A NATIONAL STUDY OF THE SUPPLY AND DEMAND FOR TEACHERS OF VOCATIONAL AGRICULTURE IN 1983

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FORWARD

Demand and supply data about vocational agriculture teachers on a state and national basis can be useful in recruitment and public relations efforts. This is the major premise for the study which has been conducted annually for nineteen consecutive years. This study provides objective data from every state that can be used by agricultural education leaders to identify and compare teacher trends in the vocational agriculture profession. Also, it can provide information for planning and evaluating programs.

In terms of actual use, this study has done much to stimulate recruitment efforts nationally and in states where teacher shortages occur. Teacher education institutions and state departments of education have used the data to aid in their planning and expansion of agricultural education programs. In addition, the data have been used to assist in modifying certification standards. Information from the study has also been used by the National Vocational Agricultural Teachers Association in a careers booth at the National FFA Convention. This report is distributed to every state education department and agricultural teacher education institution, and to selected agricultural education leaders in the United States. Summary reports appear periodically in The Agricultural Education Magazine and the Agriculture Teachers Directory. Agricultural business and industry newsletters and magazines, including The National Future Farmer, use some of the data in news columns and articles. Each year the author receives many favorable comments about the study and requests for information.

Verbal and monetary support for this study and its distribution was provided by the Professional Personnel Recruitment Committee of the Agricultural Education Division, American Vocational Association. During the annual American Vocational Association meeting in December, the Committee receives a progress report of the current study, reviews last year's report, and makes recommendations for improving further study efforts. A request was made and accepted for financial support to the Ag-Ed Division for the 1984 study. Responsible suggestions are welcome from any reader.

The author wishes to thank the Department of Technological and Adult Education for its assistance with the study this year. Acknowledgement is made to Mrs. Mildred Nave, secretary to the agricultural education staff at The University of Tennessee, Knoxville, for her assistance in the conduct of this study.

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TABLE OF CONTENTS

LIST OF TABLES

SUPPLY AND DEMAND FOR TEACHERS OF VOCATIONAL AGRICULTURE IN THE UNITED STATES 1983

INTRODUCTION

Major changes are taking place in the supply and demand for vocational agriculture teachers in the United States. There has been a two-year decline in the teacher shortage trend. This report proposes to describe the nature and degree of the supply and demand of vocational agriculture teachers in 1983. For the third year in this annual study, emphasis will be placed upon securing curriculum and clientele of post-secondary vocational agriculture teachers.

In addition, secondary vocational agriculture teacher changes and trends will be identified which have occurred since 1965 when the study began. The findings of this nineteenth annual survey of the supply and demand for teachers of vocational agriculture will be used to stimulate and aid state and nationwide recruitment efforts to secure prospective teachers for the profession.

GATHERING THE DATA

The data on teacher supply and demand were secured from all known institutions preparing teachers in vocational agriculture as well as the offices of head state supervisors in agriculture. Questionnaires were mailed to both groups on September 9, 1983. Follow-up letters and telephone calls were made for six months. There was nearly 100 percent return among the institutions and the states. There was a decrease in the number of responses concerning post-secondary vocational agriculture teacher positions. The author continues to urge participants to report accurate, available data.

The respondents were asked to provide information regarding numbers of graduates qualified and the number of teaching positions available. Responses have been tabulated for each state and each institution preparing teachers. A copy of each of the questionnaires used in the study is included in the Appendix.

SUMMARY

A summary of the vocational agriculture teacher demand and supply situation is included at this point for the convenience of those readers who do not wish to read the entire study. The following represents a brief review of selected findings and conclusions.

The secondary vocational agriculture teacher shortage is the smallest since this study was begun nineteen years ago. A total of 1,277 persons were qualified for teaching vocational agriculture in 1983 as compared to 1,368 last year and 1,468 the year before. The number qualified is the lowest in the last sixteen years of this study. The percentage of individuals placed in teaching positions dropped to 45.6 percent in 1983. This is the lowest placement rate of any year in this study.

A small shortage of vocational agriculture teachers continues to exist. However, the shortage occurs in certain areas of the country in an irregular pattern and yet 6.2 percent of the graduates were unemployed. There were only 582 graduates entering teaching for the 1,188 replacements employed up to September 1, 1983. There were only 42 teachers still needed on that date. A turnover of 9.8 percent, below average, also contributed to the teacher shortage.

A comparison of the number of secondary teachers of vocational agriculture in the nation over the past decade shows that the number has increased from a low of 10,221 in 1967 to a record high of 12,844 in 1978.

There were 12,099 secondary teachers identified in 1983. This number shows a five-year decline of about 745 teaching positions. Conversely, the number of vocational agriculture teachers in post-secondary institutions has been increasing since 1980. A total of 1,074 post-secondary teachers were identified in 28 states in 1983.

Several trends continue to appear in the types of secondary vocational agriculture teaching positions. About 88 percent of all positions occurred in general or comprehensive high schools, while approximately 9 percent were employed in area vocational high schools. Slightly more than two-thirds, or 67.8 percent, of the positions involved teaching only high school students. The number of teachers in single teacher departments represented about 54 percent of the total, a figure which increased by 11 percent from last year.

