

COMPARATIVE EVALUATION OF AGRICULTURAL PUBLICATIONS
AND OTHER FARMING NEWS MEDIA

by

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INTRODUCTION

Scope of Extension Services

During the year 1947, 471,637 Extension publications of various types were distributed by the Kansas State Extension Information office. By 1957 the number of publications distributed had expanded to 1,005,305 -- an increase of more than twice the number of publications distributed in 1947.

Much of this remarkable increase in numbers of publications distributed may be attributed to the Kansas State College Extension Information office staff for its willingness to experiment, and to initiate necessary changes, if need be, to provide a more efficient service to Kansas farmers.

Improvements Made In Recent Years

When comparing Extension publications of 1957 with those written in 1947, it becomes readily apparent that many changes have been made. The publications have become progressively shorter, proceed more directly to the point. Many modern bulletins are coming to resemble charts more and more because of their numerous titles and sub-titles and short, concise paragraphs. Many publications, in fact, are designed in the form of convenient charts.

Pictures and other illustrations have been assigned a greater role in today's Extension publications. Many publications now illustrate the context of the subject matter with convenient, step-by-step pictures and illustrations. These illustrations not only assist in conveying the message to the reader; they also contribute to a more attractive product which is better able to sell itself.

The latest change in Extension publications has been the introduction of color. Many publications now appear with color-illustrated as well as color pictures and other illustrations throughout their entirety. Color has revitalized and enhanced

the advantages brought about by the introduction and subsequent expansion of the use of black and white pictures and other illustrations.

The trend over the past ten years, then, has been to greatly condense the text of Extension publications, greater utilization of subject titles and subtitles for quicker reference, the greater usage of black and white pictures and other illustrations to further elaborate on the text, and, finally, the introduction of color to the publications.

Credit must be given to the members of the Extension Information office staff for their foresight in recognizing and instituting new methods and procedures for bringing agricultural information to the farmer in an ever-increasing attractive and effective package.

Need for Additional Research

Yet, research is needed to more accurately evaluate these publications from the standpoint of their usefulness to the farmer. The final test of a good bulletin, after all, is not its size, shape, appearance, or the manner in which the message is presented. Rather, it is its ability to effectively communicate agricultural information to the farmer.

Moreover, research is needed to determine if proper emphasis is being given Extension publications, or if the Extension Information office should concentrate a greater proportion of its efforts through other media, such as radio and television.

PROCEDURE

A questionnaire was utilized to compile the desired information. It was designed to provide information regarding the relative size, scope, and degree of success of the farmer's enterprise in addition to his attitude toward college publications and the extent that he made use of them.

Scope of Research

Since available time and finances restricted the scope of this study, it was decided to limit the research to one county. It was believed that this action would increase the probability of a thorough and accurate survey which sampled all attitudes in proportion to the rates of frequency in which they occurred in the county.

Geary county was selected because its proximity provided greater convenience in conducting the survey, and because there were no obvious reasons why the attitudes of the farmers would not be representative of those over the remainder of the state.

Pretesting the Questionnaire

Pretesting the questionnaire exposed a number of weaknesses. It was learned that farmers were often reluctant to answer such specific questions as:

"In the past year, how many times did you look for college publications at your County Agent's office which pertained to a subject of particular interest to you? _____. While looking through the selection of college publications at your County Agent's office, how many times in the past year has a particular publication had such appeal that you obtained a copy of it? _____"

Many of the farmers didn't have any idea how many times during the previous

year they had failed to find the publications they were looking for, etc., and a few were annoyed that such detailed information should even be asked of them. In short, since the questionnaire was not worded in "farmer language," it failed to sustain -- even to attract, in some instances -- the interest and subsequent cooperation of many of the farmers. The questionnaire was therefore redesigned, making it less formal and the questions less specific. For instance, the questions mentioned above in example of the original questionnaire was rephased to read in this manner:

"How many college publications do you estimate you pick up at the County Agent's office in a year's time? _____. Do you some of the time? _____, most of the time? _____, or always? _____ get what you're looking for? Do you some of the time? _____, most of the time? _____, or always? _____ pick up some other college publication while you're at the County Agent's office?"

