# A FOLLOW-UP STUDY OF FORMER GARDEN CITY JUNIOR COLLEGE AGRICULTURAL STUDENTS

by

445

# NORMAN HOWARD STAATS

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#### INTRODUCTION

A trend in agricultural college curriculum development in the early 1960's has been toward a de-emphasizing of introductory agricultural courses and accenting basic sciences, humanities, communications, and commerce. This change, according to Duane Acker, Director of Resident Instruction of the College of Agriculture at Kansas State University, is due to the "changing needs of professional agriculture."

This trend to eliminate or consolidate basic agricultural courses has been studied with much concern by the administration and instructors of agriculture at Garden City Junior College. "Most of the students who enter junior college will not go on to further education," Thornton stated, "although they classify themselves in most cases as 'transfer' students."

It was the opinion of the writer concerning this problem that if the agricultural curriculums at Garden City Junior College were to be designed to accommodate these students, the trend to eliminate most agricultural courses from the first two years of college work would leave them with little or no additional knowledge of agriculture. The original goals of these students would not be fulfilled, and they would leave school with a feeling of defeat rather than a feeling of some accomplishment.

<sup>1&</sup>quot;Take a New Look at Ag Colleges," <u>Successful Farming</u>, LXI (April, 1963), 98.

<sup>&</sup>lt;sup>2</sup>Duane Acker, as quoted in "Take a New Look at Ag Colleges," <u>Successful</u> <u>Farming</u>, LXI (April, 1963), 98.

James W. Thornton, Jr., <u>The Community Junior College</u> (New York: John Wiley & Sons, Inc., 1960), p. 60.

It was further observed by the writer that when the junior college offers the basic agricultural courses, students who have taken them and transferred to some of the four year colleges have had difficulty in the transfer of such credit.

In considering this problem the writer decided to design a study to see if former Garden City Junior College agricultural students had continued their educational objectives as they had originally planned. The study was also designed to survey the opinions held by former students concerning usefulness of each agricultural course taken in junior college and their views on how the agricultural curriculum could be improved. A set of questions was developed, in conference with several other workers in this field, to survey former students regarding their opinions.

#### STATEMEN OF THE PROBLEM

The purpose of this study was to determine from former agricultural students of Garden City Junior College the answer to each of the following questions:

- 1. What is the present occupation of former agricultural students?
- 2. What are the future occupational plans of former students?
- 3. How many former students follow through with original educational objectives?
- 4. How useful has each of the agricultural courses taken at Garden City Junior College been to former students?
- 5. How could the agricultural courses taken in junior college be changed to better prepare former students for their life occupation?

6. What additional courses would have been beneficial for former students to take at the junior college?

#### LIMITATIONS

This study was limited to the former students who had completed one or more agricultural courses at Garden City Junior College from the fall of 1954 to those who completed their junior college training in the spring of 1963. The fall of 1954 was the earliest records available of agricultural courses being offered, and the latter date included all students who would have been out of junior college one full year at the time this study was started (1964).

The study was also limited by the lack of returns of the questionnaires with 79.8 per cent returns being obtained.

## DEFINITIONS OF TERMS

Certain terms were set aside for special definition for the purposes of this study. The definitions given were not necessarily those of common usage.

- Agricultural course--A course taught by the school or department of agriculture.
- Agricultural related occupation -- Included all occupations where a knowledge of some phase or phases of agriculture was necessary or beneficial to satisfactorily perform the job.
- Junior college—The official definition of the junior college adopted by the American Association of Junior Colleges is:

The junior college as at present constituted, comprises several forms of organization: first, a two-year institution embracing two years of collegiate work in advance of the completion of what is ordinarily termed the twelfth grade of an accredited secondary school; secondly, the institution embracing two years of standard work integrated with one or more contiguous years of fully accredited high school work administered as a single unit. The aims of the curriculum in either case are to meet the needs of the student for maximum growth and development, to further his social maturity, and to enable him to make his greatest contribution as a member of society. I

Service or armed forces -- Any branch of the military armed forces of the United States.

Terminal student--"A regularly enrolled student in junior college who does not expect to pursue formal education past the junior college level."2

Transfer student—Those students who had transferred from the junior college to a four year college or university.

#### PROCEDURE

After the topic for this report was selected, the writer discussed the problem with Dr. R. J. Agan, Head Teacher Trainer in Agricultural Education, Kansas State University, and with Wallace Good, Dean of the Garden City Junior College.

A questionnaire and cover letter was developed with the advice and council of David Mugler, Instructor in the College of Education, Kansas State University. The information obtained for this study was secured by mailing the questionnaires, cover letters and stamped self-addressed

<sup>&</sup>lt;sup>1</sup>L. C. Garrison, Jr., "Function of Agriculture in Kansas Junior Colleges" (unpublished Master's report, Kansas State University, Manhattan, Kansas, 1959), p. 3.

<sup>2&</sup>lt;sub>Ibid</sub>.

envelopes to ninety former students on July 3, 1964. These ninety students were all students who had completed one or more of the agricultural courses at Garden City Junior College in the nine year period from the beginning of the 1954-55 school year to and including those students who completed their junior college training in the 1962-63 school year. Of the ninety questionnaires mailed out, eight were returned because of wrong or insufficient address and were not located.

Forty-nine per cent of the questionnaires were returned without any follow-up procedure. After follow-up procedures consisting of second letters with questionnaires and stamped self-addressed envelopes enclosed, and telephone contacts were iniated, seventy-one questionnaires or 79.8 per cent were returned.

#### REVIEW OF SELECTED LITERATURE

A search was made of the literature including professional journals at the libraries of Kansas State University and Garden City. No literature was found on the exact problem, however, a review of selected related literature was made.

"The next half century will be an exciting time in which to live," stated Bear, editor of Soil Science. He further stated that the population of the United States would probably double, crop surpluses would disappear, many large farms would grow larger and be more efficiently managed, and many small farms would be operating on an integrated control basis. Bear's article indicated that this would mean a continuing

<sup>1</sup> See Appendix.

<sup>&</sup>lt;sup>2</sup>Firman E. Bear, "College Training in Preparation for Farming," Agronomy Journal, 52 (1950), 359.

decrease in the number of farm workers.

This same reasoning was followed by Jones in his writings where he indicated that many people have interpreted this decline in farm population as meaning a decline in the importance of agriculture. "Actually the reverse is true," he stated. Fewer people producing more goods certainly has not been the mark of a declining industry. This pointed out the need for more and better educated people in the industry.

Jones pointed out, further, that the agriculture of 1960 included two very important segments in addition to the production of farm products. One involved the processing and distributing of farm products. The other provided service and supplies to the farmer. In total, these three areas accounted for 40 per cent of all jobs in the United States.<sup>2</sup>

The method of educating these 40 per cent of our labor force referred to by Jones has been studied by several persons. Strong stated that:

Agricultural training limited to farming alone would be short-sighted for junior college level agricultural training as indicated by reduction of the number of people engaged in farming, increase in number of people in service occupations, the age of people engaged in farming, and the wage of salary income received in farming.<sup>3</sup>

The writers in this field were indicating that some of these people would profit from an advanced degree. Many of the jobs did not require

<sup>1</sup>J. W. Jones, "Enrollment Trends in Agricultural Colleges," Journal of Dairy Science, 43 (January, 1960), 114.

<sup>2&</sup>lt;sub>Tbid</sub>.

<sup>&</sup>lt;sup>3</sup>Winston Counter Strong, "Federal Aided Agricultural Education at the Junior College Level" (unpublished Doctor's dissertation, The University of California, 1948), p. 89.

training programs for as much as four years, however. A terminal program in a junior college or a short course in a senior college could have adequately prepared these people. This had been one of the major objectives of the junior college.

Medsker found that in junior colleges that had offered a comprehensive program which served both terminal and transfer students at least two-thirds of the entering students said that they would transfer. The same study indicated that one-third of them did transfer. A study by Starrak and Hughes and another by Thornton tended to show the same result. Eells reported a survey in which 10,000 junior college students were asked whether or not they planned to continue their education in a senior college or university. Eighty per cent of these answered yes, five per cent no, and fifteen per cent were undecided. A follow-up study disclosed that twenty-one per cent actually enrolled in a senior college or university.