About 151 more teachers than in 1982 were teaching in production agriculture programs while about 182 fewer teachers were in ornamental horticulture. Slightly more than 83 percent of the teachers continue to teach full-time or part-time production agriculture.

With regard to post-secondary vocational agriculture teachers, about 71 percent taught full-time and more than 58 percent taught in technical institutes. Most of the post-secondary teachers, or 90 percent, taught in multiple teacher departments. About 31 percent taught-full time production agriculture while another 31 percent taught a combination of agricultural production and other specialties. About 13 percent taught ornamental horticulture.

Most secondary teaching positions were filled by fully qualified persons holding a bachelor's degree. The number of positions filled by teachers with temporary or emergency certificates decreased by 59 percent to 149 in 1983.

The modal secondary vocational agriculture teacher in the United States teaches only high school classes, in a comprehensive high school, in a single teacher department, teaching production agriculture and maybe one or more specialized agriculture classes. The modal post-secondary vocational agriculture teacher teaches full-time, in a technical institute in a multiple-teacher department teaching specialized agriculture classes and maybe agriculture production.

RECOMMENDATIONS

The Professional Personnel Recruitment Committee has recommended that approximately 1,600 persons per year be qualified for teaching vocational agriculture in the nation. It would appear that this goal is realistic, as evidence is submitted showing the need for more qualified vocational agriculture teachers. In addition, enrollments in colleges of agriculture continue to be high. In view of this goal, the following recommendations are made:

1. Vocational agriculture teachers should recruit their best students each year for teaching vocational agriculture. Each teacher should have as his/her goal that at least one of his/her students graduate in agricultural education every two to three years.

2. Teacher turnover should be reduced and maintained at a low percentage level. Local administrators, state supervisors in agricultural education and professional organizations should provide a variety of incentives to encourage all effective teachers of quality programs to remain in the profession.

3. State supervisors and teacher educators in surplus states should encourage current agricultural education graduates to cross state lines to areas where shortages exist. Continued efforts need to be made to make teacher salaries competitive with other fields in which they might enter. In addition, working conditions and class size should be regulated so that effective teaching can take place.

4. State vocational agriculture teacher associations should exercise leadership in forming and/or maintaining an active recruiting campaign. Emphasis should be placed upon the variety of job opportunities, especially specialized subject areas, locations of jobs, and the advantages of teaching as a profession (for example, the importance of agriculture and working with youth). Recruitment efforts should focus on state, district and local FFA officers and award winners. Colleges of agriculture, departments of agricultural education and agricultural industry could offer additional scholarships to potential majors in agricultural education.

5. Agricultural education leaders at the state level should make strong efforts to reduce the number of uncertified teachers in the profession. Continued steps need to be taken to broaden certification standards to include such areas as horticulture, agricultural business and agricultural mechanics. Names and addresses of available and certified teachers need to be placed in the hands of employing superintendents and boards of education.

6. Previous recommendations for further research about vocational agriculture teacher supply and demand have been followed. Studies have been completed and published as follows: "A Synthesis of Current Research About Vocational Agriculture Teacher Supply and Demand" and "Why Do Vocational Agriculture Teachers Leave (or Stay in) the Profession."

7. This longitudinal study of the supply and demand for teachers of vocational agriculture should be continued in 1984. Proposals for funds have been submitted to the Agricultural Education Division of the American Vocational Association for this study and recruitment activities.

MAJOR FINDINGS

Secondary Teacher Positions and Trends

The demand for secondary teachers of vocational agriculture is shown in Table I. A turnover of 9.8 percent required 1,188 teacher replacements for the 12,099 positions in 1983. This table shows that there is still a teacher shortage in that 47 teachers were needed but not available September 1, and that 9 departments could not operate during the 1983-84 school year because of a lack of teachers.

The number of secondary teaching positions shows a decrease of three percent from the two previous years. There has been a 24 percent decrease in the number of new graduates entering teaching since 1981. The number of teachers with temporary or emergency certificates has decreased by more than one-half the last three years. There has been a corresponding decrease of teachers needed but unavailable and the departments that had to close because of the teacher shortage.

TABLE I

NUMBER OF SECONDARY TEACHING POSITIONS IN VOCATIONAL AGRICULTURE IN THE UNITED STATES IN 1981, 1982, 1983

Item	1981	1982	1983
1. Total positions as of June 30	12,450	12,474	12,099
2. New graduates entering teaching	767	701	582
3. New positions added (net total)	-112	-81	-98
4. Number of 1983 qualified teachers still available September 1	65	88	79
5. Teachers needed but unabailable September 1	98	35	42
6. Teachers with temporary/emergency certificates	327	254	149
7. Departments which will not operate because of the teacher shortage	39	15	9

Agricultural Education Graduates

It is evident from Table II that a total of 1,277 teachers were qualified by institutions last year and of these, 582 or 45.6 percent, accepted secondary teaching positions in vocational agriculture. The table also shows the most recent ten-year trends of the number of teachers qualified and the percent entering various occupational areas.

There has been a corresponding decrease of the total number of qualified graduates and the total number placed in secondary vocational agriculture positions during the last six years. Furthermore, placement rate percentage has decreased steadily, nine percent during the same period. Agriculture business continues to be the second largest employer of agricultural education graduates. Graduate work and farming attracted the

highest number of graduates for those areas during the last ten years. Other teaching and the armed forces continue to employ the lowest number of graduates.