While this type of questioning was of a more general nature than in the original questionnaire, it was worded in a language which the farmer readily understood, did not tax his memory too strenuously, and thus received prompt and enthusiastic consideration by most of the farmers.

It was found that responses were greatly stimulated by the omission of the requirement of the name of the farmers completing the questionnaire. Although a place for the name of the individual completing forms is basic to the vast majority of questionnaires, there was no requirement for specific names in this survey. It was found that the omission of this requirement became a tremendous psychological advantage to the farmers. Most people, including farmers, tend to be more reserved in their participation and are less likely to reflect their true attitude in questionnaires if they are required to identify themselves on the form. They are far more likely to make a limited, generalized statement, no statement at all, or attempt to express what they believe was wanted. This

fact was particularly true on the last question of the questionnaire which read:

"In the remainingspace, tell what you believe the Extension Information office could do to make college publications better, how they could get them out to the farmers better, or anything else that you think would help them to do a better job."

Farmers, it was discovered, don't normally differentiate between the various sources and types of college agricultural media. To ask them how many Extension publications they obtained per year and how many Experiment Station publications they obtained per year would only confuse them. It would be futile, therefore, to ask them for a breakdown on the publications they obtained from the Extension Information office into quantities of bulletins, circulars, leaflets, etc. Since it was believed that their attitude toward one source of college agricultural publications would be likely to be very similar to others, no differentiation of the various publications was required in the questionnaire. All types and sources of college agricultural publications were grouped together under the heading "college publications." By this procedure, undue confusion on the part of the farmers was avoided. Furthermore, it was believed that the procedure in no way altered the response of the farmer. Henceforth, in this study all college types and sources of agricultural publications will be referred to simply as college publications.

Conducting the Interviews

The questionnaires were taken to the farmers in person. Moreover, the identity of the author, what he was attempting to do, and why he was doing it was explained to the farmers at length. The questionnaire was gone over with the farmers, question by question, everything they were uncertain about being

explained. In some instances, the farmers expressed their desire to give more consideration to the last statement before writing their suggestions. In these instances, the questionnaire and a self-addressed envelope were left with the farmer while other interviews were continued. Frequently, the farmers preferred to give verbal answers to the questions and continue with their work.

Although the procedure in conducting the survey was relatively expensive and very time-consuming, it also proved very effective. The author aspired to interview 110 Geary county farmers, which is 20 percent of the total number of farmers in the county. To attain this goal, 117 farmers were interviewed -- only seven of whom failed to return their questionnaires.

To insure adequate coverage of all types of farmers, all the farmers along both sides of the highways running through portions of the county were interviewed. In this manner, the writer was able to interview the large farmers, the small farmers, the successful farmers, and the not so successful farmers without being influenced by subconscious prejudices. An estimated 10 to 12 farmers were interviewed daily by this procedure.

While traveling over the county, the writer was unable to detect any prevalence of any one particular class or type of farmers residing along the highways. It is probable, therefore, the survey accurately sampled the opinions of farmers of differing circumstances in the approximate frequency in which they existed.

OTHER RESEARCH

"AGRISearch"

AGRISearch, dated September, 1955, entitled, Reach New People? This study attempted to find the answer to the question -- Do mail notices of publications help extension?

They found that mail announcements of extension publications can be expected to draw requests from 10 to 15 percent of the rural audience.

Succeeding announcements sent to those who reply to the first announcement can be expected to yield 40 to 50 percent returns. Most of the respondents to these announcements are "average" farmers.

Nearly 60 percent of those who responded to mail announcements of publications are persons not active in extension work. The larger farmers utilize more extension publications than the smaller farmers.

The salutation in a letter accompanying a questionnaire does not influence the proportion of replies.

