	42	22	19	8	8	193
States projecting demand	4	3	5	6	4	4	2	1	4	33
Demand mean score	1.25	1.66	2.6	2.16	2.25	2.0	2.0	2.0	2.0	2.03
<b>Other Construction and Maintenance Trades</b>										
States reporting programs	1	0	2	0	0	0	0	0	0	3
Teachers currently employed	2	-	13	-	-	-	-	-	-	15
States projecting demand	1	0	2	0	1	0	0	0	0	4
Demand mean score	3.0	-	2.0	-	1.0	-	-	-	-	2.0
<b>Other Industrial Occupations</b>										
States reporting programs	0	1	1	0	0	1	0	0	0	3
Teachers currently employed	-	40	10	-	-	1	-	-	-	51
States projecting demand	0	1	0	0	0	0	0	0	0	1
Demand mean score	-	3.0	-	-	-	-	-	-	-	3.0
<b>Other Metal-Working Occupations</b>										
States reporting programs	0	0	1	1	0	0	1	0	0	3
Teachers currently employed	-	-	2	2	-	-	43	-	-	47
States projecting demand	0	0	1	2	0	0	1	0	0	4
Demand mean score	-	-	2.0	2.0	-	-	2.0	-	-	2.0

TABLE 30

THE DEMAND FOR FULL-TIME POST HIGH SCHOOL  
TEACHERS IN TRADE AND INDUSTRIAL EDUCATION

	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting*	5	4	5	6	5	7	5	5	6	48
States reporting programs Teachers employed in 1965	2 76	3 713	3 285	5 646	3 388	7 381	4 329	5 176	5 2915	37 5906
States reporting Number of unfilled teaching positions in 1965	3 13	2 60	2 31	5 106	1 5	4 43	3 60	4 21	4 119	28 458
States reporting Number of unfilled teaching positions in 1965	0 -	1 5	1 6	4 24	0 -	1 2	0 -	1 1	1 1	9 39
States reporting Projected number of teachers needed in 1968	3 190	4 1770	4 415	5 1207	4 439	7 565	5 399	5 229	6 3491	43 7705

States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region IX-Hawaii

TABLE 31

EMPLOYMENT AND DEMAND FOR TEACHERS IN TRADE AND INDUSTRIAL EDUCATION  
AT THE POST HIGH SCHOOL LEVEL BY INSTRUCTIONAL AREA

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
<b>Air Conditioning and Refrigeration</b>										
States reporting programs	0	2	1	5	2	3	2	1	1	17
Teachers currently employed	-	9	6	36	5	11	12	2	12	93
States projecting demand	3	2	2	5	3	5	4	1	2	27
Demand mean score**	1.33	2.0	2.5	3.0	2.0	2.4	2.25	3.0	1.5	2.26
<b>Aircraft Maintenance</b>										
States reporting programs	0	2	2	6	1	2	0	1	2	16
Teachers currently employed	-	5	5	21	4	6	-	2	67	110
States projecting demand	3	0	2	6	1	3	1	2	3	21
Demand mean score	1.0	-	1.0	2.0	3.0	1.66	3.0	1.5	1.33	1.59
<b>Auto (Body and Fender)</b>										
States reporting programs	1	2	1	5	1	5	2	2	3	22
Teachers currently employed	1	36	6	23	4	21	7	7	44	149
States projecting demand	3	2	2	5	3	7	3	2	3	30
Demand mean score	1.33	2.5	1.0	2.6	1.66	1.85	2.0	2.0	1.66	1.9
<b>Auto Mechanics</b>										
States reporting programs	2	2	2	5	2	6	5	4	4	32
Teachers currently employed	11	170	26	69	34	74	49	31	137	601
States projecting demand	4	2	2	5	4	7	4	4	3	35
Demand mean score	2.5	2.5	1.5	3.0	2.0	2.0	2.0	1.75	2.0	2.17

\*States not reporting were: Region I-Massachusetts; Region III-Kentucky; Region IX-Hawaii

\*\*Demand mean score is a calculated regional average of the projected trend in demand for teachers over the next three-year period where 3=substantial increase; 2=moderate increase; 1=remain the same; 0=decrease in demand.