TABLE II

PERCENTAGES OF AGRICULTURAL EDUCATION GRADUATES ENTERING VARIOUS OCCUPATIONS DURING THE LAST TEN YEARS

Occupation	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Total Number Qualified	1623	1660	1697	1749	1791	1656	1584	1468	1368	1277
Total Number Placed in Secondary Vo-Ag	943	999	1043	1063	1015	909	824	767	701	582
Teaching Vo-Ag	58.1	60.2	61.5	60.8	56.7	54.9	52.0	52.2	51.3	45.6
Ag Business	7.8	7.5	6.3	7.4	9.3	14.9	13.8	14.5	14.6	12.5
Graduate Work	8.9	9.8	8.8	6.3	9.1	9.1	10.3	8.0	8.4	10.9
Other Work	10.8	9.9	11.0	13.7	13.8	7.5	8.8	8.9	6.7	10.2
Farming	9.2	8.2	8.2	8.2	7.3	7.9	7.6	8.4	8.6	9.5
Unemployed	(no data until 1979)					2.5	3.6	4.4	6.4	6.2
Other Teaching	4.1	3.3	2.5	1.8	2.8	2.1	2.3	2.0	2.3	3.1
Armed Forces	1.1	1.1	1.7	1.8	1.0	1.1	1.6	1.6	1.7	2.0

Enrollments in Agricultural Colleges

There should be a close relationship between the number of agricultural teachers qualified and the number of persons enrolled in agricultural colleges. Table III shows a more rapid increase in agricultural college enrollments over this nineteen-year period than the number qualified to teach. More specifically, as the number of persons qualified to teach has decreased somewhat in the past ten years, the agricultural college enrollments have more than tripled until 1981.

TABLE III

ENROLLMENT IN COLLEGES OF AGRICULTURE COMPARED WITH NUMBERS QUALIFIED IN AGRICULTURAL EDUCATION IN 1959 AND DURING THE LAST TEN YEARS

Academic Year	Enrollment in Agriculture	Percent Based on 1959-60	Number Qualified in Agricultural Education	Percent Based on 1959-60
1959-60	33,968	100%	1,324	100%
1973-74	77,516	228.2	1,623	122.6
1974-75	88,992	262.0	1,660	125.4
1975-76	97,941	288.3	1,697	128.2
1976-77	103,382	304.4	1,749	132.1
1977-78	101,440	298.6	1,791	135.3
1978-79	103,793	305.6	1,656	125.1
1979-80	105,755	311.3	1,584	119.6
1980-81	104,260	306.9	1,468	110.9
1981-82	96,486	284.0	1,368	103.3
1982-83	92,886	273.5	1,277	96.5

A Recent Comparison of Secondary Teacher Supply

A ten-year comparison of the number of positions in teaching vocational agriculture in Table IV shows a general upward and then a downward trend since 1974. The highest number of teaching positions occurred in 1978 when there were 12,844. There was a significent three percent decrease in positions from last year.

During the last ten years, there has been an average need per year for more than 156 teachers that were not available. During the last eight years, there has been a gradual decline in the percent of qualified graduates entering vocational agriculture teaching, with 1983 being the lowest and the first year to drop below 50 percent.

TABLE IV

A COMPARISON OF SELECTED INFORMATION ON THE SUPPLY OF SECONDARY TEACHERS OF VOCATIONAL AGRICULTURE IN 1965 AND DURING THE LAST TEN YEARS

Year	Total No. of Positions	Teachers Needed But Not Available September 1	Total Qualified for Teaching	Percent Qualified Entering Teaching
1965	10,378	120	1,038	64.6
1974	11,578*	292	1,623	58.1
1975	12,107*	211	1,660	60.2
1976	12,486*	211	1,697	61.5
1977	12,694*	221	1,749	60.8
1978	12,844*	189	1,791	56.7
1979	12,772*	144	1,656	54.9
1980	12,510*	117	1,584	52.0
1981	12,450*	98	1,468	52.2
1982	12,474*	35	1,368	51.3
1983	12,099*	42	1,277	45.6

*The figures for 1974 to 1983 do not include teachers of agricultural technicians in technical institutes, community colleges, and similar institutions.

Changes in Curriculum and Clientele, Secondary and Post-Secondary

Changes in secondary vocational agriculture teaching positions are shown in Table V. This table shows that a stable number, 475 or 4.0 percent of the teachers taught classes in junior high school, while slightly more than two-thirds taught high school classes only; 26.3 percent of the teachers taught high school classes as well as classes for adult and young farmers. The number teaching full-time adult and young farmer classes has shown a general decline during the last six years.

As to the kind of schools, 88.3 percent of the vocational agriculture positions were located in comprehensive or general high schools, while 9.5 percent occurred in area vocational high schools. The number of teachers located in single-teacher departments has fluctuated between 46 and 54 percent in recent years. The percent increased to 54.4 in 1983. Hence, the number of persons located in multiple-teacher departments decreased to 45.6 percent.