Clark indicated that in comprehensive junior colleges many students tried to avoid the terminal label even when they were aware that they were not likely to go on beyond the junior college. 5 This social stigma

Leland L. Medsker, <u>The Junior College: Progress and Prospect</u> (New York: McGraw-Hill Book Company, Inc., 1960), p. 97.

<sup>&</sup>lt;sup>2</sup>James A. Starrak, and Raymond M. Hughes, <u>The New Junior College</u> (Ames, Iowa: The Iowa State College Press, 1948), p. 164.

<sup>&</sup>lt;sup>3</sup>James W. Thornton, Jr., <u>The Community Junior College</u> (New York: John Wiley & Sons, Inc., 1960), p. 60.

<sup>&</sup>lt;sup>4</sup>Walter C. Eells, "Success of Transferring Graduates of Junior College Terminal Curricula," <u>Journal</u> of <u>American Association of Collegiate Registrars</u>, 18 (July, 1954), p. 396.

<sup>&</sup>lt;sup>5</sup>Burton R. Clark, <u>The Open Door College</u> (New York: McGraw-Hill Book Company, Inc., 1960), p. 80.

of the terminal label has also been noted by others.

Administrators of technical institutes report that most of their students entering declared their intention of preparing for a job and going directly into employment upon leaving the institute. Despite this declaration some students transferred to four year schools to gain their B.S. degree.

Garrison stated that the fact that so many students switch back and forth from terminal to transfer student was one reason that most junior colleges attempted to minimize the differences between programs for the terminal and transfer students.<sup>2</sup>

Maguire's study of 430 students from a junior college terminal or semiprofessional curricula showed that when they transferred to Syracuse University they achieved as well, or better, academically as the students prepared in the general academic curriculum.

Carter found that most of the deans of agriculture in land-grant colleges felt that junior colleges should not offer courses in agriculture to students who planned to transfer. However, most of these deans indicated that students who had taken agricultural courses in junior colleges did as well during their last two years as did students who

<sup>1</sup> Medsker, loc. cit.

<sup>&</sup>lt;sup>2</sup>L. C. Garrison, Jr., "Function of Agriculture in Kansas Junior Colleges" (unpublished Master's report, Kansas State University, Manhattan, Kansas, 1959), p. 6.

Ruth E. Maguire, "A Descriptive Study of 430 Junior College Students Transferring to Syracuse University from 1937 to 1946, Inclusive" (unpublished Master's thesis, Syracuse University, Syracuse, New York, 1948), p. 54.

had taken their first two years at land-grant institutions. Actual programs in junior college were "too often determined by the plans and dictates of senior institutions to which their graduates expect to transfer. . . . even though it is well known that the particular pattern of studies is far less important than the abilities of the student and his habits of study. "2

## **FINDINGS**

Seventy-one individuals returned useable questionnaires. Twenty-eight or 39.5 per cent of these 71 individuals were engaged in farming as their major occupation. Four of these had a part-time job in addition to farming. The occupations of those who had completed at least one agricultural course at Garden City Junior College between the years of 1954 and 1963 are shown in Table 1.

College students made up the second largest group of individuals. Sixteen or 22.5 per cent were attending college in 1964.

Agricultural related occupations, armed forces, and other occupations each had nine individuals representing 12.7 per cent of the 71 individuals who answered the questionnaires in each of these occupational groupings. The agricultural related occupations included: two vocational agriculture teachers, one co-op feed salesman, one livestock buyer, one cattle checker in a commercial feedlot, one service man for

<sup>&</sup>lt;sup>1</sup>John Thomas Carter, "A Study of the Agricultural Programs in the Junior Colleges of the United States" (unpublished Doctor's thesis, University of Illinois, Urbana, Illinois, 1954), p. 126.

<sup>&</sup>lt;sup>2</sup>Jesse P. Bogue, "From the Executive Secretary's Desk," <u>Junior College Journal</u>, 19 (February, 1949), p. 359.

an implement dealer, one clerk for the Agricultural Stabilization and Conservation Service office, one food retailer, and one soil conservation contractor. The occupations classified as others included: one general contractor, one auto parts man and bookkeeper, one geophysicist, one in the petroleum industry, one working for the fish and game commission, one telephone company employee, two classroom teachers, and one school principal. It was noted that four of the nine people in the military service were engaged in farming before entering the service.

Table 1. Occupations of Respondents.

**************************************	Name la constant	Developed
Occupations -	: Number :	Per cent
Farming	28	39.5
Agricultural Related Occupation	9	12.7
Armed Forces	9	12.7
College Student	16	22.5
Others	9	12.7

<sup>\*</sup>N = 71

Table 2 presents the future farming plans of those not in farming at the time of the study. Of the forty-three non-farmers answering the questionnaire, forty-two useable answers were obtained. Twelve or 28.6 per cent of these indicated that they intended to start farming within the next five years. Present college students made up eight or 66.7 per

<sup>1</sup> See Appendix.

cent of these and members now in the armed forces made up the other four or 33.3 per cent of those planning to farm within the next five years. This represented 50.0 per cent of the college students and 44.5 per cent of those in the armed forces. There also were four college students, two members of the armed forces, and six persons in agricultural related occupations that were undecided about farming. This was 25 per cent, 22.2 per cent, and 66.7 per cent of the total members in each of the respective occupations.

Table 2. Future farming plans of non-farmers.

	:	Intended	to	Start	Farming	Within	the	Next Five	Years
Occupations	:			Yes	:	No	:	Undecided	l
All Occupations Number Per cent	(N :	= 42)		12 28.6		18 42.8		12 28.6	
Agricultural (N : Related Number Per cent	= 9	)		0 0		3 33.3		6 66.7	
Armed Forces (N : Number Per cent	= 9	)		4 44.5		3 33.3		2 22.2	
Present College Students Number Per cent	(N	= 16)		8 50.0		4 25.0		4 25.0	
Non-agricultural Related Occupation Number Per cent		= 8)		0		8 100		0 0	

None of the people in agricultural related or in other occupations planned to start farming within the next five years.

In Table 3 it is indicated that the majority (50.9%) of the fifty-seven respondents answering question number three of the questionnaire did not intend to enter into an agricultural related occupation within the next five years. Twenty-four or 42.1 per cent planned to enter an agricultural related occupation and four or 7.0 per cent were undecided.

Of the twenty-five farmers answering the questionnaire six or 24.0 per cent indicated that they were going to enter into an agricultural related occupation. Three, 12 per cent, were undecided and sixteen or 64 per cent did not intend to enter into an agricultural related occupation.

Six of the nine members of the armed forces or 66.7 per cent intended to go into an agricultural related occupation. Four of the six also indicated that they intended to farm and one of the six was uncertain about farming in addition to the agricultural related occupation. Three or 33.3 per cent did not plan to enter into an agricultural related occupation.

Present college students showed the highest interest in going into an agricultural related occupation. Eleven or 73.3 per cent of the fifteen students planned to enter an agricultural related occupation. The other 26.7 per cent indicated no interest in this field. As did those in the armed forces, three college students planned to farm in addition to the agricultural related occupation.

<sup>1</sup> See Appendix.

Table 3. Future plans of entering an agricultural related occupation by those not in an agricultural related occupation.

	:		tart in an Agr Within the Ne	icultural Related xt Five Years
Occupations	:	Yes	: No	: Undecided
All Occupations Number Per cent	(N = 57)	24 42.1	29 50.9	4 7.0
Farmers Number Per cent	(N = 25)	6 24.0	16 64.0	3 12.0
Armed Forces Number Per cent	(N = 3)	6 66.7	3 33•3	0 0
Present College Students Number Per cent	(N = 15)	11 73.3	4 26.7	0 0
Non-agricultural Related Occupati Number Per cent		1 12.5	6 75.0	1 12.5

Of the eight in non-agricultural related occupations one or 12.5 per cent intended to start in an agricultural related occupation within the next five years and one was undecided. The other six or 75 per cent did not plan to go into an agricultural related occupation.

