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THE S I S

THE EFFECTS OF VOCATIONAL AGRICULTURAL
INSTRUCTION ON THE SELECTION OF OC-
CUPATIONS BY HIGH SCHOOL STUDENTS.

Submitted
as
The Major Thesis
in
Agricultural Education
for the
Master of Science Degree .
The Virginia Polytechnic Institute
by
Ashby Weldon Kay

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THE PROBLEM

A STUDY OF THE EFFECT OF VOCATIONAL
AGRICULTURAL EDUCATION IN VIRGINIA
HIGH SCHOOLS IN INFLUENCING STUDENTS
OF HIGH SCHOOLS TO ELECT FARMING OR
ALLIED OCCUPATIONS AS THEIR VOCATIONS.

FOREWORD

After eight years of development of vocational agricultural education, in Virginia, under the terms of Federal Vocational Act, it seems wise to undertake an investigation to determine something of the actual value of the Agricultural Education Program in the State. In order to ascertain the real worth of agricultural education it was necessary to find out the vocations of former students of vocational agriculture and in the light of these findings draw certain conclusions about the work. In determining the vocations of this group of students, many other facts of value were found.

The nature of the data necessary for this paper required active co-operation on the part of each individual in the entire organization responsible for the program of vocational education in Virginia. Acknowledgment is hereby made of the valuable assistance rendered by the fifty-two Instructors who filled out and returned the questionnaires. In many cases this was hard and tedious work and required many hours of extra time and effort. The efforts of these teachers constitute a tribute to the professional attitude of the high school teachers of vocational agriculture. Again, the writer is indebted to Professor _____, former State Supervisor of Vocational Agriculture; to the present State Supervisor, _____; and to Professor _____ for constant aid and untiring help and beneficial criticism.

THE AIMS OF THIS
STUDY

- First:** To determine the occupations of graduates and past students of high schools, who have received one or more years of vocational agriculture.
- Second:** To determine the occupations of graduates and past students of high schools with one or more years of high school work in a group of rural high schools in which vocational agriculture had not been taught.
- Third:** To determine the correlation existing between the length of course taken by students and the choosing of farming as a vocation, in the respective groups of high schools under consideration.

I N T R O D U C T I O N

Pertinent questions are being asked by educational leaders and legislative committees concerning the value of vocational instruction in agriculture. These questions are provoked because of the relatively high cost of instruction in agriculture as compared to other branches of study. One of the outstanding criticisms of Division Superintendents and School Boards is that vocational instruction does not function, in that it fails to place a large percent of its students on the farm. Until these questions are met and properly answered there will remain the great question - Is Vocational Agriculture worth the cost?

Up to the present time, the subject of what becomes of the boy who takes vocational agriculture in the high school, has received very little study. There are three such studies recorded in Federal Bulletin - "Effectiveness of Vocational Agriculture". These studies were made in 1921 and 1922. Owing to the rapid strides taken and marked progress made by this type of instruction these studies are quite out of date. This present time is more opportune because we are farther from the abnormalities of the World War and the vocational program has functioned long enough to have a true story of its own. The Virginia schools are not unlike those reported in the Federal Bulletin mentioned above, many of them have been running too short a time for any data on their output to be accurate and of value. Any department which had been running less than four years was eliminated from this study.

The nation, the state, the community, have invested in vocational agricultural education with the hope and aim of improving farming methods and farm living. Except a goodly percent of the product of this type of schools returns to the farm, what advantage is there in having highly trained men and nicely equipped departments all over the state. Why the extra expense to the Federal, State and local school appropriations for this type of instruction, if all of the students who have its advantages are following other lines of work and none farming? It is the purpose of the writer to show how vocational agriculture may be justified through the occupations of former students.

PROCEDURE

- First:** Follow-up records were secured of all former students who had had one or more years of vocational agriculture in the Virginia Schools. These were obtained by questionnaires sent to each Instructor in the State.
- Second:** With the aid of the State Supervisor of Secondary Education in Virginia, typically rural high schools were selected in Virginia. These schools had not had vocational agriculture taught and were selected as a check on the vocational schools.
- Third:** Follow-up records were then secured, from the Principals of these schools, of all male students in this group of non-vocational high schools. Only such boys as those who had completed one full year of vocational agriculture were included in the study.
- Fourth:** A careful study was then made of these data secured from these two types of high schools. The methods employed in the tabulation and in comparing were identical for the two types of schools.

PLAN FOR THE STUDY

The the spring of 1922 a study of the follow-up records of vocational students of the Virginia high schools was completed. This study was made by the State Supervisor of Vocational Agriculture, Mr. Thomas D. Eason, in co-operation with the Federal Board for Vocational Education. The data collected at that time showed the work of vocational agriculture during the first five years of its operation under the Smith-Hughes plan. Mr. Eason's study did not have a check to show the comparison of the vocational schools with non-vocational schools.. The present study covers a period of eight years of work done by the vocational department, from 1917 to 1925.

The form of questionnaire used by Mr. Eason was comprehensive and sought vital information concerning the occupations of former vocational students. A questionnaire containing the essential elements of the one used in 1922 study was devised for the present study.

Information was sought at the state office of the Supervisor of Vocational Agriculture concerning the departments throughout the state. The date each department was established, the location of each department, length of time each department had been in operation and training and attitude of the Principal of the high schools in which vocational departments were located, were among the things studied at the state office.

It seems fitting that there be a check on the data, secured from the vocational schools, relative to the placement of former students on farms. There will be added significance in the findings, if it can be shown that the occupational selection of vocational students shows preference to farming over the occupational selection of students of non-vocational training.

A group of rural high schools, in which vocational agriculture had not been taught, was selected by which the results of vocational agriculture might be measured. This group of high schools was selected with the aid of the State Supervisor of Secondary Education and only rural schools with farming advantages comparable to the vocational schools were included in the list.

Questionnaires designed to secure the same information, requested from the vocational teachers, were sent to the Principals of these schools. Along with each questionnaire went a letter explaining the purposes of the study and urging a hearty co-operation on the part of all concerned.