Curricular offerings in vocational agriculture in the past have showed trends toward specialization. However in 1982 and 1983, only about 55 percent of the teachers were teaching, at least part-time, in specialized nonproduction programs. About 17 percent of the teachers were full-time in some form of specialized off-farm program. The number of teachers in production agriculture programs has increased to 45.9 percent of the total.

TABLE V

TYPES OF SECONDARY TEACHING POSITIONS IN VOCATIONAL AGRICULTURE IN 1982 AND IN 1983

Type of Position	Number 1982	Number 1983	Percent of Total 1983
By Kind of Students			
Teachers of junior high school classes only	508	475	4.0
Teachers of high school classes only	7,893	8,062	67.8
Teachers of both high school and out-of-school classes (adult and/or young farmer classes)	3,593	3,133	26.3
Teachers of adult and young farmer classes only	269	221	1.9
By Kind of School			
Teachers in general or comprehensive high schools	9,974	10,026	88.3
Teachers in area vocational high schools	1,335	1,074	9.5
Teachers in vocational high schools	312	256	2.2
By Size of Staff			
Teachers in single-teacher departments	4,456	6,310	54.4
Teachers in multiple-teacher departments	5,895	5,297	45.6
By Kind of Program			
Teachers in full-time production agriculture programs	5,124	5,275	45.9
Teachers in full-time ornamental horticulture programs	1,204	1,022	8.9
Teachers in part-time production agriculture programs and had one or more classes in specialized programs such as Agricultural Supplies, Agricultural Mechanics	4,493	4,268	37.2
Teachers in full-time specialized programs such as Agricultural Supplies, Agricultural Mechanics, Agricultural Products	711	917	8.0

A breakdown of the types of post-secondary teaching positions in vocational agriculture occurs in Table VI. There were 1,074 post-secondary teachers identified in 1983. Only 28 states reported post-secondary teacher numbers as compared to 32 last year.

Slightly less than three-fourths or 71.6 percent of the post-secondary teachers taught in full time positions. Approximately 28 percent taught part time.

When considering the kind of school, more than one-half of the post-secondary teachers, or 58.2 percent, taught in technical institutes. Thirty-three percent taught in community colleges, while about nine percent taught in area schools.

As to size of staff, almost 90 percent of teachers were in multiple-teacher departments. Thus, ten percent of the teachers were in single-teacher departments. About 31 percent of the teachers taught full-time production agriculture. About 13 percent taught full-time ornamental horticulture. About 31 percent taught in other specialized programs such as agricultural mechanics. Thus, the remaining post-secondary teachers, 23.8 percent, taught part-time production agriculture and in at least one other specialized program.

Graduates and Secondary Teaching Positions by States and Regions

There was a close relationship between the regions with the largest number of teaching positions and those producing the largest number of qualified graduates as shown in Table VII. The Central Region had the highest placement rate with 48.6 percent and the North Atlantic Region, the lowest with 36.5 percent. As stated earlier, the national average

placement rate was 45.6 percent. This table has shown very consistent, proportional data in recent years.

TABLE VI

TYPES OF POST SECONDARY TEACHING POSITIONS
IN VOCATIONAL AGRICULTURE IN 1982 and 1983*

Type of Position	Number 1982	1983	Percent of Total 1983
By Employment Time			
Teachers who teach full-time	1,174	917	71.6
Teachers who teach part-time	766	361	28.2
Teachers who teach part-time as wellas adult and/or young farmer classes	15	3	0.2
By Kind of School			
Teachers in area schools	155	106	9.1
Teachers in community colleges	1,109	379	32.7
Teachers in technical institutes	712	676	58.2
By Size of Staff			
Teachers in single-teacher departments	118	121	10.1
Teachers in multiple-teacher departments	1,859	1,077	89.9
By Kind of Program			
Teachers in full-time production agriculture	397	310	31.5
Teachers in full-time ornamental horticulture	209	133	13.5
Teachers in part-time production agriculture and part time in specialized programs such as agricultural supplies or other	575	234	23.8
Teachers in specialized programs such as agricultural mechanics or other	465	308	31.2

*There were 28 states reporting 1,074 post-secondary vocational agriculture teachers.

TABLE VII

PLACEMENT OF AGRICULTURAL EDUCATION GRADUATES
BY REGIONS IN 1983

Region	Teaching Positions	Number Qualified Graduates	Number Placed in Teaching Vo-Ag	Percent Placed in Teaching Vo-Ag
Southern	5,632	612	272	44.4
Central	3,514	418	203	48.6
Pacific	1,602	143	69	48.3
North Atlantic	1,351	104	38	36.5

A comparison of the number of teaching positions in each of the states and regions is shown in Table VIII. Nine states had over 400 teachers of agriculture in secondary schools. They include Texas, 1,641; Ohio, 651; California, 639; Minnesota, 492; Florida, 481; Oklahoma, 467; Illinois, 436; Alabama, 417; and North Carolina, 404.

The number of teacher replacements was highest in the Southern Region which required 587 teachers, followed by the Central Region with 341, The Pacific Region with 175, and the North Atlantic Region with 85. The Southern Region had the greatest need for teachers on September 1 with 29, the Pacific Region, 7; the Central Region needed five, and the North Atlantic Region, one.