Question six on the questionnaire was designed to determine the educational goal of the student at the time he enrolled in his first agricultural course. Questions seven and eight were designed with the intention of determining the manner that students fulfilled these original objectives after leaving Garden City Junior College.

Table 4 shows that of the seventy-one replies nineteen or 26.8 per cent of the people originally planned to farm after completing junior college. About one-third (31.6%) of these people did this. Five or 26.3 per cent started in an agricultural related occupation, three or 15.8 per cent entered in non-agricultural related occupations, and three entered the armed forces. The other two (10.6%) continued on to a four year college, one majored in agriculture, and the other in a non-agricultural related curriculum.

The largest percentage, 40.8, of the respondents originally planned to transfer to a four year college and major in agriculture. Seventeen or 58.6 per cent of these twenty-nine did this. This was also the highest percentage of following through with their original goals of any of the categories. Three others entered a four year college, two majored in a non-agricultural related curriculum, and one in a related curriculum.

<sup>1</sup>See Appendix

<sup>&</sup>lt;sup>2</sup>See Appendix

Table 4. Manner of fulfilling original educational objectives.

		: Enter an A	Original Educational Objectives: Transfer gri- : Transfer to : A Four Y	bjectives Transfer to A Four Year	: Other		
Manner Original Objective was Fulfilled After Junior College	Farm After Completing Junior College	: cultural Related : : Occupation After : : Completing : : Junior College :	a Four Year : College and : Major in : Agriculture :	College and Major in an Agricultural Related Field	: Reason for : Taking an : Agricultural : Course	Total	La &
Farm Number Per cent	31.6	00	13.8		00	01	14.1
Started in an Agri- cultural Related Occupation Number Per cent	5 26.3	00	8°9	5 29.4	00	12	16.9
Started in a Non- Agricultural Related Occupation Number Per cent	3	00	1.6 4.6	2 11.8	00	9	8.5
Entered the Armed Forces Number Per cent	3	. 100	2 6.9	00	00	9	8.5

Table 4. (concluded)

••		Original	Original Educational Objectives	)bjectives		
Manner Original Objective was Fulfilled After Jumior College	Farm After : Completing : Comjor : College	Enter an Agri- cultural Related: Occupation After: Completing	Transfer to : A Four Year : College and : Major in Agriculture :	Transfer to A Four Year College and Major in an Agricultural Related Field	: Other : Reason for : Taking an : Agricultural : Course	Total N %
Transferred to a Four Year College and Majored in						
Agriculture Number Per cent	1,5.3	00	17, 58.6	3.7.6	20.0	22 31.0
Agricultural Related Curriculum Number Per cent	00	0 0	3.4	23.5	120.0	6 8.5
Non-agricultural						
Number Per cent	5.3	00	6.9	3	3 60.0	9 12.7
Total Number	19	ч	59	17	20	12
Per cent of All Replies 26.8	es 26.8	1.4	8.04	23.9	7.0	

Four of the twenty-nine started farming after leaving junior college, two started in agricultural related occupations, two entered the armed forces, and one started in a non-agricultural related occupation.

Seventeen or 23.9 per cent originally planned to enter a four year college and major in an agricultural related curriculum after finishing junior college. Four or 23.5 per cent of these people followed through with their plans. Six others attended a four year college, three majored in agriculture and three in non-agricultural related curriculums. Five of the seventeen entered directly into an agricultural related occupation and two entered into non-agricultural related occupations after completing their junior college work.

There was one person who originally planned to enter into an agricultural related curriculum after junior college. He entered the armed forces instead.

Five people had other reasons for taking an agricultural course.

Examples of reasons given were; "It fit into my schedule," "I had a close friend taking the course," "I had a horse at home and was interested in learning more about the care of it and other animals." All five of these people entered a four year college. Three majored in non-agricultural related curriculums, one majored in an agricultural related curriculum, and one in agriculture.

Of the seventy-one replies thirty or 42.3 per cent actually continued on with their original plans. All total, 14.1 per cent returned to the farm after leaving junior college, 16.9 per cent started in an agricultural related occupation, 8.5 per cent went into non-agricultural related occupations, 8.5 per cent entered the armed forces, 31.0 per cent

majored in agriculture at a four year college, 8.5 per cent majored in agricultural related curriculums at a four year college, and 12.7 per cent majored in a non-agricultural related curriculum at a four year college. All totaled more than half (52.2%) of the respondents transferred to a senior college or university. This was more than double the number of students transferring as Eells found in his study. Thornton made a statement regarding transfer students indicating that most students who entered a junior college classified themselves as a transfer student but most did not continue on to college. Of the fifty-one students who originally classified themselves as transfer students thirty-five or 68.6 per cent transferred to a four year college.

The usefulness of each of the agricultural courses taken at Garden City Junior College to individuals in their occupations was the objective of question nine of the questionnaire. In Table 5 the results of those students who took animal husbandry are shown. Fifty persons who took the course replied. Half of them had transferred to a senior college or university.

It can be noted that about three-fourths (74.0%) of the respondents classified animal husbandry above the occasionally useful level. Those in agricultural related occupations ranked it above the occasionally

Walter C. Eells, "Success of Transferring Graduates of Junior College Terminal Curricula," <u>Journal of American Association of Collegiate Registrars</u>, 18 (July, 1954), p. 396.

<sup>&</sup>lt;sup>2</sup>James W. Thornton, Jr., <u>The Community Junior College</u> (New York: John Wiley & Sons, Inc., 1960), p. 60.

<sup>3</sup>See Appendix.

Table 5. Usefulness of the elements of animal husbandry course taken at Garden City Junior College to individuals in their occupations.

0	:		ry eful	:		ten eful	:Us	ccas sefu	ionall	y: :		ldom eful	:	Ne <b>v</b> Use	er ful	:	То	tal
Occupations	: :	N	%	:	N	%	:	N	%	:	N	%	:	N	%	:	N	%
Farmers		12	50.0		5	20.8		3	12.5		4	16.7		0	0		24	48
Agricul- tural Related		4	66.7		1	16.7		1	16.7		0	0		0	0		6	12
Non-agri- cultural Related		4	44.4		2	22.2		2	22.2		1	11.1		0	0		9	18
Present College Students		4	36.4		5	45.5		2	18.2		0	0		0	0		11	22
Terminal Students		14	56.0		4	16.0		5	20.0		2	8.0		0	0		25	50
College Transfer Students		10	40.0		9	36.0		3	12.0		3	12.0		0	0		25	50
Total		24	48.0		13	26.0		8	16.0		5	10.0		0	0		50	

useful level most frequently, 83.4 per cent. Non-agricultural related persons had the least use for animal husbandry but classified it in the often or very useful columns in 66.6 per cent of the cases. No person indicated that the course was never useful to them.

The usefulness of the elements of dairying course as tabulated in Table 6 showed quite a different trend. Less than half, 36.1 per cent, of the respondents classified it above the occasionally useful level. Nearly as many people, 33.3 per cent, classified it as either seldom or never useful.

Of the thirty-six people answering the questionnaire who had taken the dairying course the fourteen farmers seemed to benefit from the course the least. Two or 14.3 per cent of these classified the course above the occasionally useful level while 57.1 per cent said it was seldom or never useful to them.

All three people in agricultural related occupations ranked elements of dairying above the occasionally useful level. There was a noticeable difference to the author between terminal and college transfer students. Terminal students seemingly did not find the course as useful (31.6 per cent ranked it above the occasionally useful level and 42.2 per cent below this level) as did the college transfer students (41.2 per cent ranked it above the occasionally useful level and 23.5 per cent below this level).

The usefulness of the poultry production course to former students in their occupations is tabulated in Table 7. The small number of students taking the course, nineteen, was in the opinion of the writer due partially at least to a lack of interest in poultry he had observed

Table 6. Usefulness of the elements of dairying course taken at Garden City Junior College to individuals in their occupations.