TABLE 31 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region*	5	4	5	6	5	7	5	5	6	48
<b>Baking</b>										
States reporting programs	0	2	1	2	1	1	2	0	2	11
Teachers currently employed	-	33	1	3	1	5	2	-	14	59
States projecting demand	3	1	1	4	3	2	2	2	2	20
Demand mean score	1.66	1.0	1.0	2.0	1.33	1.5	2.0	2.0	1.5	1.65
<b>Barbering</b>										
States reporting programs	1	0	2	4	1	1	2	1	1	13
Teachers currently employed	2	-	5	11	8	2	3	1	3	35
States projecting demand	3	0	2	5	1	2	2	1	1	17
Demand mean score	.66	-	1.0	1.8	2.0	1.0	1.5	1.0	2.0	1.35
<b>Cabinet Maker</b>										
States reporting programs	0	1	2	2	0	1	0	0	0	6
Teachers currently employed	-	2	3	11	-	1	-	-	-	17
States projecting demand	0	0	2	2	1	3	0	0	0	8
Demand mean score	-	-	1.0	2.0	2.0	1.33	-	-	-	1.5
<b>Carpentry</b>										
States reporting programs	2	2	1	3	2	3	3	2	3	21
Teachers currently employed	6	26	10	5	19	23	7	5	34	135
States projecting demand	3	1	2	4	3	6	3	1	3	26
Demand mean score	1.0	2.0	1.5	2.5	1.33	2.0	1.66	2.0	1.33	1.73
<b>Commercial Art</b>										
States reporting programs	0	1	0	1	1	2	0	1	4	10
Teachers currently employed	-	4	-	2	4	3	-	3	26	42
States projecting demand	3	1	1	5	3	3	1	1	2	20
Demand mean score	.66	3.0	1.0	2.0	1.66	1.66	1.0	2.0	1.5	1.6
<b>Commercial Food Preparation</b>										
States reporting programs	0	2	1	4	1	1	1	1	3	14
Teachers currently employed	-	29	3	12	5	4	1	1	41	96
States projecting demand	4	1	2	5	3	4	2	2	3	26
Demand mean score	1.5	3.0	1.5	2.0	2.0	1.5	2.0	2.5	2.33	1.92
<b>Cosmetology</b>										
States reporting programs	0	2	2	4	1	2	3	3	2	19
Teachers currently employed	-	5	18	63	5	16	6	7	99	219
States projecting demand	3	1	2	5	4	4	4	2	2	27
Demand mean score	2.0	3.0	2.0	2.2	1.5	1.5	1.75	1.5	2.0	1.85
<b>Diesel Mechanics</b>										
States reporting programs	0	2	1	5	1	3	3	2	3	20
Teachers currently employed	-	29	1	10	2	8	8	6	15	79
States projecting demand	3	2	2	5	2	6	3	2	3	28
Demand mean score	2.0	1.5	2.0	2.4	1.5	2.0	2.0	2.0	2.0	2.0
<b>Drafting</b>										
States reporting programs	3	2	2	4	2	4	3	2	4	26
Teachers currently employed	6	47	11	26	3	16	12	6	51	178
States projecting demand	3	2	2	5	4	6	4	2	3	31
Demand mean score	2.33	2.5	2.5	3.0	1.75	1.83	2.0	1.5	2.0	2.16
<b>Dressmaking and Tailoring</b>										
States reporting programs	0	2	2	3	0	1	2	1	2	13
Teachers currently employed	-	12	6	7	-	2	2	2	9	40
States projecting demand	3	1	2	5	4	4	4	1	2	26
Demand mean score	.66	1.0	1.5	1.8	1.0	1.25	1.5	1.0	1.5	1.31