TABLE VIII

SECONDARY TEACHING POSITIONS IN VOCATIONAL AGRICULTURE
BY STATES AND REGIONS, SEPTEMBER 1, 1983

North Atlantic Region

State	Total Positions 8/1/83	Number Replacements Employed to 8/1/83	Change in Positions Since 8/1/82	Net Total Teachers Needed	Teachers Still Needed 8/1/83
New York	386	29	+1	30	0
Pennsylvania	359	21	-7	14	0
West Virginia	116	2	0	2	1
Maryland	92	9	-0	9	0
Massachusetts	82	4	-2	2	0
New Jersey	72	5	+3	8	0
Connecticut	63	7	0	7	0
Maine	50	3	0	3	0
Delaware	42	0	0	0	0
Vermont	41	2	+1	3	0
New Hampshire	36	3	+3	6	0
Rhode Island	12	0	-1	0	0
Total for Region	1,315	85	-2	84	1

TABLE VIII (continued)

SECONDARY TEACHING POSITIONS IN VOCATIONAL AGRICULTURE
BY STATES AND REGIONS, SEPTEMBER 1, 1983

Central Region

State	Total Positions 8/1/83	Number Replacements Employed to 8/1/83	Change in Positions Since 8/1/82	Net Total Teachers Needed	Teachers Still Needed 8/1/83
Ohio	651	45	-9	36	0
Minnesota	492	32	-40	-8	2
Illinois	436	47	-4	43	0
Missouri	336	40	+1	41	0
Wisconsin	323	38	-8	30	0
Iowa	275	14	+2	16	0
Indiana	283	37	+2	39	0
Michigan	198	16	-5	11	3
Kansas	188	25	+1	26	0
Nebraska	146	13	-2	11	0
North Dakota	98	16	+1	17	0
South Dakota	88	18	+3	21	0
Total for Region	3,514	341	-58	283	5

TABLE VIII (continued)

SECONDARY TEACHING POSITIONS IN VOCATIONAL AGRICULTURE
BY STATES AND REGIONS, SEPTEMBER 1, 1983

Pacific Region

State	Total Positions 8/1/83	Number Replacements Employed to 8/1/83	Change in Positions Since 8/1/82	Net Total Teachers Needed	Teachers Still Needed 8/1/83
California	639	46	-3	43	5
Washington	251	27	-9	18	0
Oregon	131	12	-3	9	0
Colorado (1982)	96	24	-1	23	0
Idaho	82	13	-1	12	0
Montana	77	16	+1	17	0
New Mexico	74	11	-1	10	0
Arizona	73	10	-4	6	0
Utah	70	1	+2	3	0
Wyoming	51	5	0	5	0
Hawaii	29	6	+2	8	2
Nevada	19	4	-2	2	0
Alaska (1982)	10	0	+1	1	0
Total for Region	1,602	175	-18	157	7

TABLE VIII (continued)

SECONDARY TEACHING POSITIONS IN VOCATIONAL AGRICULTURE
BY STATES AND REGIONS, SEPTEMBER 1, 1983

Southern Region

State	Total Positions 8/1/83	Number Replacements Employed to 8/1/83	Change in Positions Since 8/1/82	Net Total Teachers Needed	Teachers Still Needed 8/1/83
Texas	1,641	244	-4	240	0
Florida (1982)	481	42	+7	49	11
Oklahoma	467	52	+1	53	0
Alabama	417	13	-1	12	0
North Carolina	404	24	-5	19	0
Virginia	374	40	-7	33	0
Georgia	320	38	-1	37	12
Louisiana	289	18	+1	19	2
Arkansas	277	46	-4	42	1
Kentucky	274	19	0	19	0
Mississippi	269	14	+8	22	0
Tennessee	245	16	-8	8	0
South Carolina	174	21	-7	14	3
Total for Region	5,632	587	-20	567	29
Total for the United States	12,099	1,188	-98	1,090	42

Sources of Teacher Replacement

In order to assist with recruitment, an attempt was made to determine the sources from which teacher replacements were hired. There were few major differences among the regions as to the sources of teacher replacement (See Table IX) and few changes from last year. About 24 percent of the replacements were hired from other schools. The largest source of teacher replacement, or 44.8 percent of the total, were the 1983 agricultural education graduates with a bachelor of science degree. About 51 percent of the replacements were recent agricultural, agricultural education or education graduates. Approximately 13 percent were previous graduates or were former vocational agriculture teachers. Almost seven percent reentered teaching from an agricultural or other occupation.