After these forms, containing the information sought, were returned a very careful study was made of the data of both groups of schools. Methods of manipulation, tabulating and summarizing were identical in both types of schools. The period of years for which the data was collected was the same for both the vocational and the non-vocational schools, 1917 to 1925 including the graduates of 1925.

THE OCCUPATIONAL SELECTION OF VOCATIONAL
STUDENTS AND NON VOCATIONAL STUDENTS.

Fifty three of the agricultural schools sent in the information asked for on the questionnaires mailed to them. There were three schools whose instructors did not return the forms sent them. The number responding represents 94.65 percent of the Federally aided white vocational schools in Virginia, which had at that time been in operation four years or more. The number reporting is sufficiently great to make our study very accurate. None of the reports sent in were eliminated from the study.

In securing data from the non-vocational high schools it was necessary to confine ourselves to such rural high schools as had had the same Principals for eight years or more prior to the time of this study. This, it was thought, would be a means of getting very accurate data. These educators possessed first hand information concerning all of the boys who had left their schools during the time covered by the study. Be it said to the credit of these ladies and gentlemen, that they were most cordial in lending aid to this work. Because of this restriction to a very highly selected group of schools, the number of non-vocational high schools is much smaller than the number of vocational schools. Also the number of students reported is correspondingly small. Even though the numbers are small in the non-vocational group of schools, yet the accuracy of reporting will make this part of our study absolutely dependable.

The total of 967 former students of vocational agriculture are accounted for as follows: 43.79 percent are now farming, 13.88 percent are in allied occupations, and 43.33 percent are in non-agricultural occupations. This percentage of former students farming may seem low to the casual reader, but when it is remembered that those who enter allied occupations are in a very vital way connected with farm life, the work of vocational agriculture is seen not to be small. And too - when the percentage farming among the agricultural students is compared with the same group of the non-vocational schools the actual farming figure of 43.79 percent is not so low, but relatively high. The percent of students of non-vocational schools who actually engage in farming is only 24.6.

In a study entitled "Effectiveness of Vocational Education in Agriculture" conducted by the Federal Board of Vocational Education, the percent of former students farming was 54. This study was completed in 1922 and there were thirty five states of the Union contributing to the data. This study conducted by the Federal Board lacked the essential feature, a check, by which to measure the results of vocational education.

It seems reasonable to suppose that the best way to rate the accomplishments of any system of education is by comparison with other systems. Included in the same Federal Bulletin, referred to above, is a study conducted by Mr. T. D. Eason of the Virginia Vocational Schools. In this study of Mr. Eason's there are students farming to the extent of 40 percent of all former vocational students. There are more students farming as recorded in the present study than in Mr. Eason's study, by 3.79 percent of the whole number of former students.

There are several reasons for this difference in the Federal study and the present study. There are decidedly more students recorded as farmers in the former than in the latter. During the period covered by the Federal study all of the influences of early post war days are reflected in the school boy and his choice of a vocation. The high prices of farm produce, the unheard of high prices paid for farm land, and the ready market for every pound of produce, animal or grain, and the inflation of our currency, during the period of the Federal study - these things had a powerful influence upon the young man and his choice of a career.

Consequently, many were entering farming in preference to other vocations. On the other hand, the period covered by the present study not only takes into account the years of inflation, but also the critical period which follows in the wake of every great war. The past five or six years have been characterized by abnormal prices and agricultural depression. This economic pressure, which is driving boys from the farm and causing many of the mature farmers to sell their farms and move to the city, has been in full force for the past few years and is reflected in this study. Thus, it seems that this is the most inopportune time for this study. Despite this fact, it is not a bad plan to check up every so often and see where we are headed.

As to why the Virginia schools are placing a larger number of students on the farm now than was shown by the study of 1922 is a matter of speculation, very largely. One thing which has meant a great deal to the cause of vocational agriculture, is the closing of several departments where there was no farming interest in the community. Again, there has been much more care and study given to the matter of locating new departments. Instructors have been securing a more select type of student than was found in the average class a few years ago. In addition, better methods are now employed, higher standards for supervised farm practice; better trained teachers and more adequate supervision had been instituted - all of which have steadily raised the efficiency of the Virginia system.

Table 1 gives a comparison between the vocational and the non-vocational schools in respect to the total number of students reported, total number of students farming and percentage of students farming. Of every hundred students, who have been trained vocationally, 43.79 are farming, while 24.6 of the non-vocationally trained students find occupations on the farm. There are almost twice as many students, when counted on a percentage basis, farming from the vocational group than from the non-vocational group of schools.

Chart 1 and 2 are graphic representations of the facts given in tables 1 and 2. These charts show on a percentage basis the difference existing between the vocational and the non-vocational schools in the placement of former students in farming, in allied occupations and in non-agricultural pursuits. These charts represent the percentages as based upon the total number of former students for whom an occupational status was reported.

T A B L E 1

THE OCCUPATIONAL SELECTION OF FORMER VOCATIONAL AGRICULTURAL STUDENTS.

Students now farming.....	419
Students in occupations allied to farming....	133
Students in non-agricultural pursuits.....	405
Total number of cases.....	957
Percent of students farming.....	43.79

T A B L E 2

THE OCCUPATIONAL SELECTION OF STUDENTS OF HIGH SCHOOLS WHERE THERE WAS NO VOCATIONAL INSTRUCTION IN AGRICULTURE.