TABLE 31 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
<b>Electric Appliance Repair</b>										
States reporting programs	0	0	2	1	0	1	2	0	0	6
Teachers currently employed	-	-	13	4	-	3	2	-	-	22
States projecting demand	0	0	2	1	1	1	1	0	0	6
Demand mean score	-	-	1.0	3.0	2.0	2.0	2.0	-	-	1.66
<b>Electrical - Industrial</b>										
States reporting programs	1	1	2	5	2	2	2	2	2	19
Teachers currently employed	2	7	16	29	14	17	5	5	27	122
States projecting demand	3	0	2	5	4	3	3	2	3	25
Demand mean score	2.33	-	1.0	2.4	1.75	2.33	2.0	1.5	2.0	2.0
<b>Electrical - Linemen Training</b>										
States reporting programs	0	2	0	1	2	3	2	0	1	11
Teachers currently employed	-	3	-	3	5	9	6	-	1	27
States projecting demand	1	1	0	4	3	4	2	1	1	17
Demand mean score	3.0	1.0	-	2.0	1.33	1.75	1.5	1.0	1.0	1.64
<b>Electrical Wiring</b>										
States reporting programs	0	2	1	1	2	1	1	0	2	10
Teachers currently employed	-	20	7	2	7	6	8	-	11	61
States projecting demand	3	1	1	5	3	3	2	1	2	21
Demand mean score	2.0	1.0	2.0	2.0	1.33	1.66	2.0	1.0	1.5	1.71
<b>Electronics</b>										
States reporting programs	1	0	0	2	1	0	0	0	1	5
Teachers currently employed	4	-	-	19	28	-	-	-	3	54
States projecting demand	1	0	1	2	1	1	1	0	1	8
Demand mean score	3.0	-	3.0	2.5	2.0	2.0	2.0	-	2.0	2.37
<b>Fireman Training</b>										
States reporting programs	0	0	1	1	2	3	2	2	3	14
Teachers currently employed	-	-	3	4	3	9	9	3	9	40
States projecting demand	1	0	1	4	3	4	2	4	3	22
Demand mean score	2.0	-	1.0	1.75	1.66	1.5	1.5	1.75	3.0	1.82
<b>Fishery</b>										
States reporting programs	0	0	0	0	0	0	0	0	2	2
Teachers currently employed	-	-	-	-	-	-	-	-	5	5
States projecting demand	2	0	0	4	2	2	0	1	1	12
Demand mean score	2.0	-	-	1.25	1.0	1.5	-	1.0	2.0	1.41
<b>Food Service Worker (Includes Waiter/Waitress)</b>										
States reporting programs	0	2	0	1	0	0	0	1	2	6
Teachers currently employed	-	11	-	8	-	-	-	1	16	36
States projecting demand	2	1	1	4	2	4	1	2	3	20
Demand mean score	1.0	1.0	2.0	1.5	2.0	2.0	2.0	2.0	2.0	1.75
<b>Heavy Equipment Operator</b>										
States reporting programs	0	1	0	1	3	0	2	0	3	13
Teachers currently employed	-	2	-	3	6	-	2	-	4	21
States projecting demand	2	1	0	4	3	4	3	1	2	20
Demand mean score	1.5	1.0	-	1.5	1.33	1.75	2.0	3.0	1.5	1.65
<b>Industrial Sewing</b>										
States reporting programs	0	0	1	1	1	0	1	1	0	5
Teachers currently employed	-	-	2	2	1	-	1	1	-	7
States projecting demand	0	0	1	3	0	0	1	1	0	6
Demand mean score	-	-	2.0	1.66	-	-	2.0	1.0	-	1.66