Stamped return envelopes bring a higher proportion of questionnaire returns than do franked return envelopes.

AGRISearch, dated January, 1956, entitled, Content Counts Most! Following is a summary of their findings regarding farmer's opinions on ways to improve bulletins:

<u>Illustrations</u>		<u>Length</u>		<u>Language</u>	
more	35	same	74	same	74
fewer	2	longer	2	simpler	70
same	98	shorter	80	no opinion	891
no opinion	900	no opinion	899		

AGRISearch, dated December, 1955, entitled, Choose Colors!! For men and women, blue and red tend to be the more highly preferred colors, while yellow and orange tend to be less highly preferred.

In general, the darker colors tend to be preferred over the lighter colors.

Social conditions, environment, and other factors help to determine color preferences.

AGRISEARCH, dated November, 1955, entitled, Say It with Pictures. Simple visual patterns with few data tend to produce more specific recall. Static comparisons are best represented by bar graphs. Dynamic comparisons are best represented by statistical tables. Simple comparisons are best given by pictographs.

AGRISEARCH, dated March, 1956, entitled, Colorful, Isn't It? Other factors being equal, people tend to remember colored objects better than uncolored objects.

In general, the additional cost of color printing can be justified on the basis of added recall.

Printed material in color tends to get higher readership than similar material in black and white.

Orange and yellow tend to be high visibility colors; green, red, and blue tend to have low visibility.

Darker colors tend to make things look smaller, lighter colors tend to make things look larger.

AGRISEARCH, dated May, 1956, entitled, Black on White or White on Black.

Black print on a white background is normally more legible than comparable white print on black.

Black print on white takes less reading time than white on black.

AGRISEARCH, dated June, 1955, entitled, Where Do They Get Their Information?

Found most frequently reported sources were:

magazines or newspapers	22.8% of total
neighbors or relatives	10.7% "
bulletins	11.4% "
agricultural teachers	7.3% "
county agent	5.7% "

University of Missouri Bulletins

University of Missouri Agricultural Experiment Station research bulletin number 472, dated April, 1951, entitled, Source and Use of Farm and Home Information by Low-Income Farmers in Missouri. A very high percentage of the

operators and wives who had contacts with the available means of farm and home information found them useful as sources of information.

Farm operators and wives recognized more impersonal than personal sources of farm and home information. Examples of personal sources were friends and relatives. Examples of impersonal sources were radio, newspapers, and magazines.

Far more low-income farm operators and wives obtained information through commercialized channels of communication than directly from public agencies including the College of Agriculture.

Radio information broadcasts were generally viewed with favor by low-income farm operators and wives as sources of farm and home information.

Formal education of the operator was more closely associated with the proportion of households obtaining useful farm and home information from farm bulletins than with any of the other reading sources considered.

Personal, reading, and radio sources of farm and home information were not equally utilized by all households.

Locality differences were apparent in the use made of various sources of farm and home information.

The extent to which farm and home information was translated into action fell far short of recommended standards.

The adoption of approved practices varied greatly with farm income and education of operator.

Advanced age presented no serious barrier to new practice acceptance.

The importance of primary group association as a means of disseminating farm and home information was demonstrated by the study.

The basic need for increasing contacts with recognized sources of farm and home information as a prerequisite to farm practice improvement was demonstrated by the study.

The theory that personal sources are more convincing than impersonal ones was supported by the study.

LIMITATIONS

Problem of Obtaining Representative Samples

Although a conscious effort was made not to be selective of the type of farmers interviewed, one could not be certain that the 110 farmers interviewed along the highways were truly representative of the total 552 farmers in the county.

Many farmers were not at home, and were not called upon a second time. It is possible that the majority of farmers absent from their homes belonged primarily to one particular class of farmers. Such a situation could conceivably result in an over-emphasis of the classes of farmers who were more frequently found at home.

Influence of Presence of the Questionnaire's Author

Although the nature of the survey was thoroughly explained to the farmers and the fact was always emphasized that no signatures were required, the presence of the writer at the time of the completion of the questionnaire may have influenced the expression of a more favorable attitude on the part of the farmer.