Students now farming.....	82
Students in occupations allied to farming....	13
Students in non-agricultural work.....	238
Total number of cases.....	333
Percent of students farming.....	24.6

T A B L E 3

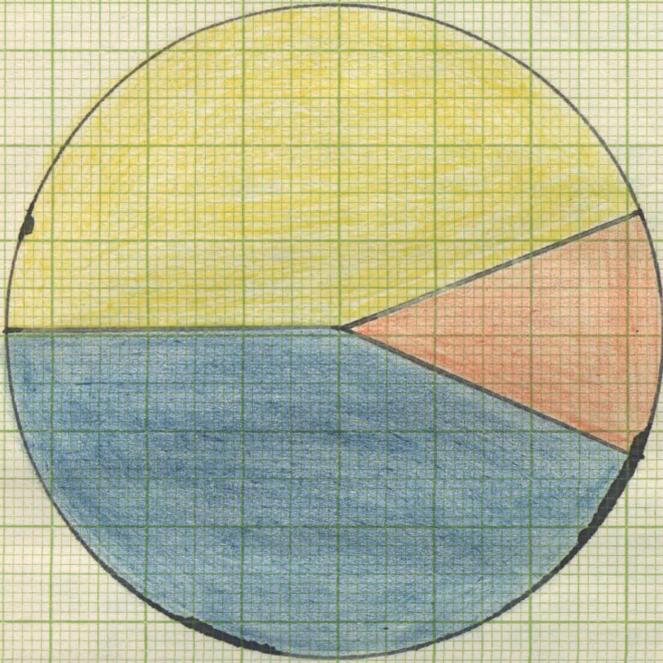
THE PLACEMENT OF FORMER VOCATIONAL AND
NON-VOCATIONAL STUDENTS IN ALLIED OCCU-
PATIONS AND IN COLLEGES.

	Vocationally trained students	Students who did not re- ceive any voc. instruction.
Percent of all students in occu- pations allied to farming.....	13.88	3.9
Percent of all graduates who go to V. P. I. and take Agri. courses	12.33	2.73
Percent of all graduates who attend Academic Colleges	7.83	31.2
Percent of all students who engage in rural allied work.....	1.35	1.2

VIRGINIA POLYTECHNIC INSTITUTE

Chart.....1

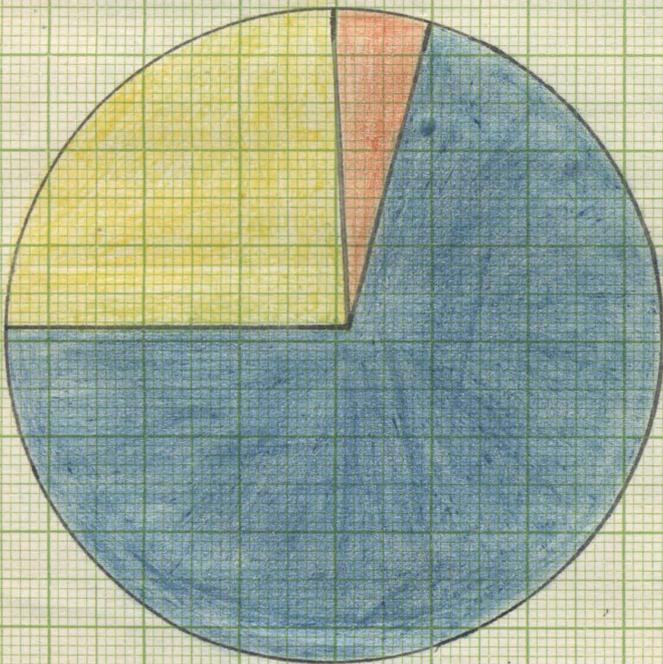
Occupational distribution of 957 former agricultural students.



-  Per cent now farming.....43.79
-  Per cent in allied occupations..13.88
-  Per cent engaged in occupations other than farming.42.33

Chart.....2

Occupational distribution of 333 former non vocational students..



-  Per cent now farming..... 24.6
-  Per cent in allied occupations.. 3.9
-  Per cent engaged in occupations other than farming. 71.5

**THE SELECTION OF OCCUPATIONS ALLIED
TO FARMING BY VOCATIONAL AND NON-
VOCATIONAL STUDENTS.**

The next point to which attention will be called is the comparison between the two groups of schools in the placement of former students in occupations allied to farming. Note the comparison of the percentages of all former students engaged in occupations allied to farming in the vocational and the non-vocational groups of students. There are ten percent more vocational students who follow allied occupations than non-vocational students. The difference in these percentages is due largely to the fact that former students who take agricultural courses in the Agricultural Colleges are classed among occupations allied to farming. There are four times as many students entering the colleges of agriculture from the vocational high schools as enter the same institutions from the non-vocational high schools. A part of this great difference is due to the fact that a greater part of the non-vocational students who enter college at all enter the academic institutions. This fact may be due to preferences on the part of the pupils, or it may be caused by former training being extremely academic. The academic college is more inviting to the boy who is trained in an academic school where the vocational is neglected. Where students are given equal opportunities, by reason of former training, for entering either type of college there seems to be a decided tendency on the part of the pupil to crowd the agriculture college more than before the advent of vocational agriculture in high schools.

During the period covered by this study there were 118 (12.33 percent) of all former vocational students, who entered the state college of agriculture, and chose courses in agriculture. A study recently completed by Professor E. C. McGill of the Virginia Polytechnic Institute gives testimony to this part of the present work. The non-vocational schools during the same period of time sent nine (2.73 percent) of their former students to the agricultural courses of the agricultural college.

Is it not significant that the ratio of vocational to non-vocational students attending the college of agriculture is four to one? It is evident that vocational agriculture is a mighty influence directing students to the agricultural courses of the agricultural college, when the vocational program in the high school occupies one-fourth of the student's time and increases the percentage from 2.73 for non-vocational students to 12.33 for vocational students.

The true influence of the non-vocational high schools in directing students to academic colleges rather than to the college of agriculture is apparent from table four. Thirty-one students of every hundred trained in the non-vocational high schools (31.2%) attend academic colleges while of the vocational students seven (7.83%) go to academic colleges. This great difference in collegiate selection on the part of high school boys may not be due entirely to the preferences of the students or to their fitness to enter a particular type of college, but often boys are influenced by their teacher to attend the college he happens to come from. There is no criticism, offered here, of this custom, except to say that it is unfortunate to advise a student in the light of the teacher's preferences and to disregard the boys' aptitudes, possibilities and needs.