TABLE IX

SOURCES OF TEACHER REPLACEMENT
BY REGION IN 1983

Sources of Teacher Replacement	Region					
	Central	North Atlantic	Pacific	Southern	Total	Percent
Transfers Between Schools	67	19	37	153	276	24.5
Ag. Ed. B.S. Graduates	202	35	62	206	505	44.8
Ag. Ed. M.S. Graduates	7	6	11	25	49	4.3
Other Agriculture Graduates	4	1	0	12	17	1.5
Other Education Graduates	0	4	1	4	9	0.8
Previous Ag./Ag. Ed. Graduates	6	5	14	49	74	6.6
Former Vo.-Ag. Teachers	13	10	15	35	73	6.5
Re-entry, Ag. Business	7	0	5	23	35	3.1
Re-entry, Farming	5	0	4	12	21	1.8
Re-entry, Other	3	3	4	12	22	1.9
Non-degree	5	8	1	5	19	1.7
Other	5	5	16	2	28	2.5

Number of Teachers Prepared and Placed by State and Region

Table X shows that 1,277 persons were prepared for teaching vocational agriculture in the United States in 88 different institutions. Of those individuals, 582 became teachers of vocational agriculture, 160 have chosen agricultural business careers, 195 entered other fields of work, 122 began farming, 139 began graduate work, while 79 were unemployed. The largest number of teachers, 612, were prepared in the Southern Region, followed by 418 in the Central Region. The Pacific Region qualified 143, and 143 were prepared in the North Atlantic Region.

There was a wide range of percent placement in vocational agriculture among the states, i.e., 0.0 to 100.0. The percent placement showed considerable variation from state to state and when comparing data with that of 1982. Also, there was variation of placement rates among the institutions in any one state. The seven states with the highest placement rates (70 percent or higher) in vocational agriculture were, in order: Georgia, New Hampshire, North Dakota, Wyoming, Oregon, Massachusettes, and Arkansas. The lowest placement rates (25 percent or below) were in the following states (in descending order): Delaware, New Jersey, Rhode Island, New Mexico, Kentucky, Colorado, Connecticut, Nevada, and Vermont.

In 31 states, one university has been designated for the preparation of teachers of vocational agriculture. States with more than one institution preparing teachers of vocational agriculture included Texas with 9; California, Illinois and Tennessee had 5 each; and Kentucky and Louisiana, with 4 each. Arkansas, Oklahoma and Wisconsin have 3 each and there are 2 each in Alabama, Delaware, Georgia, Maryland, Mississippi, Missouri, North Carolina and Virginia.

TABLE X

GRADUATES IN AGRICULTURAL EDUCATION AND PLACEMENT
BY STATES AND REGIONS DURING THE 1982-83 SCHOOL YEAR

North Atlantic Region

State	Institutions Reporting (N=14)	Number of Qualified Graduates					
		Teaching Vo-Ag	Agr. Business	Farming	Graduate Work	Other	Total
Connecticut	Univ. of Connecticut	1	1	2	1	1	6
Delaware	Delaware State College	0	0	0	0	1	1
	Univ. of Delaware	2	2	0	1	2	7
Maine	Univ. of Maine	1	2	0	0	0	3
Maryland	Univ. of Maryland, College Park	3	1	1	0	1	6
	Univ. of Maryland, Eastern Shore	2	0	0	0	1	3
Massachusetts	Univ. of Massachusetts	5	2	0	0	0	7
New Hampshire	Univ. of New Hampshire	3	0	0	1	0	4
New Jersey	Rutgers Univ.	1	0	0	1	2	4
New York	Cornell Univ.	7	2	4	8	5	26
Pennsylvania	Pennsylvania State University	10	6	0	3	8	27
Rhode Island	Univ. of Rhode Island	1	0	0	0	3	4
Vermont	Univ. of Vermont	0	0	0	1	0	1
West Virginia	West Virginia Univ.	2	1	0	1	1	5
Total for Region		38	17	7	17	25	104

TABLE X (continued)

GRADUATES IN AGRICULTURAL EDUCATION AND PLACEMENT
BY STATES AND REGIONS DURING THE 1982-83 SCHOOL YEAR

Central Region

State	Institutions Reporting (N=19)	Number of Qualified Graduates					
		Teaching Vo-Ag	Agr. Business	Farming	Graduate Work	Other	Total
Illinois	College of St. Francis	0	0	0	0	0	0
	Illinois State Univ.	8	1	5	1	0	15
	Southern Illinois Univ.	9	4	7	2	2	24
	Univ. of Illinois	10	4	0	1	3	18
	Western Illinois Univ.	4	0	3	0	1	8
Indiana	Pardue Univ.	8	6	2	2	9	27
Iowa	Iowa State Univ.	20	7	5	2	5	39
Kansas	Kansas State Univ.	19	2	4	6	4	35
Michigan	Michigan State Univ.	10	5	2	3	0	20
Minnesota	Univ. of Minnesota	7	2	2	3	12	26
Missouri	Northwest Missouri State	6	0	3	0	0	9
	Univ. of Missouri	15	2	2	4	5	28
Nebraska	Univ. of Nebraska	11	6	3	1	5	26
North Dakota	North Dakota State Univ.	15	2	2	0	1	20
Ohio	Ohio State Univ.	16	9	1	8	8	42
South Dakota	South Dakota State Univ.	15	2	1	3	2	23
Wisconsin	Univ. of Wisconsin, Madison	9	2	0	2	5	18
	Univ. of Wisconsin, Platteville	6	4	3	0	6	19
	Univ. of Wisconsin River Falls	15	4	1	0	1	21
Total for Region		203	62	46	38	69	418

TABLE X (continued)