Possibly the most significant limiting factor of the survey was the author's inability to investigate attitudes which prompted certain types of responses. For instance, it would have been interesting to attempt to determine why some

farmers have never been to their County Agent's office, or have never used any college publications.

Problem of Formulating a Flexible Questionnaire
For Different Types of Attitudes

Finally, the questionnaire may have not been thorough enough, broad enough, or flexible enough to formulate an accurate picture of each farmer and his perspective regarding college publications.

Precautionary measures were taken to minimize these problems as much as possible. Since one out of every five farmers in the county was interviewed, it is believed the resulting overall picture will not be unduly distorted by these recognized limitations.

HYPOTHESIS

This study was undertaken on the hypothesis that college publications are well received by the vast majority of farmers, and that few changes in the present form, nature of content, subject matter development procedures, and methods of distribution are necessary.

FINDINGS

Age in Relation to Number of Farmers

Table 1. Age in relation to number of farmers

Age of farmers	:	Number of farmers	:	Percent of total number of farmers
0 to 25	:	6	:	5.45
25 to 35	:	14	:	12.72
35 to 55	:	54	:	49.09
55 to 65	:	21	:	19.09
65 or older	:	15	:	13.63

As would be expected, the number of farmers increased as the age-group categories increased. This trend was reversed among farmers 55 years or older.

It is interesting to note that farmers 65 years or older exceeded the number of farmers between 25 and 35 years of age.

Almost one-half of the farmers interviewed were in the 35 to 55 age group. When comparing the percentage of this age group with others, one must keep in mind that the 35 to 55 age-group category encompasses a 20-year span, whereas the preceding and following categories cover 10-year spans. Yet, it is significant to note that there are nearly as many farmers in the 35 to 55 age-group category as there are in all the other categories combined.

Age in Relation to Number of Acres Farmed

Table 2. Age in relation to number of acres farmed

Age of farmers	Total number of acres		Average number of acres		
	owned	rented or otherwise	owned	rented or otherwise	total acres
0 to 25	1,171	1,304	412.5	217.3	2,475
25 to 35	2,718	3,386	436.5	241.9	6,104
35 to 55	15,933	9,933	476.8	182.1	25,866
55 to 65	7,762	3,361	543.9	174.3	11,423
65 or older	5,227	2,213	496.0	147.5	7,440

There was a trend toward greater total acreages with increasing age-group categories. Farmers 65 years or older were the only exception.

The greatest difference between the age-group categories was found in the 0 to 25 and 55 to 65 age-group categories. Here, there was an average of 131.4 more acres per farmer in the 55 to 65 age-group category than in the 0 to 25 age-group category.

It was not surprising to note the influence of number of years of farming (reflected roughly in the different age-group categories) upon the proportion of the farms owned or rented (or otherwise). This was most evident when a

comparison was made of the 0 to 25 and 65 or older age-group categories. The 0 to 25 age-group category owned an average of 195.2 acres and rented (or otherwise) an average of 217.3 acres per farmer. This represented an average of 22.1 more acres rented (or otherwise) per farmer than owned by the farmers in this age-group category. In contrast, the 65 or older age-group category farmers owned an average of 348.5 acres and rented (or otherwise) only 147.5; a difference of an average of 201.0 more acres per farmer owned than rented.

The 0 to 25 and the 25 to 35 age-group categories were the only ones that rented (or otherwise) more acres than they owned.

Age in Relation to Years of Formal Education

Table 3. Age in relation to years of formal education

Age of farmers	Number of farmers	Ave. years of education
0 to 25	6	14.42
25 to 35	14	13.25
35 to 55	54	11.36
55 to 65	21	11.50
65 or older	15	7.75

There was approximately one year's difference in the average level of education of the 0 to 25 and 25 to 35 age-group category farmers.