It must be remembered in this connection that all of the vocational students have about three chances to one to be influenced by academic teachers rather than by the agricultural teacher. The non-vocational students get only the academic influence. This being the true situation it is impossible to get vocational agriculture without academic interference. On the other hand, all of the non-vocational schools included in this study operated without vocational interference.

The findings of this paper are all the more significant because of this unavoidable disadvantage to which the vocational schools are subjected.

The difference, in percentage of students engaged in rural work other than farming, is not as great as other comparisons show. However, the vocational students are much in the majority in this work. The percentage of former students of both types is low in rural work. Table four gives the number of vocational and non-vocational students who enter the allied occupations. This table also shows what occupations are classed as allied to farming in this study. In all there are eight occupations which are considered allied to farming. The attendance of the agricultural college is considered allied if a student takes some of the agricultural courses. Fifteen former vocational and nine former non-vocational students are engaged in rural work considered allied to farming. Federal bulletin 82 "Effectiveness of Vocational Agriculture" lists several other occupations as allied, but where there was any doubt about an occupation it was not counted as such in this study. Occupations such as auto mechanics, auto drivers, and carpenters, if followed in strictly urban communities might be but slightly benefited by vocational instruction in agriculture.

When it is remembered that about 80 percent of all rural boys remain in rural communities (Federal Report) the vocational significance of farm shop and farm mechanics deserve mention.

T A B L E 4

DETAILS OF OCCUPATIONAL SELECTION OF VOCATIONAL AND NON-VOCATIONAL STUDENTS WHO ENGAGE IN WORK ALLIED TO FARMING.

	Vocational trained students	Students with no vocational training
Number of students at V. P. I. studying agriculture.....	118	9
Number of former students employed as rural carpenters.....	2	1
Number of Agricultural Instructors	2	
Officers of farm organizations...	2	1
Greenhousemen.....	3	
Cow Testers.....	3	
Dairy manufacturers.....	1	1
Seed Dealers.....	1	
County Surveyors.....	1	1
 Total number of cases	 <u>133</u>	 <u>13</u>

TO WHAT EXTENT ARE FARM BOYS KEPT IN THE
AGRICULTURAL INDUSTRY BY VOCATIONAL IN-
STRUCTION IN AGRICULTURE?

The New York study of 1922 gave very conclusive evidence that there are vastly more vocational students who enter farming than non-vocational students. The Pennsylvania study indicated the same. These two studies were checked by an investigation of a large number of non-vocational schools. It is not indicated in the Federal study whether care was exercised in the choice of these non-vocational schools. When it is remembered that 45 percent of the vocational students of the New York schools farm, and 3.6 percent of the non-vocational students farm, the difference seems incredible. The present study does not show so great a difference in student placement in the two types of schools. However, the variation in percentage of placements on farms and in other occupations is sufficiently great to prove that vocational agriculture does function in the matter of keeping boys in the farming occupations.

Chart 3 pictures clearly the influence of vocational agriculture in placing former students on the farm. Reference to this chart shows that 43.79 percent of all former vocational students farm as against 24.6 percent of all former non-vocational students. When the percentages, of those engaging in allied occupations, are added to the farming groups for both types of schools, there is a total of 57.67 percent for the vocational schools and 28.5 percent for the non-vocational schools. It may be seen from these figures, that due to the institution of vocational agriculture into certain of the rural schools in our state there are 29 students of every 100 saved to the farming business. This is a substantial save and with the improving methods and gaining efficiency of the present system we may expect greater things in the future.

Some objections may be raised to the placing of the Agricultural College students who study agriculture in College, in the allied occupations group. These objections are largely met when it is remembered that a greater part of these students will return to rural communities in post college days. Again, the Agricultural College holds out for these students inducements, in vocational preparation, without which many of the same students would not go to college at all. This would mean the choosing of a vocation immediately after the completion of high school. If this is done, would not the farm get a proportionate number of these students? The claim is here made, that the farming business would get 52 of the 118 who take agriculture at the Agricultural College, or the same percentage as of all other students. This is a very conservative estimate and if computed on this basis would give a percentage farming almost identical to the present figures presented in this study.

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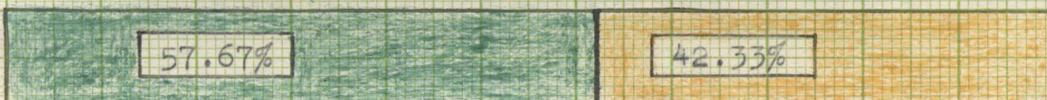
CHART III

INFLUENCE OF VOCATIONAL AGRICULTURE IN DIRECTING
HIGH SCHOOL STUDENTS TO THE FARM.

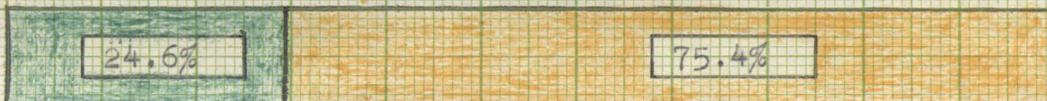
ALL FORMER VOCATIONAL STUDENTS IN 52 VIRGINIA SCHOOLS.



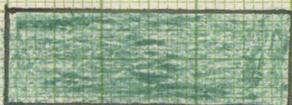
ALL FORMER VOCATIONAL STUDENTS IN 52 VIRGINIA SCHOOLS,
ALLIED OCCUPATIONS ADDED TO FARMING.



ALL FORMER NON VOCATIONAL STUDENTS IN 19 VIRGINIA SCHOOLS



ALL FORMER NON VOCATIONAL STUDENTS IN 19 VIRGINIA SCHOOLS,
ALLIED OCCUPATIONS ADDED TO FARMING.