GRADUATES IN AGRICULTURAL EDUCATION AND PLACEMENT
BY STATES AND REGIONS DURING THE 1982-83 SCHOOL YEAR

Pacific Region

State	Institutions Reporting (N=15)	Number of Qualified Graduates					
		Teaching Vo-Ag	Agr. Business	Farming	Graduate Work	Other	Total
Arizona	Univ. of Arizona	8	1	0	1	2	12
California	California State Univ. Chico	14	1	0	0	0	5
	California State Univ. Fresno	4	1	0	0	2	7
	California Poly State Univ. Pamona	1	0	0	0	3	4
	California Poly State Univ., San Luis Obispo	4	0	0	0	8	12
	Univ. of California	6	0	0	0	4	10
Colorado	Colorado State Univ.	2	4	3	0	2	11
Idaho	Univ. of Idaho	4	2	1	1	2	10
Montana	Montana State Univ.	5	1	1	0	5	12
Nevada	Univ. of Nevada	1	0	0	0	4	5
New Mexico	New Mexico State Univ.	3	2	0	4	4	13
Oregon	Oregon State Univ.	8	1	1	0	1	11
Utah	Utah State Univ.	5	0	1	1	1	8
Washington	Washington State Univ.	8	2	0	2	3	15
Wyoming	Univ. of Wyoming	6	0	1	1	0	8
Total for Region		69	15	8	10	41	143

TABLE X (continued)

GRADUATES IN AGRICULTURAL EDUCATION AND PLACEMENT
BY STATES AND REGIONS DURING THE 1982-83 SCHOOL YEAR

Southern Region

State	Institutions Reporting (N=40)	Number of Qualified Graduates					
		Teaching Vo-Ag	Agr. Business	Farming	Graduate Work	Other	Total
Alabama	Alabama A&M Univ.	2	0	0	1	10	13
	Auburn Univ.	6	3	3	0	1	13
Arkansas	Arkansas State Univ.	5	0	0	2	2	9
	Univ. of Arkansas, Fayetteville	9	0	0	1	1	11
	Univ. of Arkansas, Pine Bluff	0	0	0	0	0	0
Florida	Univ. of Florida	13	1	0	3	3	20
Georgia	Fort Valley State College	2	0	0	0	3	5
	Univ, of Georgia	18	0	0	0	0	18
Kentucky	Morehead State Univ.	3	0	1	3	4	11
	Murray State Univ.	3	1	0	5	1	10
	Univ. of Kentucky	6	0	9	7	10	32
	Western Kentucky Univ.	5	3	4	5	4	21
Louisiana	Louisiana State Univ.	5	1	0	0	2	8
	Louisiana Tech. Univ.	3	2	0	0	3	8
	Southern Univ.	0	1	0	1	2	4
	Univ. of S.W. Louisiana	1	0	1	0	0	2
Mississippi	Alcorn State Univ. (1982)	0	0	0	0	6	6
	Mississippi State Univ.	7	2	2	1	6	18
North Carolina	A&T State Univ.	2	0	3	2	6	13
	N.C. State Univ.	10	4	2	2	10	28
Oklahoma	Cameron Univ.	9	2	2	0	1	14
	Oklahoma State Univ.	34	2	6	2	10	54
	Panhandle State Univ.	1	2	3	0	3	9
South Carolina	Clemson Univ.	9	1	0	2	1	13

TABLE X (continued)

GRADUATES IN AGRICULTURAL EDUCATION AND PLACEMENT
BY STATES AND REGIONS DURING THE 1982-83 SCHOOL YEAR

Southern Region

State	Institutions Reporting (N=18)	Number of Qualified Graduates					
		Teaching Vo-Ag	Agr. Business	Farming	Graduate Work	Other	Total
Tennessee	Middle Tenn. State Univ.	1	3	3	0	0	7
	Tennessee State Univ.	3	0	0	0	1	4
	Tennessee Tech. Univ.	4	1	1	0	0	6
	Univ. of Tenn., Knoxville	4	0	1	1	3	9
	Univ. of Tenn., Martin	3	0	1	0	2	6
Texas	East Texas State Univ.	3	1	2	4	0	10
	Prairie View A&M College	1	0	1	0	0	2
	Sam Houston State Univ.	13	5	0	8	2	28
	Southwest Texas State Univ.	6	3	1	2	6	18
	Stephen F. Austin State	5	1	2	0	2	10
	Tarleton State Univ.	25	11	3	5	9	53
	Texas A&I Univ.	13	2	0	0	2	17
	Texas A&M Univ.	12	2	2	12	11	39
	Texas Tech. Univ.	6	3	4	5	7	25
Virginia	Virginia Polytechnic Inst. & State Univ.	17	7	5	0	4	33
	Virginia State Univ. (1982)	3	1	0	0	1	5
	Total for Region	272	66	61	74	139	612
Total for the United States		582	160	122	139	274	1,277

Suggestions to States with Teacher Shortages

Table XI is included to aid those who wish to locate additional teachers from other regions. A comparison of the number of teachers qualified and the numbers employed but not teaching, shows that all of the regions had an appreciable number, an average of about 48 percent, of qualified persons accepting other positions. It is also emphasized that only 6.5 percent of the qualified teachers (one-half percent higher than last year) left their home states to find employment in vocational agriculture elsewhere. These data may be an indication of high and low teacher supply regions.