Far more significant is the fact that there was a difference of an average of only .14 years of education between the 35 to 55 and 55 to 65 age-group categories.

Farmers in the 65 or older age-group category had an average of 7.75 years of formal education. This was significantly lower than the two preceding age-group categories, and is approximately one-half the amount of the 0 to 25 age-group category.

Status of Farm Acreages

Table 4. Status of farm acreages

	Number of farmers	Number : of acres	Average acreage : per farmer	Percent : of total
Own farms	51	32,811	298.3	61.55
Rent (or otherwise)	59	20,497	186.3	38.45
Total	110	53,308	484.6	100.00

Less than one-half of the farmers owned their farms, yet they owned 12,314 more acres than they rented (or otherwise). This represents a difference of an average of 112 more acres owned than rented (or otherwise) per farmer -- approximately 20 percent more.

Size of Farms in Relation to Number of Farmers

Table 5. Size of farms in relation to number of farmers

Number of acres	:	Number of farmers	:	Percent of total
0 to 50		8		7.27
50 to 100		7		6.36
100 to 200		17		15.36
200 to 500		61		54.53
500 to 1,000		15		13.63
1,000 or more		2		1.82

Sixty-one of the 110 farmers interviewed were grouped in the 200 to 500-acre category. This number was greater than all the other acreage categories combined. The average farmer must be conceived, then, as operating a farm containing from 200 to 500 acres.

There were only two more 100 to 200-acre farms than there were 500 to 1,000-acre farms.

It was somewhat surprising to note that as many as eight farms contained 0 to 50 acres, and as few as two farms contained 1,000 or more acres.

Amount of Net Profit in Relation
to Number of Farmers

Table 6. Amount of net profit in relation to number of farmers

Amount of net profit	Number of farmers	Percent of total farmers
0 to \$1,000	22	20.00
\$1,000 to \$2,500	47	42.72
\$2,500 to \$5,000	49	44.54
\$5,000 or more	2	1.82

Nearly one-half (44.54%) of the farmers interviewed netted between \$2,500 and \$5,000. The second largest group (42.72%) netted between \$1,000 and \$2,500. These two group categories combined (\$1,000 to \$5,000) constituted 87.20% of the total number of farmers interviewed.

Only one farmer out of five netted \$1,000 or less, and a very small minority (1.82%) netted over \$5,000.

Age in Relation to Amount of Net Income

Table 7. Age in relation to amount of net income

Age of farmers	Number of farmers	Average yearly income
0 to 25	6	\$1,243.00
25 to 35	14	\$1,920.00
35 to 55	54	\$2,633.00
55 to 65	21	\$3,547.00
65 or older	15	\$2,732.00

With the exception of the 65 or older age-group category, net income increased with increased age groups of farmers. There was a difference of an average of \$1,304 per farmer between the 0 to 25 age-group category and the 55 to 65 age-group category.

No explanation is ventured for the lower average yearly net income of the 65 or older age-group farmers in contrast to the 55 to 65 age-group category.

The 65 or older age-group farmers netted an average of only \$99 more than

the 35 to 55 age-group farmers.

Age in Relation to Source of Introduction
to new Farming Ideas

Table 8. Age in relation to source of introduction to new farming ideas

Age of farmers :	No. of farmers :	Demonstrations :		No. of farmers :	Other farms :	
		% of age group :	% of total group :		% of age group :	% of total group :
0 to 25	1	16.16	1.11	5	83.33	5.55
25 to 35	1	7.14	1.11	13	92.86	11.81
35 to 55	4	7.41	3.64	50	92.59	45.45
55 to 65	0	0	0	21	100.00	19.09
65 or older	0	0	0	15	100.00	13.63
Total	6		5.86	104		95.53

The most striking thing in this table is the overwhelming percentage of farmers who were introduced to new farming ideas via other farms rather than by demonstrations. One hundred four of the 110 farmers interviewed observed new farming ideas being practiced on other farms. Only 6 of the 110 interviewed gained more ideas through demonstrations than through observations of other farm operations.