FARMING



NOT FARMING

UNIVERSITY GRAPH PAPER 202A

INFLUENCE OF THE AMOUNT OF VOCATIONAL IN-
STRUCTION ON OCCUPATIONAL SELECTION OF
FORMER STUDENTS

In the Virginia study of 1922 the statement is made that "Apparently, the more education a student receives the less likely he is to follow farming as a means of earning a livelihood." In the present study the same may be said about the non-vocational schools without reserve, but if total influence is considered, this statement does not hold true for the vocational students. Table 5 shows that in actual farming there is a falling off in percentages as the years of vocational agriculture increase. This apparent loss to the farm, in the way of actual farmers, is corrected by the increasing percentages of students who engage in allied occupations. With each additional year of vocational agriculture there is an increase in the percentage of students who enter the allied occupations. This gives a substantial increase in the total influence of vocational agriculture on former students with each additional year of vocational training.

On the contrary, table 5 shows a total percentage which decreases with each additional year of training taken by the non-vocational students. It is of particular interest to note that the least percent returned to the farm in the vocational group is substantially more than the greatest percent returned to the farm in the non-vocational group. That is to say, the percentage of students returning to the farm from this type of schools, varies inversely with the number of years of training taken by the student.

Another striking difference existing between the two types of students, is seen in the columns headed "Percent in allied occupations". For the vocational students, the lowest percent is in group 1 where the boys have had one year of training. There is a fairly uniform increase in these percentages as the years of agriculture increase from 1 to 4. These percentages do not increase with any degree of regularity on advancing from one to four years of training in the non-vocational students. When it is noted, that the average percent for all groups of the non-vocational students is 3.9, whereas the percent for an average in the vocational group is 13.88, the benefits of vocational training is in evidence.

Objections may be raised by some as to the counting of the allied occupations as a part of the influence of vocational agriculture. But with certain qualifications and restrictions this may be done without impropriety. Allied occupations have been included here with no intention to magnify the influence of vocational agriculture, nor to reflect discredit to the high schools of the old type. It is only with this definition of allied occupations that this addition may be justified. Allied occupations as here used may be defined as those occupations which are so closely related to farming that the training received in vocational agriculture has a definite vocational value.

Table 5 is an attempt to show the influence of varying amounts of vocational and non-vocational training on the same students or students with like opportunities so far as high school training goes. All possible combinations, to be made with students who have had from one to four years of vocational or non-vocational training, are listed in this table. It is an outstanding fact that there are numerically many more students who drop out of school at the end of the second or third year. It is none the less significant that 60 percent of these one year students, who drop out, engage in farming. This group of students offers a promising field for the vocational teacher of the future. The students who have had the least amount of training, vocational or non-vocational, are the boys who are destined to fill the ranks of the basic industry of man. It is beyond the scope of this paper to give any data on the part-time or evening school work, but the vast majority of the boys who drop out of regular school may be reached by these types of classes. Through this means, many instructors are reaching and training many boys and adults for better farming and more intelligent rural leadership.

Table 6 further shows that regardless of the amount of vocational agriculture taken by the students the percentage returning to the farm decreases as the number of years of training increases. Vocational agriculture is influencing many of these boys to remain in school until graduation and then to go the the Agricultural College. Of the 118 former vocational students,

who have gone to the Virginia Polytechnic Institute and have chosen agricultural courses, there will be many who will return to the farm in after life. Certainly a larger percentage of these students may be expected to return to the farm in after life than students whose training has been academic throughout.

The true value of vocational agriculture cannot be determined at the time of this study with only eight years of operation completed. If a good showing for vocational agriculture were the primary aim of this paper, this time is most opportune for the study. The truth about vocational agriculture is sought rather than a stuffed report. The period covered by this study in many ways is abnormal and has not warranted the best functioning of this new type of instruction. There are many boys who have left the farms because there is not room enough for two or more families. These former students are at present engaged in non-agricultural pursuits. In the course of a few years these boys will come back to occupy the farm which dad at that time will not be able to cultivate. In many instances there will be more than one boy in the same family and the one best qualified, by reason of education, will be the more likely to take charge of the farm. The point is that at the present time, with so few years of the vocational program behind us, the boys who receive such training have not come into their own. In the course of ten or more years we may reasonably expect to find a larger percentage of the output from these schools engaged in farming.

The Federal study of 1922 was conducted at a more opportune time, for showing large numbers in farming, than the present study. The former had as a total influence the impetus afforded agricultural pursuits by scarcity of food, abnormal prices, and a great world demand and at the same time receiving very little or none of the effects wrought by the subsequent slump in practically all agricultural products. The present study includes all of the years covered by the study of 1922 and three years of the slump period in addition. It is needless to say that the effect of these years of depression and commodity deflation will have the effect of lowering the apparent efficiency of the vocational schools.

T A B L E V

THE INFLUENCE OF VOCATIONAL AND NON-VOCATIONAL
INSTRUCTION ON OCCUPATIONAL SELECTION OF FOR-
MER STUDENTS.

Yrs. of agri.	Yrs. 'reg. 'H. S.	No. of 'cases	No. now 'farm- 'ing	No. in 'all al- 'lied oc- 'cupations	% farm- 'ing	% in al- 'lied oc- 'cupa- 'tions	Total % 'in farm- 'ing and 'allied occu.
1	1	118	71	1	60	.84	61.00
1	2	97	50	2	52	2.60	53.60
1	3	85	34	5	40	5.90	45.80
1	4	50	15	6	30	12.00	42.00
Total		350	170	14	46.6	4.00	52.60
2	2	106	56	8	53	7.41	60.37
2	3	69	30	10	44	14.5	56.50
2	4	58	15	14	26	24.14	50.00
Total		233	101	32	43.3	13.7	57.00
3	3	52	26	8	50	15.4	65.40
3	4	87	36	20	41	23.00	64.40
Total		139	62	28	44.6	20.14	64.74
4	4	235	86	59	36.6	25.8	61.7
Total		957	419	133	43.79	13.88	57.67