:		ery seful	:		ten eful	:Usef	sionall ul	у:		ldom eful	:		ver :	То	tal
Occupations:	N	%	:	N	%	: N	%	:	N	%	:	N	%:	N	%
Farmers	2	14.3		0	0	4	28.6		6	42.8		2	14.3	14	38.9
Agricul- tural Related	1	33.3		2	66.7	0	0		0	0		0	0	3	8.3
Non-agri- cultural Related	1	12.5		2	25.0	2	25.0		2	25.0		1	12.5	8	22.2
Present College Students	1	9.1		4	36.4	5	45.5		1	9.1		0	0	11	30.6
Terminal Students	3	15.8		3	15.8	5	26.3		5	26.3		3	15.8	19	52.8
College Transfer Students	2	11.8		5	29.4	6	35.3		4	23.5		0	0	17	47.2
Total	5	13.9		8	22.2	11	30.6		9	25.0		3	8.3	36	

Table 7. Usefulness of the poultry production course taken at Garden City Junior College to individuals in their occupations.

	:		ry eful	:		ten eful	:Use		ionall	y: :		ldom eful	:		ver :	To	tal
Occupations		N	%	:	N	%	:	N	%	:	N	%	:	N	<b>%</b> :	N	%
Farmers		0	0		0	0		0	0		6	75.0		2	25.0	8	42.1
Agricul- tural Related		0	0		1	50.0		1	50.0		0	0		0	0	2	10.5
Non-agri- cultural Related		0	0		0	0		1	33.3		2	66.7		0	0	3	15.8
Present College Students		1	16.7		1	16.7		2	33.3		2	33.3		0	0	6	31.6
Terminal Students		0	0		1	9.1		2	18.2		6	54.5		2	18.2	11	57.9
College Transfer Students		1	12.5			12.5		2	25.0		4	50.0		0	0	8	42.1
Total		1	5.3		2	10.5		4	21.0	]	LO	52.6		2	10.5	19	

in students enrolling at Garden City Junior College. The usefulness of the course to people in their occupations possibly justified the lack of interest shown.

Of the eight farmers taking poultry six or 75.0 per cent indicated that it was seldom useful. The other two stated that it was never useful to them.

Present college students apparently received the most benefit from poultry. Two-thirds (66.7%) classified it as occasionally useful or above.

When all occupations were combined, 15.8 per cent ranked poultry above the occasionally useful level and 53.1 per cent placed it below this level of usefulness.

The crops course was the most useful agricultural course taken in the junior college. When all occupations were considered together 81.8 per cent classified crops above the occasionally useful level and 9.1 per cent as seldom or never useful.

Thirteen or 76.5 per cent of the seventeen farmers classified crops as very useful, one as often useful, one as occasionally useful, and two as seldom useful. Of the four people in agricultural related occupations who took crops three classified it as very useful to them and the other as occasionally useful.

College transfer students ranked the course above the occasionally useful level 85.8 per cent of the time as compared to 79.0 per cent of the terminal students. The terminal students ranked it below the occasionally

<sup>1</sup> See Table 8.

Table 8. Usefulness of the crops course taken at Garden City Junior College to individuals in their occupations.

	:		ry eful	:		ten eful	:Usefu	ionall	y: :		ldom eful	:		ver eful	: : To	tal
Occupation	:	N	%	:	N	%	: N	%	<u>:</u>	N	%	:	N	%	: N	%
Farmers		13	76.5		1	5.9	1	5.9		2	11.8		0	0	17	51.5
Agricul- tural Related		3	75.0		0	0	1	25.0		0	0		0	0	4	12.1
Non-agri- cultural Related		3	37.5		3	37.5	1	12.5		0	0		1	12.5	8	24.2
Present College Students		1	25.0		3	75.0	0	0		0	0		0	0	4	12.1
Terminal Students		12	63.2		3	15.8	2	10.5		1	5.3		1	5.3	19	57.5
College Transfer Students		8	57.2		4	28.6	1	7.2		1	7.2		0	0	14	42.5
Total		20	60.6		7	21.2	3	9.1		2	6.1		1	3.0	33	

useful level in 10.6 per cent of the time as compared to 7.2 per cent of the transfer students.

Table 9 gives the usefulness of the soils course to individuals in their occupations. Seventeen of the thirty-four people taking soils were farming. Thirteen or 76.5 per cent of the farmers classified soils above the occasionally useful level and 5.9 per cent below the point.

The agricultural related and the non-agricultural related occupations indicated that soils was more than occasionally useful in 60.0 and 66.7 per cent of the respective occupations. They ranked it as seldom and never useful in 20.0 and 16.7 per cent of the time.

Present college students classified the usefulness of the soils course higher than any other occupation. Three people indicated that it was very useful and the other three said it was often useful.

When all occupations were considered together 76.4 per cent classified soils above the occasionally useful level and 8.8 per cent below this level.

The usefulness of the range management course to people in their occupations is shown in Table 10. It was classified as being the most useful course by those engaged in farming. Ninety and nine-tenths per cent ranked the course above the occasionally useful level. No farmer ranked it below occasionally useful.

The agricultural related, the non-agricultural related, and the present college student ranked the range management course above the occasionally useful level in 83.3 per cent, 66.6 per cent, and 50.0 per cent, respectively, of the time.

When all occupations were considered together 79.1 per cent of the

Table 9. Usefulness of the soils course taken at Garden City Junior College to individuals in their occupations.

:		ery seful	:	Often Useful		:Occasionally: :Useful :			Seldom Useful		:	Never : Useful :			tal
Occupations:	N	%	:	N	%	: N	%	:	N.	%	:	N	% :	N	%
Farmers	8	47.1		5	29.4	3	17.6		1	5.9		0	0	17	50
Agricul- tural Related	2	· 40.0		1	20.0	1	20.0		1	20.0		0	0	5	14.7
Non-agri- cultural Related	4	66.7		0	0	1	16.7		0	0		1	16.7	6	17.7
Present College Students	3	50.0		3	50.0	0	0		0	0		0	0	6	17.7
Terminal Students	9	56.3		2	12.5	3	18.8		1	6.3		1	6.3	16	47.0
College Transfer Students	8	44.4		7	<b>38.</b> 9	2	10.1		1	5.6		0	0	18	53.0
Total	17	50.0		9	26.4	5	14.7		2	5.9		1	2.9	34	

Table 10. Usefulness of the range management course taken at Garden City Junior College to individuals in their occupations.

	U	ery seful	:		ten eful	:Occasionally: :Useful :					:	Never Useful		:	То	Total	
Occupations	N	%	:	N	%	: N	%	:	N	%	: :	N	%	:	N	%	
Farmers	6	54.5		4	36.4	1	9.1		0	0		0	0		11	45.8	
Agricul- tural Related	2	33.3		3	50.0	0	0		1	16.7		0	0		4	25.0	
Non-agri- cultural Related	1			1	33.3	1	33.3		0	0		0	0		3	12.5	
Present College Students	1			1	25.0	2	50.0		0	0		0	0		4	16.7	
Terminal Students	7	53.8		4	30.8	2	15.4		0	0		0	0		13	54.2	
College Transfer Students	3	27.2		5	45.5	2	18.2		1	9.1		0	0		11	45.8	
Total	10	41.7		9	37.4	4	16.7		1	4.2		0	0		24		

respondents ranked it above occasionally useful. This is second only to crops in the usefulness of a course.

Question number ten of the questionnaire was designed to find out how the agricultural courses that were taught in Garden City Junior College should be changed, if at all, to better meet the needs of former students in their occupations. 2

Of the fifty students that took animal husbandry 30.0 per cent thought that the course should have been taught with more practical applications. Twenty per cent thought more technical information should be given and the remaining 50.0 per cent thought that the course needed no change. It was noted in Table 11 that the farmers indicated a greater desire for more practical applications in the animal husbandry course than did any other occupation. A higher percentage, 33.3, of the people in agricultural related occupations and the non-agricultural related occupations indicated a desire for more technical information in the animal husbandry course than did any of the other groupings. The persons who were attending four year colleges and universities were the best satisfied with the animal husbandry course with 63.6 per cent indicating no change in the course was needed.

Table 12 shows that of the thirty-six respondents who took the dairy course twenty-two or 61.1 per cent wanted no change in the course. Twenty-

<sup>1</sup> See Appendix.