One hundred percent of both the 55 to 65 and 65 or older age-group categories never gained new farming ideas via demonstrations.

Also noteworthy, over 92 percent of the 25 to 35 and 35 to 55 age-group categories gained more new farming ideas from observations of these practices on other farms than by demonstrations.

While four times as many farmers in the 35 to 55 than the 25 to 35 age-group category named demonstrations in preference to observations of other farms, this reflects the greater number of farmers in that particular age-group category. The two age-group categories are very similar when compared from the "percent of age group" point of reference.

The 0 to 25 age-group category was influenced more by demonstrations than all the other age-group categories combined. Yet, 83.33 percent of the farmers in this age-group category indicated their preference of observations of new farming ideas being practiced on other farms than by demonstrations. This would suggest that older, more experienced farmers rely proportionally less upon the efforts of their county agent than younger, less experienced farmers.

All age-group categories considered, approximately 1 out of 17 farmers was introduced to new farming ideas through demonstrations, rather than by observing these ideas being practiced on other farms.

Age in Relation to Acceptance of New Ideas

Table 9. Age in relation to acceptance of new ideas

Age of farmers	No. of farmers	Try out first		Observe first		
		% of age group	% of total group	No. of farmers	% of age group	% of total group
0 to 25	1	15.66	1.11	5	83.33	5.55
25 to 35	2	14.29	2.22	12	85.71	10.91
35 to 55	3	5.55	3.33	51	94.44	46.36
55 to 65	0	0	0	21	100.00	19.09
65 or older	0	0	0	15	100.00	13.63

The contents of this table, closely related to table No. 8, indicates the preference of the vast majority of farmers in all age groups to observe the results of a new farming idea tested on another farm prior to instituting it in their own farming program.

None of the 36 farmers in the 55 to 65 age-group category were the first to try out new ideas in their communities.

Only 5.55% of the 35 to 55 age-group category pioneered new farming ideas on their farms, contrasted to 94.44 percent of the same group who preferred to first observe the results on another farm.

The percentage of age-group farmers first to try out new farming ideas in

their community was greatest in the 0 to 25 age-group category. Of this group, 16.66 percent (1 out of 5) indicated they were the first to try out new farming ideas in their community compared to 14.29 percent of the 25 to 35 age-group category.

All age-group categories considered, approximately 1 out of 17 farmers were the first to try out new farming ideas in their community.

Number of Farmers in Relation
to Usage of Bulletins

Table 10. Number of farmers in relation to usage of bulletins

Age of farmers	Number of farmers interviewed	Number using bulletins	Percent of age group
0 to 25	6	6	100.00
25 to 35	14	14	100.00
35 to 55	54	48	88.88
55 to 65	21	15	71.43
65 or older	15	7	46.66

Less than one-half of the farmers in the 65 or older age-group category used bulletins. This is not surprising since many indicated during interviews that experience was, without question, the best teacher. A surprising number of this age group were antagonistic to the idea of colleges and universities trying to help them and generally "meddling in our affairs."

Over 15 percent more of the farmers in the 35 to 55 age-group category used bulletins than in the 55 to 65 age-group category. No explanation for this fact is ventured. Nevertheless, the vast majority of farmers in both age-group categories used bulletins: 88.88 percent and 71.43 percent respectively.

All farmers interviewed in the 0 to 25 and 25 to 35 age-group category used bulletins. That 100 percent of the farmers in both of these age-group categories used bulletins was unexpected.

A distinct trend was evident in the percentage of farmers using bulletins

and their respective age-group categories. Although the percentage declined as age-group categories were increased, the vast majority of all groups, with the exception of the 65 or older age-group category, used bulletins. As was previously noted, the use of bulletins by this age group declined sharply.