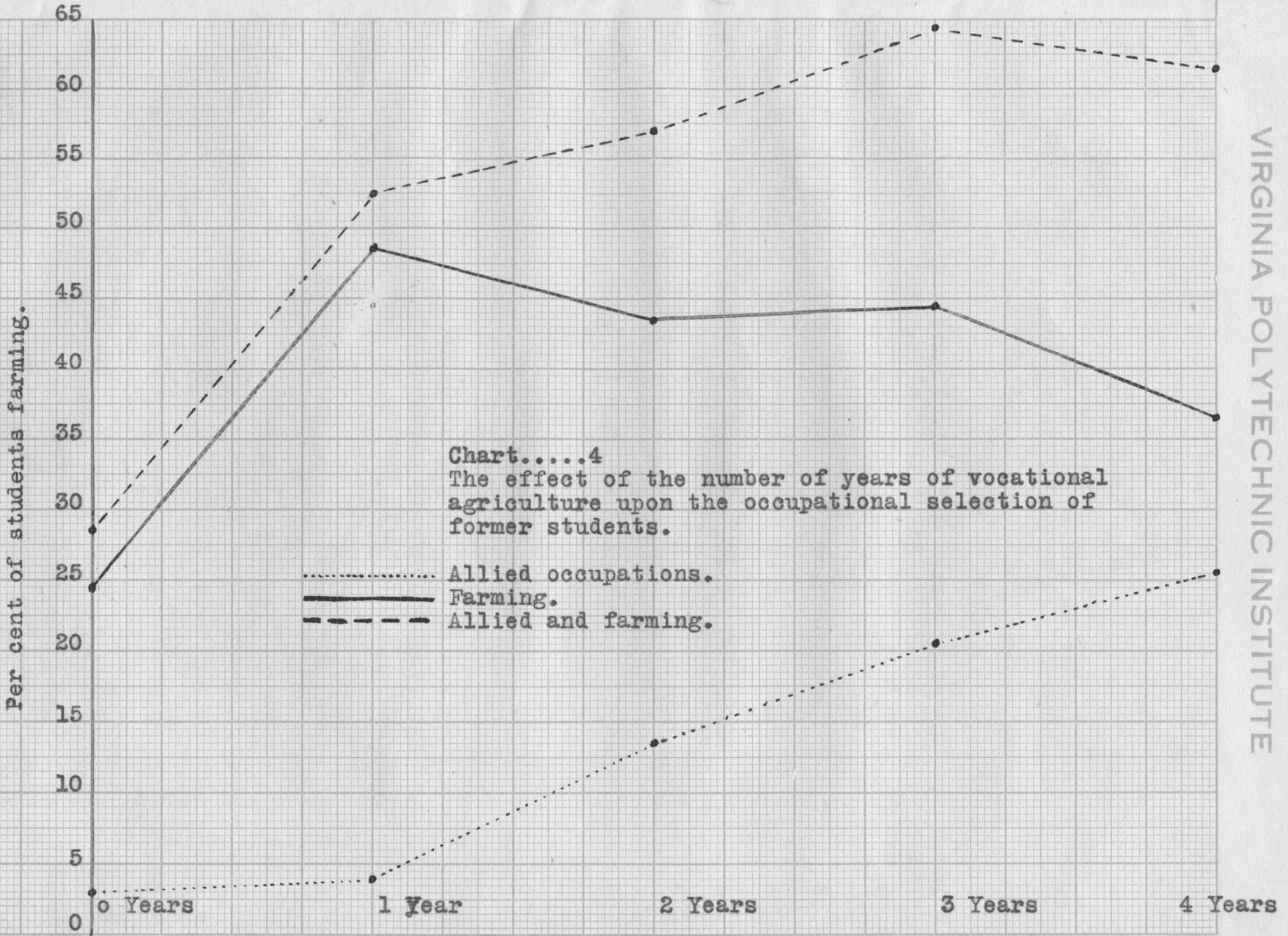


Chart.....4
The effect of the number of years of vocational agriculture upon the occupational selection of former students.

..... Allied occupations.
———— Farming.
- - - - Allied and farming.

Years in agriculture.

UNIVERSITY GRAPH PAPER 202A

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T A B L E VI

THE INFLUENCE OF THE AMOUNT OF VOCATIONAL
INSTRUCTION IN AGRICULTURE ON THE OCCUPA-
TIONAL SELECTION OF STUDENTS.

Group No.	No. of cases	No. farming.	No. in allied occupa.	% farming	% in allied occupations	Total % farming and in allied occupa.
1	350	170	14	48.6	4	52.6
2	233	101	32	43.3	13.7	57
3	139	62	28	44.6	20.14	64.74
4	235	86	59	36.6	25.8	61.7
	957	419	133	43.79	13.88	57.67

T A B L E VII

THE INFLUENCE OF THE AMOUNT OF NON-VOCA-
TIONAL INSTRUCTION ON THE OCCUPATIONAL
SELECTION OF FORMER STUDENTS.

Group No.	No. of cases	No. farming	No. in allied occupa.	% farming	% in allied occupations	Total % farming and in allied occupa.
1	67	22	2	32.8	2.98	35.8
2	35	16	1	45.7	2.8	48.6
3	38	10	0	26.3	0	26.3
4	193	34	10	17.6	5.18	22.8
	333	82	13	24.6	3.9	28.5

SOME INFLUENCES WHICH AFFECT OCCUPATIONAL SELECTION OF FORMER AGRICULTURAL STUDENTS.

There are certain more or less vital influences which affect in a very definite way the number of former students who follow farming or non-farming occupations. These influences are not confined to any particular type of school or to any particular section of the state. Some of the most prominent of these factors are: size of town in which vocational departments are located; distance from which pupils are hauled to the central school; industries of the community which come into direct competition with farming; attitude of School Boards and Superintendents toward vocational agriculture; training of the principal of the high school in which the vocational department is located; and the economic pressure upon the farmer during the post war years.

While all of these influences have an important bearing upon the placement of vocational students on the farms of our state, the scope of this paper is so limited as not to permit a treatment of all of these factors. The discussion which follows shall be concerned with only three of these factors.