TABLE 31 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
<b>Law Enforcement</b>										
States reporting programs	0	0	1	1	3	0	2	3	3	13
Teachers currently employed	-	-	1	1	3	-	4	4	169	182
States projecting demand	1	0	1	5	4	2	1	3	4	21
Demand mean score	2.0	-	2.0	1.2	1.75	.5	2.0	2.33	2.75	2.05
<b>Machine Tool Operator</b>										
States reporting programs	0	2	1	1	1	0	0	0	0	5
Teachers currently employed	-	105	1	3	2	-	-	-	-	111
States projecting demand	1	0	1	4	1	3	1	1	1	13
Demand mean score	3.0	-	3.0	2.0	3.0	1.66	3.0	1.0	2.0	2.15
<b>Machine Shop</b>										
States reporting programs	3	2	1	5	1	5	3	2	3	25
Teachers currently employed	6	73	15	38	48	39	21	8	111	359
States projecting demand	4	2	2	5	2	7	4	1	3	30
Demand mean score	2.25	2.0	2.5	2.6	2.0	2.14	2.25	1.0	1.66	2.17
<b>Meat Cutter</b>										
States reporting programs	0	1	0	1	1	0	0	0	0	3
Teachers currently employed	-	10	-	2	1	-	-	-	-	13
States projecting demand	1	0	0	4	1	3	0	1	0	10
Demand mean score	2.0	-	-	1.25	2.0	1.33	-	1.0	-	1.4
<b>Office Machine Repair</b>										
States reporting programs	0	0	0	2	0	0	0	1	0	3
Teachers currently employed	-	-	-	3	-	-	-	3	-	6
States projecting demand	0	0	0	2	0	0	0	1	0	3
Demand mean score	-	-	-	2.0	-	-	-	2.0	-	2.0
<b>Painting and Decorating</b>										
States reporting programs	0	1	1	2	2	0	0	0	2	8
Teachers currently employed	-	4	3	3	4	-	-	-	5	19
States projecting demand	3	1	1	5	1	4	0	1	2	18
Demand mean score	.66	1.0	2.0	1.6	2.0	1.5	-	2.0	1.5	1.44
<b>Photography</b>										
States reporting programs	0	1	0	2	1	0	0	0	2	6
Teachers currently employed	-	1	-	2	2	-	-	-	22	27
States projecting demand	2	0	1	5	1	5	0	1	3	18
Demand mean score	1.5	-	2.0	1.2	2.0	1.4	-	2.0	2.0	1.56
<b>Plumbing</b>										
States reporting programs	0	2	1	1	2	2	1	0	1	10
Teachers currently employed	-	16	12	1	12	2	1	-	6	50
States projecting demand	3	1	2	5	2	5	2	1	1	22
Demand mean score	.66	2.0	1.5	1.8	1.5	1.4	2.5	2.0	1.0	1.54
<b>Printing</b>										
States reporting programs	0	2	2	3	2	2	3	2	2	18
Teachers currently employed	-	46	12	9	21	19	3	4	33	147
States projecting demand	3	1	2	5	2	7	4	1	2	27
Demand mean score	1.33	2.0	2.0	2.2	1.5	1.71	1.5	2.0	2.0	1.78
<b>Radio and TV Maintenance</b>										
States reporting programs	0	2	2	4	1	5	3	1	3	21
Teachers currently employed	-	11	9	38	2	30	13	1	47	151
States projecting demand	1	2	2	5	2	7	3	2	3	27
Demand mean score	2.0	2.0	1.5	2.6	1.5	1.85	2.0	2.0	2.0	2.0

TABLE 31 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
<b>Related Instruction</b>										
States reporting programs	0	0	1	1	0	0	1	1	0	4
Teachers currently employed	-	-	18	2	-	-	17	8	-	45
States projecting demand	0	0	1	1	0	0	1	1	0	4
Demand mean score	-	-	2.0	2.0	-	-	2.0	2.0	-	2.0
<b>Sheet Metal</b>										
States reporting programs	2	2	2	2	2	2	1	1	2	16
Teachers currently employed	2	41	5	4	9	5	2	2	14	84
States projecting demand	4	1	2	5	2	6	2	1	1	24
Demand mean score	2.0	1.0	1.0	2.2	1.5	1.5	2.5	2.0	1.0	1.75
<b>Shoe Repairing</b>										
States reporting programs	0	2	2	2	2	1	0	0	1	10
Teachers currently employed	-	4	2	2	3	1	-	-	10	22
States projecting demand	3	1	2	5	2	3	0	1	1	18
Demand mean score	1.0	1.0	1.0	1.4	1.0	1.0	-	1.0	1.0	1.11
<b>Small Engine Repair</b>										
States reporting programs	0	1	1	4	0	2	1	0	0	9
Teachers currently employed	-	5	3	7	-	2	1	-	-	18
States projecting demand	3	1	1	5	2	4	2	1	1	20
Demand mean score	.66	1.0	2.0	2.2	1.5	1.5	2.0	1.0	3.0	1.65
<b>Supervisory Training</b>										
States reporting programs	0	0	1	0	0	1	2	0	0	4
Teachers currently employed	-	-	3	-	-	1	10	-	-	14
States projecting demand	0	0	1	0	0	0	2	0	0	3
Demand mean score	-	-	1.0	-	-	-	2.0	-	-	1.66
<b>Surveying</b>										
States reporting programs	0	0	0	1	2	1	1	1	1	7
Teachers currently employed	-	-	-	1	5	1	1	1	1	10
States projecting demand	1	0	0	5	2	2	1	1	9	13
Demand mean score	2.0	-	-	1.0	1.5	1.5	1.0	2.0	2.0	1.46
<b>Tool and Die</b>										
States reporting programs	0	1	0	1	1	0	0	0	0	3
Teachers currently employed	-	3	-	1	3	-	-	-	-	7
States projecting demand	1	0	0	1	1	0	0	0	0	3
Demand mean score	2.0	-	-	2.0	3.0	-	-	-	-	2.33
<b>Trowel Trades</b>										
States reporting programs	1	1	2	4	2	1	1	0	0	12
Teachers currently employed	1	6	11	20	9	1	1	-	-	49
States projecting demand	3	2	2	5	2	3	2	1	1	21
Demand mean score	1.0	2.0	2.0	2.0	2.0	1.66	1.5	1.0	1.0	1.67
<b>Upholstery</b>										
States reporting programs	0	0	1	2	1	1	1	1	0	7
Teachers currently employed	-	-	4	6	5	1	1	1	-	18
States projecting demand	0	0	1	2	0	1	2	1	0	7
Demand mean score	-	-	1.0	2.0	-	2.0	2.0	1.0	-	1.71
<b>Watchmaking</b>										
States reporting programs	0	0	1	4	1	1	2	0	2	11
Teachers currently employed	-	-	1	7	1	1	2	-	4	16
States projecting demand	1	0	1	5	1	3	2	1	2	16
Demand mean score	0.0	-	1.0	1.4	1.0	1.33	2.0	1.0	1.5	1.25