The author tabulated the questionnaires from students that he has had in class separately on this question from other students but did not do so in this report.

Table 11. Recommended changes in the animal husbandry course taken at Garden City Junior College.

Occupations		re actical		e hnical	: in	Change Course		tal
Occupations	: N	%	: N	%	: N	%	: N	%
Farmers	9	37.5	4	16.7	11	45.8	24	48.0
Agricultural Related	1	16.7	2	33.3	3	50.0	6	12.0
Non-agricultural Related	2	22.2	3	33.3	4	44.4	9	18.0
Present College Students	3	27.2	1	9.1	7	63.6	11	22.0
Terminal Students	7	28.0	4	16.0	14	56.0	25	50.0
College Transfer Students	8	32.0	6	24.0	11	44.0	25	50.0
Total	15	30.0	10	20.0	25	50.0	50	

Table 12. Recommended changes in the elements of dairying course taken at Garden City Junior College.

	:	More	etical	:	More Tech	nical		Change Course	: : T	otal
Occupations	:	N	%	:	N	%	: N	%	: N	%
Farmers		3	21.4		1	7.1	10	71.4	14	38.9
Agricultural Related		1	33.3		1	33.3	1	33.3	3	8.3
Non-agricultural Related		2	25.0		2	25.0	4	50.0	8	22.2
Present College Students		3	27.2		1	9.1	7	63.6	11	30.6
Terminal Students		4	21.0		3	15.8	12	63.2	19	52.8
College Transfer Students		5	29.4		2	11.8	10	58.8	17	47.2
Total		9	25.0		5	13.9	22	61.1	36	

five per cent thought that the course should be more practical and 13.9 per cent indicated that it should be more technical. It was noted from the table that there were no major differences in the recommendations of the different occupational groupings.

The farmers had the highest per cent (71.4) of their group not wanting a change in the course. A larger percentage of the people in agricultural related occupations (33.3) and the non-agricultural related (25.0) occupations thought that the dairying course should be more technical than did the people in the other occupations.

The recommended changes in poultry production is shown in Table 13.

Fewer people (19) replying to the questionnaire had taken poultry than any other course, however, very similar recommendations were made about it as with previous courses discussed. When all categories were considered together three or 15.8 per cent thought the poultry course should be more practical, an equal number thought it should be more technical and thirteen or 68.4 per cent indicated that no change was needed in the course. Also noted in the different occupational groupings was that more farmers, 21.4 per cent, thought that the course should be more practical than did any of the other categories.

The crops course along with being classified as the most useful course taken also was the course most students recommended changing.

In Table 14 it was noted that one-third of the thirty-three persons taking Crops recommended that more practical information should be taught.

Twelve of the thirty-three or 36.4 per cent stated that the course should

<sup>1</sup> See Table 8.

Table 13. Recommended changes in the poultry production course taken at Garden City Junior College.

0	:	More Prac	e ctical	:	More Tech	nical	:		Change Course	:	Tot	al
Occupations	:	N	%	:	N	%	:	N	%	:	N	%
Farmers		2	25.0		0	0		6	75.0		8	42.1
Agricultural Related		0	0		0	0		1	100.0		1	5.3
Non-agricultural Related		0	0		1	33.3		2	66.7		3	15.8
Present College Students		1	14.3		2	28.6		4	57.1		7	36.8
Terminal Students		2	18.2		1	9.1		8	72.7		11	57.9
College Transfer Students		1	12.5		2	25.0		5	62.5		8	42.1
Total		3	15.8		3	15.8		13	68.4		19	***

Table 14. Recommended changes in the crops course taken at Garden City Junior College.

		: Tec	hnical		Change Course		tal
N	%	: N	%	: N	%	: N	%
7	41.2	6	35.3	4	23.5	17	51.5
0	0	2	50.0	2	50.0	4	12.1
2	25.0	3	37.5	3	37.5	8	24.2
2	50.0	1	25.0	1	25.0	4	12.1
6	31.6	7	36.3	6	31.6	19	57.6
5	35.7	5	35.7			14	42.4
	7 0 2 2	7 41.2 0 0 2 25.0 2 50.0 6 31.6 5 35.7	7 41.2 6 0 0 2 2 25.0 3 2 50.0 1 6 31.6 7 5 35.7 5	7 41.2 6 35.3 0 0 2 50.0 2 25.0 3 37.5 2 50.0 1 25.0 6 31.6 7 36.3 5 35.7 5 35.7	7 41.2 6 35.3 4 0 0 2 50.0 2 2 25.0 3 37.5 3 2 50.0 1 25.0 1 6 31.6 7 36.3 6 5 35.7 5 35.7 4	7 41.2 6 35.3 4 23.5 0 0 2 50.0 2 50.0 2 25.0 3 37.5 3 37.5 2 50.0 1 25.0 1 25.0 6 31.6 7 36.3 6 31.6 5 35.7 5 35.7 4 28.6	7 41.2 6 35.3 4 23.5 17 0 0 2 50.0 2 50.0 4 2 25.0 3 37.5 3 37.5 8 2 50.0 1 25.0 1 25.0 4 6 31.6 7 36.3 6 31.6 19 5 35.7 5 35.7 4 28.6 14

be more technical and 30.3 per cent wanted no change in the course.

Seven of the seventeen farmers, 41.2 per cent, wanted the course to be more practical. Six, 35.3 per cent, thought it should be more technical and four or 23.5 per cent thought no change was needed in the course.

Of the respondents who were attending four year colleges or universities 50 per cent indicated that the course should have been more practical, 25 per cent said it should have been more technical, and 25 per cent wanted no change in the course. It was noted from Table 14 that no more than 50 per cent of any occupation or grouping thought that the course needed no change.

The recommended changes in the soils course are shown in Table 15. When all returns are considered 14.7 per cent indicated that the course should have been more practical, 32.4 per cent said it should have been more technical while 53.0 per cent indicated that no change was needed in the course. Ten of the seventeen farmers indicated that a change in the course was needed. Five of these said it should have been more practical and five indicated that it should have been more technical. Seven or 41.2 per cent of the farmers wanted no change in the course. Those persons in agricultural related occupations were best satisfied with the course as four of the five people wanted no change in the course and the fifth wanted it to be more technical.

There was little difference noted between the terminal students and the transfer students' recommendations except that a higher percentage (22.2) of the transfer students wanted more practical training in soils than did the terminal students (6.3%).

Table 15. Recommended changes in the soils course taken at Garden City Junior College.

	:	Mon		: More	nical		Change Course	: : Tot	al
Occupations	:	N	%	: N	%	: N	%	: N	%
Farmers		5	29.4	5	29.4	7	41.2	17	50.0
Agricultural Related		0	0	1	20.0	4	80.0	5	14.7
Non-agricultural Related		0	0	3	50.0	3	50.0	6	17.7
Present College Students		0	0	2	33.3	4	66.7	6	17.7
Terminal Students		1	6.3	5	31.2	10	62.5	16	47.0
College Transfer Students		4	22.2	6	33.3	8	44.5	18	53.0
Total		5	14.7	11	32.4	18	53.0	34	

The recommendations for range management (Table 16) somewhat resembled those of crops where more than one-half (54.2%) of the people indicated that the course should be changed, either being more practical (25%) or more technical (29.2%). There were 45.8 per cent of the people, however, who said no change was needed in the course. Fifty per cent of the people in agricultural related occupations indicated that they thought the course should be more technical and 16.7 per cent thought it should be more practical. Two of the three persons in non-agricultural related occupations wanted no change in the course while the third indicated that it should be more practical.

It was noted that college transfer students seemed to have been more satisfied with the course, (54.5 per cent wanted no change) than the terminal students where 38.4 per cent thought no change in the course was needed.

Question eleven of the questionnaire was designed to tell what additional courses former students thought would have been beneficial for them to have taken in the junior college.

Table 17 shows how farmers classified the usefulness of the nine courses listed on the questionnaire. The course showing the greatest need was livestock feeding where twenty-one or 75.0 per cent of the twenty-eight farmers returning questionnaires indicated that it would have been very helpful to them. The second most requested course was farm accounting where 64.3 per cent said it would have been very helpful and 21.4 per cent said it would have been of some use. Farm management

<sup>1</sup> See Appendix

Table 16. Recommended changes in the range management course taken at Garden City Junior College.