Chart 5 is a graphic representation of the effect of the size of town on occupational selection of former students. It is true that there are only three or four vocational departments in the state located in large towns. These large town schools are sending 20% fewer students to the vocation of farming than the schools where there is no town. This fact rather indicates that the strictly rural places are best for the proper functioning of vocational agricultural departments.

The data are not accurate in the matter of the training of the Principals of the high schools in which the vocational departments are located. However, the influence is of such moment that it deserves to be treated here. As its inception the work was often misunderstood and it was not uncommon for the agricultural instructor and the principal to be at variance.

The result was most often a victory for the Principal and he succeeded in getting the good will of those in sympathy with the old idea of educating everybody except the farmer. In nearly all cases the training of the Principals was entirely academic and there was no love for any of the vocational subjects. The influence of these men was considerable in keeping boys in academic studies while in high school and in directing them to an academic college when high school was over. It is true that there were some Principals who did a good part by the agricultural schools and their aid is not overlooked here. Many of these men have been responsible for the work succeeding and their help is always to our good. The work of the High School Principals of our state is of paramount importance in our educational system and I am in no way picking at them. But, the claim is here made that the agricultural instructor has a job of equal importance in rural places in Virginia.

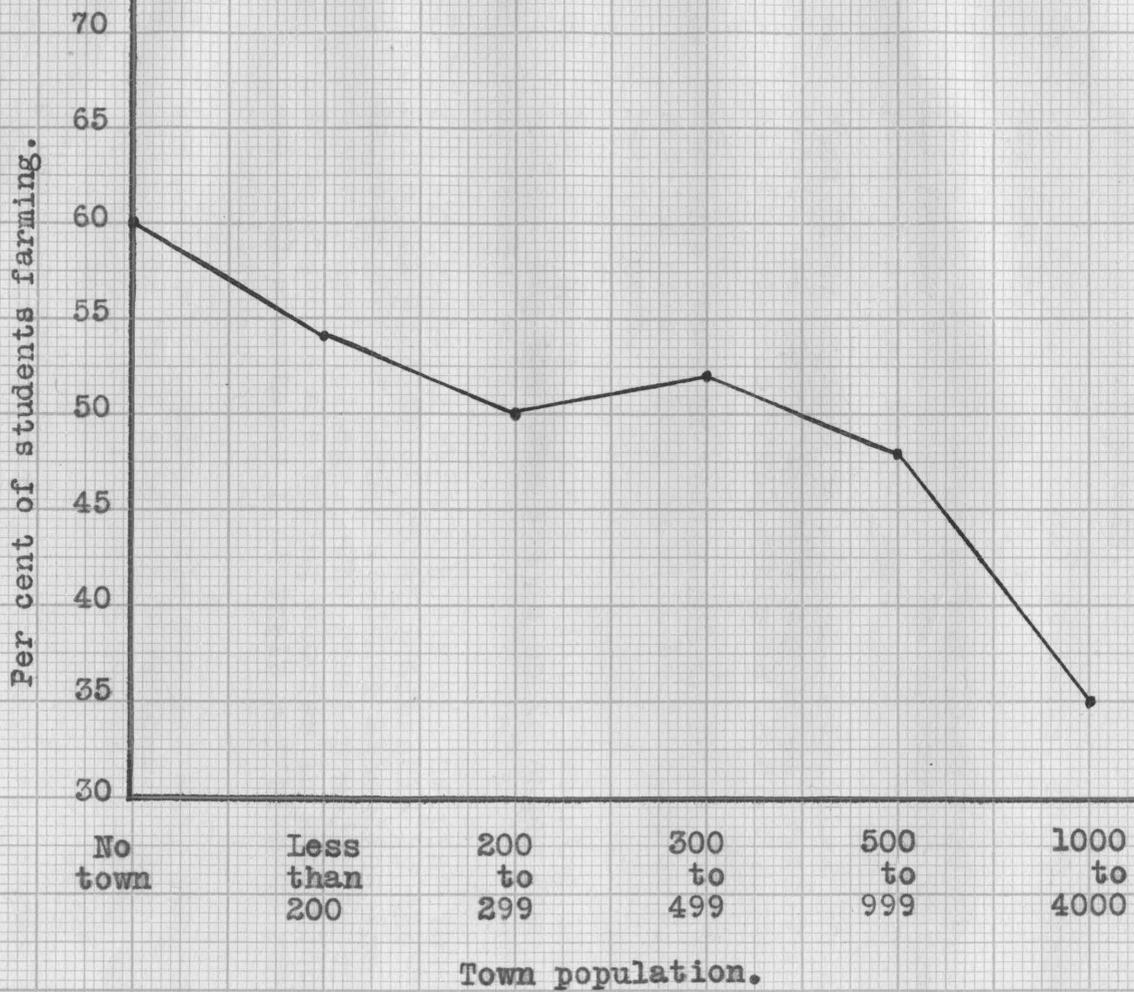
None of the influences are so pertinent as the unfavorable economic conditions on the farm today. This factor operates in all Virginia and in both types of schools alike. There is but little incentive for a boy to settle on the farm today. Economic conditions on the farm are such that a man cannot pay the prices of labor and machinery and take the low prices for his produce offered today. This condition has been more pronounced in the past three or four years than previously. This has resulted in giving a lower percentage of former vocational students now farming. This same thing may be claimed for the non-vocational schools of our state, but the point made here is that vocational agriculture has not functioned as well during the past six or eight years as it would under a state of economic equilibrium.

It is the strong belief of economists that there is a better day not far ahead of the farmer. If this is true, and it does seem probable, a study of this sort after several years will show even better results for the vocational agricultural schools.

It is the belief of the writer that the future of vocational agriculture, in rural high schools, is assured. This may be conceded, when it is remembered that this type of school, in its infancy, has survived a most trying period of our nation's history.

Chart.....5

Showing the effect of the size of town upon the placement of former students.



C O N C L U S I O N S .