TABLE 31 (Continued)

INSTRUCTIONAL AREA	REGION									TOTAL
	I	II	III	IV	V	VI	VII	VIII	IX	
States reporting by region	5	4	5	6	5	7	5	5	6	48
Welding										
States reporting programs	2	2	2	5	1	4	3	2	4	25
Teachers currently employed	3	69	18	24	14	13	38	12	70	261
States projecting demand	3	2	2	5	1	5	4	2	4	28
Demand mean score	2.33	3.0	2.5	2.4	3.0	2.4	2.0	1.5	2.25	2.32

TABLE 32

PROJECTED AREAS OF TRADE AND INDUSTRIAL EDUCATION WHICH WILL HAVE THE GREATEST NEED FOR NEW INSTRUCTORS IN THE FUTURE

Area	No. States Total (N=43)
Automotive	
Auto Mechanics	21
Auto Body Repair	5
Metal Trades	
Machine Shop	16
Welding	13
Electronics	12
Construction and Maintenance Trades	
Building Trades	9
Electrical Trades	9
Carpentry	1
Brick Layer	1
Air Conditioning, Refrigeration and Heating	6
Drafting	5
Cooperative Program Coordinator	6
Cosmetology	3
Other Service Occupations	8
Other Areas	2
<b>Total*</b>	<b>117</b>

\* Each state reported two or three areas of greatest need, thereby giving the large total figure.

APPENDIX B

American Vocational Association, Inc.  
1025 Fifteenth Street, N. W., Washington, D. C. 20005

\_\_\_\_\_  
State Director of Vocational Education  
\_\_\_\_\_  
\_\_\_\_\_

Dear \_\_\_\_\_ :

As you know so well, there is a great demand for teachers in the area of vocational and technical education. We need your assistance in determining the magnitude of this problem and to pinpoint the most critical areas. State Directors of Vocational and Technical Education and leaders in the AVA were greatly concerned at the time Public Law 88-210 was signed as to the possibility of obtaining well-trained teaching personnel. From recent reports and comments gathered from many states, our concern was well founded; there are more teaching positions than we can possibly fill with the current supply of teachers.

The AVA is cooperating in a research study sponsored by The Center for Vocational and Technical Education at The Ohio State University. The preliminary study will, to a degree, determine answers to the following questions: Where and in what specific fields are the most vital needs? Where are the best manpower pools of trained personnel? With your help we hope to answer the first question concerning the critical need areas.

We are enclosing a questionnaire which is of pressing importance to this study. The forms may not agree completely with your standard reporting procedures, as each state program varies considerably. However, we hope you will add comments where necessary and complete as much of the questionnaire as possible.

We are also cognizant of the fact that many of the projected figures will be shrewd guesswork. On the other hand, the state supervisors in your office are in a much better position to make these estimates than are our best statisticians.

The questionnaire has been designed in separate sections to facilitate your asking the various supervisors on your staff to complete the segment for their area. We would hope, however, that you would reassemble the forms and return them as a group to:

The Center for Vocational-Technical Education  
The Ohio State University  
980 Kinnear Road  
Columbus 12, Ohio

Thank you for your assistance and efforts in behalf of this study.