TABLE XI

PLACEMENT OF GRADUATES IN NON VO-AG TEACHING POSITIONS AND OUTSIDE THE STATE BY REGION IN 1983

Region	Teachers Qualified	Employed But Not Teaching Vo-Ag	Employed Outside the State
Southern Region	612	315	36
Central Region	418	184	29
Pacific Region	143	57	12
North Atlantic	104	60	6
TOTAL	1,277	616	83

APPENDICES

APPENDIX A

DUE OCTOBER 1, 1983

RETURN TO: Dr. David G. Craig
Department of Vocational-Technical Education (Agriculture)
225 Morgan Hall
Knoxville, TN 37901-1071

PLEASE Return by October 1, 1983

SURVEY OF TEACHER DEMAND IN VOCATIONAL AGRICULTURE IN 1983

Name_____ Position_____ State_____

1. Number of secondary teachers of vocational agriculture employed in your state during 1982-83 school year._____(Do not include post-secondary teachers)

2. Number of replacements required for the above teachers during the past year. _____

3. Of the replacements hired, how many were:

   a. Transfers from one school to another _____
   b. Agr. Ed. B,S, 1983 graduates _____
   c. Agr. Educ. M.S. 1983 graduates _____
   d. Other agriculture 1983 graduates _____
   e. Other education 1983 graduates _____
   f. Previous Agriculture or Agr. Educ. graduates _____
   g. Former vo-ag teachers _____
   h. Re-entry, Ag. Business _____
   i. Re-entry, farming _____
   j. Re-entry, other _____
   k. Non-degree _____
   l. Other _____

   Total replacements should match No. 2 above _____

4. Number of new and additional positions in teaching vocational agriculture which became available during the past year (7/1/82 to 6/30/83.) _____

   Number of positions discontinued _____

   Net gain or loss in number of positions during the past year _____

5. Number of vocational agriculture teachers still needed (9/1/83) but not available in your state _____

6. Number of vocational agriculture teachers last year who held emergency or temporary certificates _____

7. Number of departments which probably will not operate this year because of a shortage of teachers _____

Of the total number of Vocational Agriculture teachers--

Secondary

How many teachers:

8.1 Taught junior high school or middle school classes only _____

8.2 Taught high school classes only _____

8.3 Taught both high school and adult and/or young farmer classes _____

8.4 Taught adult and/or young farmer classes only _____

Total teachers in state = _____

How many teachers:

8.5 Taught in comprehensive high schools _____

8.6 Taught in vocational schools _____

8.7 Taught in area vocational high schools _____

Total teachers in state = _____

How many teachers:

8.8 Taught in single teacher departments _____

8.9 Taught in multiple teacher departments _____

Total teachers in state = _____

How many teachers:

8.10 Taught full time in production agriculture programs _____

8.11 Taught full time in ornamental horticulture programs _____

8.12 Taught part time in production agriculture and part time in specialized programs such as agricultural supplies or other _____

8.13 Taught full time in specalized programs such as agricultural mechanics or other _____

Total teachers in state = _____

Post-Secondary

NOTE: Your state has_____institutions and_____programs.

How many teachers:

9.1 Taught full time _____

9.2 Taught part time only _____

9.3 Taught part time as well as adult and/or young farmer classes _____

Total teachers in state = _____

How many teachers:

9.4 Taught in area schools _____

9.5 Taught in community colleges _____

9.6 Taught in technical institutes _____

Total teachers in state = _____

How many teachers:

9.7 Taught in single teacher departments _____

9.8 Taught in multiple teacher departments _____

Total teachers in state = _____

How many teachers:

9.9 Taught full time in production agriculture programs _____

9.10 Taught full time in ornamental horticulture programs _____

9.11 Taught part time in production agriculture and part time in specialized programs such as agricultural supplies or other _____

9.12 Taught full time in specialized programs such as agricultural mechanics or other _____

Total teachers in state = _____

APPENDIX B

DUE OCTOBER 1, 1983

RETURN TO: Dr. David G. Craig
Department of Vocational-Technical Education (Agriculture)
225 Morgan Hall
Knoxville, TN 37901-1071

PLEASE - Return by October 1, 1983

SURVEY OF TEACHER SUPPLY IN VOCATIONAL AGRICULTURE IN 1983

1. Total full-time, four-year degree undergraduate enrollment in your institution:

   1.1 In Agriculture (not including Home Economics, Business, Hotel Administration). _____

   1.2 In Agricultural Education _____

2. Number qualified for teaching vocational agriculture from your college or university 7/1/82 to 6/30/83. _____

3. Given those qualified above, indicate their employment status as of 9/1/83: (Please check your addition.)

   3.1 Teaching Vo-Ag _____

   3.2 Teaching and other subjects _____

   3.3 Ag. Business _____

   3.4 Farming _____

   3.5 Graduate work _____

   3.6 Armed Forces _____

   3.7 Other (including foreign students) _____

   3.8 Unemployed or still available _____

4. Of those qualified during 7/1/82 to 6/30/83, how many were employed in Vo-Ag outside your state? _____

   4.1 Of the graduates who took Vo-Ag jobs in other states, please list the number going to each state.

STATE	NUMBER	STATE	NUMBER
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Signed_____Institution_____