1. The vocational departments are sending 100 percent more students to the farm than the non-vocational schools in rural places.
2. Of all former vocational students, 43.79 percent are now engaged in farming.
3. There is another large number 13.88 percent, of all former vocational students, engaged in occupations allied to farming.
4. When those engaged in allied occupations are added to the number farming the total percent for all former vocational students is 57.67.
5. The more years of vocational agriculture a boy has the more likely he will be to farm or enter related work.
6. The more years of non-vocational training the student has the less apt is he to enter farming or related work.
7. The agricultural high schools are helping to solve the problem of rural leadership by the large number of former students attending the Agricultural College. The greater majority of these students are taking courses in agriculture and will eventually find their way back to rural communities.
8. The non-vocational schools are not only sending too few of their students back to the farm directly, but are failing to supply adequate rural leadership.
9. Departments of vocational agriculture located in strictly rural localities are productive of better results than those located in small towns.
10. For the best functioning, vocational agricultural departments should have the hearty support of school officials, especially the Principals of the high schools in which the vocational work is taught.

OCCUPATIONAL DISTRIBUTION OF 405
FORMER STUDENTS WHO ARE ENGAGED
IN NON-AGRICULTURAL PURSUITS.

Academic College-----	97	Fishermen -----	5
At V. P. I. not allied wk.--	19	Lawyers-----	5
Public Works-----	39	Railroad men-----	4
Clerks-----	39	U. S. Army-----	4
Laborers-----	21	Ministers-----	4
# Teachers-----	16	Bakers-----	4
# Mechanics-----	14	Dentists-----	4
Auto Drivers-----	10	Millers-----	3
U. S. Navy-----	9	Shop Keepers-----	3
Auto Mechanics-----	8	Newspapermen-----	2
Bookkeepers-----	8	Restaurantmen-----	2
Road construction-----	8	Engineers-----	2
Salesmen-----	7	Wire Service-----	1
Bankers-----	7	Plumbers-----	1
Electricians-----	6	Insurance men-----	1
Painters-----	6	Paper hangers-----	1
Doctors-----	6	St. car conductors---	1
Miners-----	5	Loafers-----	5
Postal Service-----	5	In ill health-----	2
# Lumbermen-----	5	Deceased-----	4
Oil station men-----	5	Not decided-----	7
T O T A L-----		405	

#These occupations are considered allied in Federal Bulletin No. 82. However, these are not counted as such in this study. Only those listed under the special heading are so considered.

T A B L E

SHOWING THE OCCUPATIONS WHICH HAVE ATTRACTED
229 FORMER STUDENTS OF THE NON-VOCATIONAL
SCHOOLS AND THE NUMBER IN EACH OCCUPATION.

In Academic Colleges-----	107	Miners-----	1
In V. P. I. not in Agri.---	2	Lumbermen-----	1
Clerks-----	28	Oil Station men-----	1
Public works-----	11	In Law-----	1
Teachers-----	10	U. S. Army-----	1
Laborers-----	7	Engineers-----	1
Auto Mechanics-----	7	Plumbers-----	1
Railroad men-----	7	Auto drivers-----	1
Bookkeepers-----	6	St. car conductors--	1
U. S. Navy-----	5	Aviators-----	1
Road construction-----	3	Barbers-----	1
Electricians-----	3	Salesmen-----	1
Dentists-----	3	Loafers-----	3
Postal Service-----	2	In ill health-----	1
Bankers-----	2	Deceased-----	3
Ministers-----	2	Not decided-----	5

T O T A L -----229

LIST OF AGRICULTURAL HIGH SCHOOLS
SURVEYED FOR THIS STUDY.

Apple Grove-----Louisa County	Floris-----Fairfax Co.
Appomatax-----Appomattox "	Great Bridge----Norfolk "
Atlee-----Hanover "	Ivy Depot-----Albermarle "
Blacksburg-----Montgomery "	Lawrenceville---Brunswick "
Big Stone Gap-----Wise "	Lebanon-----Russell "
Bridgewater-----Rockingham "	Lincoln-----Loudoun "
Brownsburg-----Rockbridge "	Masassas-----Prince Wm."
Buckingham-----Buckingham "	Middletown-----Frederick "
Burkville-----Nottoway "	Mt. Jackson-----Shenandoah"
Burks Garden-----Tazewell "	Nassawadox-----Northampton"
Charlotte C. H.-----Charlotte "	New London-----Bedford "
Chase City-----Mecklenburg"	Oceana -----Norfolk "
Chester-----Chesterfield"	Pearisburg-----Giles "
Claremont-----Surry "	Poquoson-----York "
Climax-----Pittsylvania"	Powhatan-----Powhatan "
Cobbs Creek-----Matthews "	Salem-----Roanoke "
Courtland-----Southampton"	Sparta-----Caroline "
Culpepper-----Culpepper "	Syringa-----Middlesex "
Cumberland-----Cumberland "	Temperanceville-Accomac "
Critz-----Patrick "	Toano-----James City "
Dinwiddie-----Dinwiddie "	Turbyville-----Halifax "
Driver-----Nansemond "	Varina-----Henrico "
Disputanta-----Prince George"	Wakefield-----Sussex "
Eastville-----Northampton "	Whitmell-----Pittsylvania"
Ewing-----Lee "	Williamsburg---Williamsburg"
Fincastle-----Botetourt "	Windsor-----Isle of Wight
Woodlawn-----Carroll County.	

LIST OF NON-VOCATIONAL HIGH
SCHOOLS SURVEYED FOR THIS
STUDY

School	County
Chancellor-----	Spotsylvania
Dan River-----	Pittsylvania
West Point-----	King William
Waterford-----	Loudoun
Middlebrook-----	Augusta
Altamont Consolidated	
Naruna-----	Campbell
Cleveland-----	Russell
Louisa-----	Louisa
Fleetwood-----	Nelson
Dayton High-----	Rockingham
Ivor-----	Southampton
Seneca-----	Campbell
Pungoteague-----	Accomac
Capeville-----	Northampton
Orange-----	Orange
Lucketts-----	Loudoun
Lloyds--	Essex
Fisherville--	Augusta

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