Sincerely yours,

Lowell A. Burkett  
Assistant Executive Secretary

LAB:plj  
Enclosures

B-1

APPENDIX C



The Demand for Full-Time Teachers in

AGRICULTURAL EDUCATION

High School      Post High School

Total number of full-time teachers\* employed--  
September, 1965  
Projected number of full-time teachers needed in  
September, 1968  
Number of beginning (new and replacement) full-time  
teachers placed in teaching positions in 1965  
Number of unfilled full-time teaching positions  
existing as of September, 1965

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROJECTED TREND in demand  
for teachers for the next  
three (3) years.

++ Substantial Increase
+ Moderate Increase
o Same
- Decrease

<u>TEACHING AREA</u>	Number of Full-Time Teachers <u>CURRENTLY</u> <u>EMPLOYED.</u>		<u>High School</u>	<u>Post High School</u>
	<u>High School</u>	<u>Post High School</u>		
Regular Vocational Agriculture Program	_____	_____	_____	_____
Special Agriculture Programs				
Horticulture	_____	_____	_____	_____
Forestry	_____	_____	_____	_____
Agriculture Mechanics	_____	_____	_____	_____
Farm Management	_____	_____	_____	_____
Others (List)	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

The three areas of AGRICULTURE EDUCATION which will have the greatest need for new instructors in the future are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

\*A full-time instructor should spend over 50 percent of his time teaching agricultural subjects and be under a regular contract for the school year.

CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION  
OHIO STATE UNIVERSITY

980 KINNEAR ROAD, COLUMBUS, OHIO

The Demand for Full-Time Teachers in

BUSINESS AND OFFICE OCCUPATIONS EDUCATION

	<u>High School</u>	<u>Post High School</u>
Total number of full-time teachers employed-- September, 1965	---	---
Projected number of full-time teachers needed in September, 1968	---	---
Number of beginning (new and replacement) full-time teachers placed in teaching positions in 1965	---	---
Number of unfilled full-time teaching positions existing as of September, 1965	---	---

PROJECTED TREND in demand  
for teachers for the next  
three (3) years.

++ Substantial increase  
+ Moderate Increase  
o Same  
- Decrease

<u>TEACHING AREA</u>	Number of full-time Teachers <u>CURRENTLY</u> <u>EMPLOYED.</u>		<u>PROJECTED TREND</u>	
	<u>High School</u>	<u>Post High School</u>	<u>High School</u>	<u>Post High School</u>
Accounting, Bookkeeping, Recordkeeping	---	---	---	---
Typewriting	---	---	---	---
Shorthand-Transcription	---	---	---	---
Office-Clerical Practice (Including Office Machines and Filing)	---	---	---	---
General Business Subjects (General Business, Business Principles, Business Law, Business Mathematics, and Business Correspondence)	---	---	---	---
Data Processing	---	---	---	---
Other Business and Office Occupations Education (List)	---	---	---	---
_____	---	---	---	---
_____	---	---	---	---

The three areas of BUSINESS AND OFFICE OCCUPATIONS EDUCATION which will have the greatest need for new instructors in the future are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

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OHIO STATE UNIVERSITY  
980 KINNEAR ROAD, COLUMBUS, OHIO

The Demand for Full-Time Teachers in

DISTRIBUTIVE EDUCATION

	<u>High School</u>	<u>Post High School</u>
Total number of full-time teachers employed-- September, 1965	---	---
Projected number of full-time teachers needed in September, 1968	---	---
Number of beginning (new and replacement) full-time teachers placed in teaching positions in 1965	---	---
Number of unfilled teaching full-time vacancies existing as of September, 1965	---	---

PROJECTED TREND in demand  
for teachers for the next  
three (3) years.