	:	More Prac	e ctical		More	nical			Change Course	:	Tot	al
Occupations	:	N	%	:	N	%	:	N	%	:	N	%
Farmers		3	27.3		3	27.3		5	45.5		11	45.8
Agricultural Related		1	16.7		3	50.0		2	33.3		6	25.0
Non-agricultural Related		1	33.3		0	0		2	66.7		3	12.5
Present College Students		1	25.0		1	25.0		2	50.0		4	16.7
Terminal Students		4	30.8		4	30.8		5	38.4		13	54.2
College Transfer Students		2	18.2		3	27.3		6	54.5		11	45.8
Total		5	25.0		7	29.2		11	45.8		24	

Table 17. Additional courses farmers thought would have been beneficial for them to have taken at a junior college.

Course	: Ver	ld be : y : pful :		ld be : Some :	Should at Four Schools		:	Wou of Val	
	: N	% * :	N	% * :	N	% *	:	N	% *
Agricultural Economics	14	50.0	4	14.3	8	28.7		0	0
Entomology	1	3.6	6	21.4	13	46.5		0	0
Farm Accounting	18	64.3	6	21.4	1	3.6		0	0
Farm Machinery Repair	11	39.3	8	28.7	1	3.6		4	14.3
Farm Management	17	60.7	2	7.2	3	10.7		0	0
Farm Mechanics	11	39.3	7	25.0	2	7.2		2	7.2
Genetics	5	17.9	4	14.3	13	46.5		0	0
Horticulture	4	14.3	4	14.3	14	50.0		1	3.6
Livestock Feeding	21	75.0	3	10.7	3	10.7		0	0

<sup>\*</sup>Per cent is of all twenty-eight farmers returning the questionnaire as some did not check all courses.

and agricultural economics also were classified as courses which would have been very helpful by 60.7 per cent and 50.0 per cent, respectively by the farmers. Farm machinery repair and farm mechanics were classified as "would be very useful" by eleven or 39.3 per cent of the farmers. They also were classified as being of some use by 28.7 per cent and 25.0 per cent of the farmers in the two respective courses.

Entomology was classified as being very helpful by one farmer while thirteen or 46.5 per cent thought that the course should be taught by four year colleges only. One-half of the farmers thought that horticulture and 46.5 per cent thought genetics should be taught only at four year colleges.

Other courses recommended by farmers to be taught in the junior college and the number making the request are as follows: management of soils (five), soil conservation (one), irrigation (five), beef cattle production (one), principles of veterinary medicine (one), animal breeding (one), marketing farm products (one), and farm welding (one).

Additional courses persons in agricultural related occupations thought would have been beneficial for them to have taken at junior college are tabulated in Table 18. As with the farmers, livestock feeding was the course most people (55.5%) thought would be very helpful to them. Genetics was the second most helpful course being checked by four or 44.4 per cent of the nine persons in agricultural related occupations. Agricultural economics, entomology, and farm management each had three persons who thought that the course would have been very helpful to them and one who thought it would be of some use.

Table 18. Additional courses persons in agricultural related occupations thought would have been beneficial for them to have taken at a junior college.

Course	:	Very	ld be	:	Woul of S	ld be Some	:	Should at Four Schools		:	Woul of N	_
	:	N	% *	:	N	% *	:	N	% *	:	N	% *
Agricultural Economics		3	33.3		1	11.1		1	11.1		0	0
Entomology		3	33.3		1	11.1		3	33.3		0	0
Farm Accounting		2	22.2		1	11.1		1	11.1		0	0
Farm Machinery Repair		0	0		3	33.3		2	22.2		0	0
Farm Management		3	33.3		1	11.1		1	11.1		0	0
Farm Mechanics		0	0		3	33.3		2	22.2		0	0
Genetics		4	44.4		2	22.2		1	11.1		0	0
Horticulture		1	11.1		2	22.2		3	33.3		0	0
Livestock Feeding		5	55.5		1	11.1		1	11.1		0	0

Per cent is of all nine of the persons in agricultural related occupations returning the questionnaire as some did not check all courses.

Farm accounting was classified as very helpful by 22.2 per cent of those in agricultural related occupations as compared to 64.3 per cent of the farmers. The courses farm machinery repair and farm mechanics were not classified as very helpful by any of those in agricultural related occupations. Three persons stated that both would be of some use to them.

Two other courses were written in by people in agricultural related occupations. They were comparative anatomy and soil management, both suggested by one person each. Table 19 gives the additional courses persons in non-agricultural related occupations thought would have been beneficial for them to have taken at a junior college. Eight people stated that farm management, farm accounting, and farm machinery repair would have been very helpful to them. This was 44.5 per cent of the eighteen persons in non-agricultural related occupations. Seven or 38.8 per cent of the people indicated that farm machinery repair would have been very helpful to them as did six people about agriculture economics, five about livestock feeding, four about genetics, two in horticulture, and one person in entomology.

Political agriculture and taxation were two other courses that were recommended to include in the junior college curriculum by one person in a non-agricultural related occupation.

Additional courses persons in four year colleges and universities, at the time of the study, thought would have been beneficial for them to have taken at a junior college are shown in Table 20. Eleven of the sixteen people who were in colleges (68.8 per cent) stated that both livestock feeding and farm management would have been very helpful,

Table 19. Additional courses persons in non-agricultural related occupations thought would have been beneficial for them to have taken at a junior college.

Course	: Would be : Very : Helpful			: Would be : Should be Taught : of Some : at Four Year : Use : Schools only : *				:	Would be of No Value			
	:	N	% *	:	N	% *	:	N	% *	:	N	% *
Agricultural Economics		6	33.3		6	33.3		1	5.6		0	0
Entomology		1	5.6		2	11.1		5	27.8		1	5.6
Farm Accounting		8	44.5		3	16.7		0	0		1	5.6
Farm Machinery Repair		8	44.5		2	11.1		0	0		1	5.6
Farm Management		8	44.5		4	22.2		0	0		0	0
Farm Mechanics		7	38.8		4	22.2		0	0		0	0
Genetics		4	22.2		3	16.7		3	16.7		0	0
Horticulture		2	11.1		5	27.8		3	16.7		1	5.6
Livestock Feeding		5	27.8		5	27.8		0	0		0	0

<sup>\*</sup>Per cent is of the eighteen persons presently in non-agricultural related occupations returning the questionnair as some did not check all courses.

Table 20. Additional courses persons presently in four year colleges and universities thought would have been beneficial for them to have taken at a junior college.

Course	: Ve	ould be ery elpful	:		ld be Some	:	Should at Four Schools		:	Wou of Val	
	: 1	ı %*	:	N	% *	:	N	% *	:	N	% *
Agricultural Economics	.2	2 12.5		5	31.3		7	43.8		0	0
Entomology	C	0		4	25.0		8	50.0		2	12.5
Farm Accounting	10	62.5		5	31.3		1	6.3		0	0
Farm Machinery Repair	4	25.0		9	56.3		3	18.8		0	0
Farm Management	11	68.8		4	25.0		0	0		1	6.3
Farm Mechanics	6	37.5		5	31.3		2	12.5		3	18.8
Genetics	10	62.5		2	12.5		3	18.8		0	0
Horticulture	3	6.3		1	6.3		5	31.3		2	12.5
Livestock Feeding	11	68.8		4	25.0		1	6.3		0	0

<sup>\*</sup>Per cent is of all sixteen of the present college students returning the questionnaire as some did not check all courses.

four or 25.0 per cent stated that both would be of some use. One indicated that he thought livestock feeding should only be taught at four year schools and one said that farm management would not be of any value to him.

Farm accounting and genetics were classified by ten (62.5%) senior college students as a course they thought would have been very helpful. An additional 31.3 per cent said farm accounting would have been of some use as did 12.5 per cent of the college students about genetics. Thirty-seven and five-tenths per cent of the senior college students stated that farm mechanics would have been very helpful and an additional 31.5 per cent said it would be of some use to them. Similar opinions were expressed about farm machinery repair except 25.0 per cent said it would be very helpful while 56.3 per cent said it would be of some value.