++ Substantial Increase  
+ Moderate Increase  
o Same  
- Decrease

<u>TEACHING AREAS (List Specific Titles if Appropriate)</u>	<u>Number of full-time Teachers CURRENTLY EMPLOYED.</u>			
	<u>High School</u>	<u>Post High School</u>	<u>High School</u>	<u>Post High School</u>
RETAIL (Total)				
Special Areas:				
_____	---	---	---	---
_____	---	---	---	---
WHOLESALE (Total)				
Special Areas:				
_____	---	---	---	---
_____	---	---	---	---
SALES AND SERVICE (Total)				
Special Areas:				
_____	---	---	---	---
_____	---	---	---	---
OTHER DISTRIBUTIVE EDUCATION (List)				
_____	---	---	---	---
_____	---	---	---	---
_____	---	---	---	---

The three areas of DISTRIBUTIVE EDUCATION which will have the greatest need for new instructors in the future are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

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980 KINNEAR ROAD, COLUMBUS, OHIO

The Demand for Full-Time Teachers in

HEALTH OCCUPATIONS

Total number of full-time teachers employed--September, 1965 \_\_\_\_\_

Projected number of full-time teachers needed in September, 1968 \_\_\_\_\_

Number of beginning (new) full-time teachers placed in teaching positions in 1965 \_\_\_\_\_

Number of unfilled full-time teaching vacancies existing as of September, 1965 \_\_\_\_\_

PROJECTED TREND in demand for teachers for the next three (3) years.

++ Substantial Increase
+ Moderate Increase
o Same
- Decrease

<u>TEACHING AREA</u>	<u>Number of full-time Teachers CURRENTLY EMPLOYED</u>	_____
Dental Assistant	_____	_____
Dental Lab Assistant	_____	_____
Dispensing Optician Assistant	_____	_____
Medical Assistant	_____	_____
Medical Lab Assistant	_____	_____
Nurses Aide	_____	_____
Operating Room Assistant	_____	_____
Physical Therapy Assistant	_____	_____
Practical Nurse	_____	_____
Other Health Occupations (Specify)	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The three areas of HEALTH OCCUPATIONS which will have the greatest need for new instructors in the future are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

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OHIO STATE UNIVERSITY  
980 KINNEAR ROAD, COLUMBUS, OHIO

The Demand for Full-Time Teachers in

HOME ECONOMICS

	<u>High School</u>	<u>Post High School</u>
Total number of full-time teachers employed-- September, 1965	_____	_____
Projected number of full-time teachers needed in September, 1968	_____	_____
Number of beginning (new and replacement) full-time teachers placed in teaching positions in 1965	_____	_____
Number of unfilled full-time teaching vacancies existing as of September, 1965	_____	_____

PROJECTED TREND in demand  
for teachers for the next  
three (3) years.

++ Substantial Increase  
+ Moderate Increase  
o Same  
- Decrease

<u>TEACHING AREA</u>	Number of Full-Time Teachers <u>CURRENTLY</u> <u>EMPLOYED.</u>		<u>PROJECTED TREND</u>	
	<u>High School</u>	<u>Post High School</u>	<u>High School</u>	<u>Post High School</u>
REGULAR VOCATIONAL HOME- MAKING PROGRAM	_____	_____	_____	_____
OCCUPATIONAL PREPARATION (List)	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
OTHER (List)	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

The three areas of HOME ECONOMICS which will have the greatest need for new instructors in the future are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

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980 KINNEAR ROAD, COLUMBUS, OHIO

The Demand for Full-Time Teachers in

TECHNICAL EDUCATION

Total number of full-time teachers employed--September, 1965 \_\_\_\_\_

Projected number of full-time teachers needed in September, 1968 \_\_\_\_\_

Number of beginning (new) full-time teachers placed in teaching positions in 1965 \_\_\_\_\_

Number of unfilled full-time teaching vacancies existing as of September, 1965 \_\_\_\_\_

PROJECTED TREND in demand for teachers for the next three (3) years.

- |                         |
|-------------------------|
| ++ Substantial Increase |
| + Moderate Increase     |
| o Same                  |
| - Decrease              |

RELATED TECHNICAL EDUCATION TEACHING AREAS (List specific titles under appropriate categories)

Number of Full-Time Teachers CURRENTLY EMPLOYED.

**AGRICULTURE:**

_____	_____	_____
_____	_____	_____

**HOME ECONOMICS:**

_____	_____	_____
_____	_____	_____

**HEALTH OCCUPATIONS:**

_____	_____	_____
_____	_____	_____

**BUSINESS AND OFFICE OCCUPATIONS:**

_____	_____	_____
_____	_____	_____
_____	_____	_____

**DISTRIBUTIVE EDUCATION:**

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



RELATED TECHNICAL EDUCATION  
TEACHING AREAS (List  
specific titles under  
appropriate categories)

Number of Full-Time  
Teachers CURRENTLY  
EMPLOYED.