Entomology and horticulture again were considered by most as courses that should be taught in four year colleges or as having no value to them.

Other courses recommended by senior college students to be taught in the junior college were animal science, soil management, and irrigation.

Table 21 is a consolidation of the additional courses that all college transfer students thought would have been beneficial for them to have taken in a junior college. The course indicated as being very helpful by the greatest number of transfer students was livestock feeding with 62.2 per cent, farm accounting was considered very helpful by twenty or 54.0 per cent and would have been of some use by ten more college transfer students. When both were considered together the accounting course and the livestock feeding course each had an equal number of people who indicated they would have benefited from them.

Table 21. Additional courses that college transfer students thought would have been beneficial for them to have taken in a junior college.

Course	: Ve	uld be ry lpful	: Would be : Should be Taught : of Some : at Four Year : Use : Schools Only :				:	Would be of No Value			
	: N	% *	:	N	% *	:	N	% *	:	N	% *
Agricultural Economics		21.6		8	21.6		12	32.4		0	0
Entomology	4	. 10.8		7	18.9		19	51.3		2	5.4
Farm Accounting	20	54.0		10	27.0		3	8.1		1	2.7
Farm Machinery Repair	10	27.0		8	21.6		6	16.2		4	10.8
Farm Management	16	43.3		7	18.9		6	16.2		1	2.7
Farm Mechanics	11	29.7		10	27.0		6	16.2		4	10.8
Genetics	15	40.6		5	13.5		13	35.2		0	0
Horticulture	4	10.8		5	13.5		18	48.6		3	8.1
Livestock Feeding	23	62.2		7	18.9		4	10.8		0	0

<sup>\*</sup>Per cent is of all the thirty-seven college transfer students returning the questionnaire as some did not check all courses.

Farm management was the third most wanted course with 23 people or 62.2 per cent of the transfer students indicating that they would have benefited by taking the course. Farm mechanics would have been useful to 56.7 per cent of the transfer students, genetics 54.1 per cent, farm machinery repair 48.6 per cent, agricultural economics 43.2 per cent, entomology 29.7 per cent and horticulture 24.3 per cent. Nineteen or 51.3 per cent recommended that entomology be taught at four year colleges only, as did 48.8 per cent of the transfer students about horticulture. About one-third of the transfer students also recommended that genetics and agricultural economics be taught at four year colleges only.

The terminal students made similar recommendations as to which courses would have been beneficial for them to have taken in a junior college. Twenty people (58.9%) indicated that farm management would have been very helpful to them. Nineteen persons classified livestock feeding as being very helpful. When the courses that terminal students said would have been of use to them, either very helpful or of some use, were compared, farm machinery repair was mentioned by 79.5 per cent of the people making it the most used course. Livestock feeding and agricultural economics would be useful by 75.5 per cent, farm management by 70.7 per cent, farm accounting by 67.7 per cent, farm mechanics by 64.7 per cent, genetics by 41.1 per cent, horticulture by 32.4 per cent, and entomology by 23.5 per cent of the terminal students.

When all people returning questionnaires were considered together more than half thought that six courses would have been useful for them

<sup>1</sup>See Table 22.

Table 22. Additional courses that terminal students thought would have been beneficial for them to have taken in a junior college.

Course	: Ver	ld be : y : pful :	Woul of S Use	d bo : Some :	Should at Four Schools		:	Would be of ho Value	
	: N	8 *:	1,	% :	N	% *	:	N	<b>#</b>
Agricultural Economics	17	50.0	8	23.5	5	14.7		0	0
Entomology	2	5.9	6	17.6	10	29.4		1	2.3
Farm Accounting	18	53.0	5	1.4-7	0	0		0	0
Farm Machinery Popair	13	38.3	14	41.2	0	0		1	2.9
Farm Management	20	58.9	4	11.8	0	0		0	0
Farm Mechanics	13	38.3	9	26.4	0	0		ı	2.9
Geretics	8	23.5	6	17.6	7	20.6		0	1
Horticulture	h,	11.8	7	20.6	7	20.6		J	2.9
Javestock Feedling	10	56.0	6	17.6	1	2.9		O	0

<sup>\*</sup>For cent is of all thirty-four terminal students returning the questionnaire as some did not check all courses.

to have taken in a junior college. They are livestock feeding (77.5%), farm accounting (74.6%), farm management (66.2%), farm machinery repair (63.5%), farm mechanics (60.5%), and agricultural economics (58.0%).

There were seven persons who wrote in the soil management course and six wanted a course in irrigation. Ten other courses were written in by one person each.

#### SUMMARY

The purpose of this study was to determine from students who had completed an agricultural course at Garden City Junior College during the years 1954 to 1963 inclusive the answer to each of the following questions:

- 1. What is the present occupation of former agricultural students?
- 2. What are the future occupational plans of former students?
- 3. How many former students follow through with original educational objectives?
- 4. How useful has each of the agricultural courses taken at Garden City Junior College been to former students?
- 5. How could the agricultural courses taken in junior college be changed to better prepare former students for their life occupation?
- 6. What additional courses would have been beneficial for former students to take at the junior college?

The data obtained for this study was secured by mailing questionnaires along with cover letters and stamped self-addressed envelopes to the ninety students who had taken one or more agricultural courses during the nine year period. Eight questionnaires were returned because of wrong or insufficient address and were not located.

Forty-nine per cent of the questionnaires were returned from the initial mailing. Upon initiating a follow-up consisting of a second letter with a questionnaire and a stamped self-addressed envelope enclosed plus personal telephone contacts seventy-one questionnaires or 79.8 per cent were returned.

Nearly two-fifths, 39.5 per cent, of the former agricultural students were engaged in farming. Twelve of the twenty-five people enrolled in college or in the armed forces indicated plans to start farming within the next five years. This was 56.5 per cent either farming or planning to farm.

Originally 26.8 per cent intended to farm after completing junior college. Six or 31.6 per cent of this group did this but four persons who had planned to transfer to college went into farming leaving a total of 14.1 per cent that started farming after junior college.

Forty-two and three-tenths per cent of the respondents actually continued on with their original plans. Those who intended to transfer to a senior college and major in agriculture followed through with their plans more frequently (58.6 per cent) than did those with other goals.

Crops was indicated by the respondents as the most useful agricultural course taken being classified above the occasionally useful level by 81.8 per cent of the people. Three other courses; range management, soils, and animal husbandry, were ranked similarly by 74.0 per cent or more of the respondents. Poultry was classified as the

least useful course with 15.8 per cent indicating it being above the occasionally useful level.

The author noted a relationship between the usefulness of a course and the number of persons wanting to change the course. Crops, the most useful course, was most frequently recommended for change, 33.3 per cent wanting it to be more practical, 36.4 per cent said it should be more technical, and 30.3 per cent wanted no change in the course. There was very little difference between terminal and college transfer students in their recommendations. Range management, the second most useful course, had 45.8 per cent who wanted no change, 25.0 per cent said it should have been more practical, and 29.2 per cent said it should have been more technical. No change in the soils course was desired by 53.0 per cent, however, 32.4 per cent thought it should have been more technical while 14.7 per cent thought it should have been more practical.

Half of those taking animal husbandry did not want to change the course. Thirty per cent wanted it to be more practical and 20.0 per cent thought it should have been more technical.

Dairy which was classified as being no more than occasionally useful by 63.9 per cent of the people was considered as needing no change by 61.1 per cent of the respondents. No change in poultry was desired by 68.4 per cent of the nineteen persons who took the course.

Six courses were considered by 58.0 per cent or more of those who responded to the questionnaire as courses that would have been beneficial for them to have taken in the junior college. They were: livestock feeding, farm accounting, farm management, farm machinery repair, farm mechanics, and agricultural economics. Two other courses, soil

management and irrigation, were written in by six or more people and ten other courses were mentioned by one person each.