PROJECTED TREND in demand  
for teachers for the next  
three (3) years.

++ Substantial Increase
+ Moderate Increase
o Same
- Decrease

TRADE AND INDUSTRIAL EDUCATION:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

OTHER TECHNICAL EDUCATION:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The three areas of TECHNICAL EDUCATION which will have the greatest need for new instructors in the future are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

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OHIO STATE UNIVERSITY  
980 KINNEAR ROAD, COLUMBUS, OHIO

The Demand for Full-Time Teachers in

TRADE AND INDUSTRIAL EDUCATION

	<u>High School</u>	<u>Post High School</u>
Total number of full-time teachers employed-- September, 1965	---	---
Projected number of full-time teachers needed in September, 1968	---	---
Number of beginning (new and replacement) full-time teachers placed in teaching positions in 1965	---	---
Number of unfilled full-time teaching positions existing as of September, 1965	---	---

PROJECTED TREND in demand  
for teachers for the next  
three (3) years.

++ Substantial Increase  
+ Moderate Increase  
o Same  
- Decrease

<u>TEACHING AREA</u>	Number of Full-Time Teachers <u>CURRENTLY</u> <u>EMPLOYED.</u>		<u>PROJECTED TREND</u>	
	<u>High School</u>	<u>Post High School</u>	<u>High School</u>	<u>Post High School</u>
Air Conditioning & Refrigeration	---	---	---	---
Aircraft Maintenance	---	---	---	---
Auto (Body & Fender)	---	---	---	---
Auto Mechanics	---	---	---	---
Baking	---	---	---	---
Barbering	---	---	---	---
Carpentry	---	---	---	---
Commercial Art	---	---	---	---
Commercial Food Preparation	---	---	---	---
Cosmetology	---	---	---	---
Diesel	---	---	---	---
Drafting	---	---	---	---
Dressmaking & Tailoring	---	---	---	---
Electrical, Industrial	---	---	---	---
Electrical, Lineman Training	---	---	---	---
Electrical Wiring	---	---	---	---
Fireman Training	---	---	---	---
Fishery	---	---	---	---
Food Service Worker (including waiter/waitress)	---	---	---	---



<u>TEACHING AREA</u>	<u>Number of Full-Time Teachers CURRENTLY EMPLOYED.</u>		<u>PROJECTED TREND in demand for teachers for the next three (3) years.</u>	
	<u>High School</u>	<u>Post High School</u>	<u>High School</u>	<u>Post High School</u>
Heavy Equipment Operation	_____	_____	_____	_____
Law Enforcement	_____	_____	_____	_____
Machine Tool Operator	_____	_____	_____	_____
Machine Shop	_____	_____	_____	_____
Meat Cutter	_____	_____	_____	_____
Painting and Decorating	_____	_____	_____	_____
Photography	_____	_____	_____	_____
Plumbing	_____	_____	_____	_____
Printing	_____	_____	_____	_____
Radio and TV Maintenance	_____	_____	_____	_____
Sheet Metal	_____	_____	_____	_____
Shoe Repairing	_____	_____	_____	_____
Small Engine Repair	_____	_____	_____	_____
Surveying	_____	_____	_____	_____
Trowel Trades	_____	_____	_____	_____
Watchmaking	_____	_____	_____	_____
Welding	_____	_____	_____	_____
Other Trade and Industrial Education (Specify)	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____

The three areas of TRADE AND INDUSTRIAL EDUCATION which will have the greatest need for new instructors in the future are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## OTHER CENTER PUBLICATIONS

"Guidelines for State Supervisors in Office Occupations Education."  
1965 Business Clinic

A Report of a National Seminar on Agricultural Education, "Program  
Development and Research."

"Guidance in Vocational Education." - Guidelines for Research and  
Practice.

"Research Planning in Business and Office Education."

"Evaluation and Program Planning in Agricultural Education."

"A Report of a National Seminar on Health Occupations Education  
Centers."

"A Report of a National Seminar on Cooperative Education."

A Report of "A National Leadership Seminar on Home Economics Education."

"Report of A National Invitational Research Planning Conference on  
Trade and Industrial Teacher Education."

A Report of a National Seminar on Cooperative Education,  
"Guidelines in Cooperative Education."