#### CONCLUSIONS

On the basis of the findings of this study the following conclusions were made:

- 1. More than half of the agricultural students either were farming or had intentions to farm.
- 2. Students who were planning to transfer to a senior college and major in agriculture carried through with their plans more frequently than other students.
- 3. Seventy-four per cent or more of the respondents used the information gained in crops, range management, soils, and animal husbandry quite often.
- 4. Transfer students indicated that they benefited more from dairy and poultry than did terminal students.
- 5. The courses most frequently used by students were the ones that were most frequently recommended to be changed. Nearly equal numbers of students wanted each course changed to be more practical and more technical.
- 6. Both terminal and transfer students thought they would have benefited had they taken more agricultural courses in junior college.

#### RECOMMENDATIONS

Based on the data obtained from this study and from conversations and personal letters received from former students while making this study the writer recommended to the administration and the curriculum committee at Garden City Junior College that changes be made in their agricultural curriculum. The following changes were recommended:

- Additional courses in livestock feeding, farm accounting, farm management, farm machinery repair, farm mechanics, agricultural economics, soil management, and irrigation be taught as soon as facilities and personnel are available.
- 2. The six agricultural courses taught in the junior college be retained and continued at about the same level as was being done.
- 3. Short courses and seminars be conducted as the need arises to give the people in the community more practical and technical information on specific topics to supplement the basic agricultural courses.<sup>2</sup>

The writer recommended that a second follow-up be made at least five years later. This would allow those individuals in college and the armed forces time to become established in an occupation.

<sup>&</sup>lt;sup>1</sup>This recommendation had at least some influence on the development of the irrigation course which was taught as a night course. It had an enrollment of 18 persons consisting of farmers, agricultural businessmen, and full time junior college students.

A short non-credit course on the buying and selling of cattle on future livestock market was taught in the spring of 1966 with an enrollment of thirty-three persons consisting of farmers, bankers, stock brokers, commercial feedlot operators, county agents, and junior college agricultural students.

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APPENDIX

July 3, 1964

Dear

Would you assist us in improving the agricultural curriculum at the Garden City Junior College? You who have taken agricultural courses at the junior college are in an excellent position to evaluate our agricultural program and suggest methods of improvement.

This study is being conducted with the cooperation of the Agricultural Education Department of Kansas State University and the Garden City Junior College in a joint effort to more effectively prepare students for their future vocation. You may be assured that this study will not in any way reflect information about specific individuals. A summary of the Master's Report to be written on the findings of this study will be sent to you if you will check item twelve of the questionnaire.

May I respectfully ask that you take a few minutes to complete this questionnaire and return it by July 17, or as soon as possible in the stamped, self-addressed envelope provided for your convenience.

Your cooperation in assisting us with this study is greatly appreciated.

Sincerely yours,

Norman Staats Agriculture Instructor Garden City Junior College

## A FOLLOW-UP STUDY OF GARDEN CITY JUNIOR COLLEGE AGRICULTURAL STUDENTS

1.	Present Occupation (check one)  (a) Farming  (b) Agricultural related occupation (Ag. Service Agencies, Food processor, Agricultural Products Salesman, etc.)  (c) Armed Forces  (d) College Student  (e) Other (please specify)
2.	If you are not farming now, do you intend to start farming within the next five years? Yes No Undecided
3.	Do you plan to work in an agricultural related occupation within the next five years? (if you are not doing so now)YesNoUndecided
4.	Was your parents' or guardians' occupation farming?YesNo
5.	Did you take vocational agriculture in high school?YesNo If yes, how many years?
6.	When you enrolled in the first agricultural course you took in junior college, did you intend to(a) return to the farm after completing junior college(b) go into a farm related occupation after completing junior college(c) transfer to a four year college or university and major in agriculture(d) transfer to a four year college or university and major in an agricultural related field (Vet. Med., Ag. Engineering, Wildlife
	Conservation, etc.)(e) other reason for taking an agricultural course (please specify)
7.	City Junior College? Yes No  (a) If you answered yes, did you major in  Agriculture  Agricultural related curriculum (Vet. Med., Ag. Eng., etc.)  Started in agriculture but transferred into a non-agricultural related field  Started in a non-agricultural field but transferred into agriculture
	Non-agricultural related curriculum  (b) Did you or do you intend to graduate from a four year college or university? Have graduated Intend to graduate Do not intend to graduate Undecided  (1) If you do not intend to graduate, why?  Financial reasons  Academic reasons  Felt training was not adequately preparing you for future occupation  Other reasons (please specify)

	Job		. 1	Approximate date	S
9.	Check the statement t			s the usefulness	to you of
	<ul><li>(a) very useful</li><li>(b) often useful</li><li>(c) occasionally us</li><li>(d) seldom useful</li><li>(e) never useful</li></ul>		ry Dairy Pou	ltry Crops Soils	Range Management
10.	To better prepare you you took at Garden Ci course you took at Ju	ty Junior Co.			
	(a) more practical (b) more technical (c) no change in co		ry Dairy Pou	ltry Crops Soils	Range Management
11.	In addition to the ag Junior College, (see think would have been	question 10	above) which	additional cour	ses do you
		very helpful	some use	Should be taugh at four year schools only	of no
E F F F G H	Agricultural Economics Contomology Carm Accounting Carm Machinery Repair Carm Management Carm Mechanics Genetics Corticulture Livestock Feeding				

here

July 24, 1964

Dear

Earlier this month I mailed you a questionnaire. Perhaps it has been misplaced or maybe it slipped your mind.

It is very important that I receive your questionnaire as only a relatively small number of students have taken agricultural courses at Garden City Junior College. You may help improve the agricultural curriculum at G.C.J.C. by returning the completed questionnaire.

Enclosed you will find another copy of the questionnaire in case the other one has been lost in the mail or mislaid. I would certainly appreciate it very much if you would fill out the questionnaire and return it to me as soon as possible.

Thank you.

Sincerely yours,

Norman Staats Agricultural Instructor Garden City Junior College

### A FOLLOW-UP STUDY OF FORMER GARDEN CITY JUNIOR COLLEGE AGRICULTURAL STUDENTS

by

# NORMAN HOWARD STAATS B. S., Kansas State University, 1959

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

The purpose of this study was to determine from students who had completed an agricultural course at Garden City Junior College during the years 1954 to 1963 inclusive the answer to each of the following questions:

- 1. What is the present occupation of former agricultural students?
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The data obtained for this study was secured by mailing questionnaires along with cover letters and stamped self-addressed envelopes to
the ninety students who had taken one or more agricultural courses during
the nine year period. Eight questionnaires were returned because of wrong
or insufficient address and were not located.

Forty-nine per cent of the questionnaires were returned from the initial mailing. Upon initiating a follow-up consisting of a second letter with a questionnaire and a stamped self-addressed envelope enclosed plus personal telephone contacts seventy-one questionnaires or 79.8 per cent were returned.

The returns revealed that 39.5 per cent of the former agricultural students were farming. An additional 17.0 per cent who were either in the armed forces or college planned to go into farming within the next five years. This was 56.5 per cent either farming or planning to farm.

Forty-two and three-tenths per cent of the respondents continued on with their original plans. Those who intended to transfer to a senior college and major in agriculture followed through with their plans more frequently (58.6 per cent) than did those with other goals. Ten per cent of those who classified themselves as terminal students transferred to a senior college. More than half (52.2 per cent) of the respondents transferred to a senior college.

The response indicated that crops was thought to be the most useful agricultural course taken in junior college followed by range management, soils, and animal husbandry, each having from 81.8 per cent to 74.0 per cent of the respondents ranking them above the occasionally useful level. Thirty-six and one-tenth per cent of the respondents ranked dairy above this level as did 15.8 per cent of the people who took poultry.

A relationship between the usefulness of a course and the per cent of people wanting the course to be changed either being more technical or more practical was noted by the writer. The courses ranked as being often useful by the largest per cent of the people were the ones the most people indicated needing changed.

Six courses were considered by 58 per cent or more of those who responded to the questionnaire as courses that would have been beneficial for them to have taken in the junior college. They were: livestock feeding, farm accounting, farm management, farm machinery repair, farm

mechanics, and agricultural economics. Two other courses, soil management and irrigation, were written in by six or more people and ten other courses were mentioned, each by one person.