Age in Relation to Attitude
Toward College Bulletins

Table 11. Age in relation to attitude toward college bulletins

Age of farmers	Very helpful	% of age group	Helpful	% of age group	Not very helpful	% of age group
0 to 25	2	33.33	4	66.66	0	0
25 to 35	4	28.57	10	71.43	0	0
35 to 55	21	43.75	26	54.17	1	2.08
55 to 65	2	13.33	13	86.66	0	0
65 or older	1	14.29	6	85.71	0	0

Of the farmers using college publications, 30 (33.33%) considered them very helpful, 59 (65.55%) indicated that they were helpful, and 1 (1.11%) viewed them as not being very helpful.

As was previously noted, older farmers tended to de-emphasize the value of college publications. In the 55 to 65 age-group category, for instance, 86.66 percent considered them helpful while only 13.33 percent regarded them as being very helpful.

There was an unexpected difference in attitude between the 25 to 35 age-group and 35 to 55 age-group categories. Nearly three-fourths of the 25 to 35 age-group category regarded college publications as being helpful contrasted to approximately one-half of the 35 to 55 age-group category farmers. The fact that is surprising was that 43.75 percent of the 35 to 55 age-group category indicated that college publications were very helpful compared to only 28.57 percent of the 25 to 35 age-group category with the same opinions.

With the exception of the 35 to 55 age-group category, a greater percentage

of the farmers in the 0 to 25 age-group level considered college publications to be very helpful than in any other age-group category. Accordingly, with the exception of the 35 to 55 age-group category, the lowest percentage of farmers regarding college publications as being only helpful were in the 0 to 25 age-group category.

Only one farmer, out of the 90 indicating that they used college publications, regarded them as not being very helpful. This farmer was a member of the 35 to 55 age-group category rather than to either of the two older age-group categories who had lower opinions of the value of college publications.

Despite the unexpected attitude on the part of the 35 to 55 age-group category farmers toward college publications, there was evidenced a general trend toward a higher opinion of the usefulness of the publications among younger farmers than older farmers.

Age in Relation to Use of College Bulletins

Table 12. Age in relation to use of college bulletins

Age of farmers :	Number of farmers :	% of age group :	% of total farmers
0 to 25	6	100.00	5.45
25 to 35	14	100.00	12.73
35 to 55	48	88.88	43.63
55 to 65	15	71.43	13.64
65 or older	7	46.66	6.36

A trend toward a greater use of college publications by younger farmers was clearly evident in this table.

All farmers interviewed in the 0 to 25 and 25 to 35 age-group categories indicated they used college publications.

Nearly three-fourths (71.43%) of the 55 to 65 age-group category indicated they used college publications, contrasted to less than half (46.66%) of the 65 or older age-group category farmers using the publications.

Number Years Farming in Relation to Attitude
Toward College Publications

Table 13. Number years farming in relation to attitude toward college publications

Years of farming	Very helpful	% of age group	% of total group	Helpful	% of age group	% of total group	Not very helpful	% of age group	% of total group
0 to 5	4	44.44	4.44	5	55.55	5.55	0	0	0
5 to 10	5	29.41	5.55	12	70.59	13.33	0	0	0
10 to 20	20	42.55	22.22	27	57.45	30.00	0	0	0
20 to 30	1	7.69	1.11	11	84.39	12.22	1	1.11	7.69
30 or more	0	0	0	4	100.00	4.44	0	0	0

(Nearly one out of five farmers — 20 out of 110 — indicated they didn't use college publications at all. The majority of these farmers were 55 years or older.)

Of the farmers who had been farming from 0 to 5 years, 44.44 percent considered college publications very helpful, compared to 7.69 percent of the individuals who had farmed for 20 to 30 years. While 42.55 percent of the individuals who had farmed for 10 to 20 years regarded the publications as being very helpful, only 29.41 percent of the farmers who had farmed for 5 to 10 years indicated that the publications were very helpful. The reason for this wide difference of attitude between these two groups is not known.

Of the farmers who had been farming 30 years or longer, 100 percent considered college publications helpful, compared to only 55.55 percent of the 0 to 5 years farming group. The high percentage of 70.59 percent of the 5 to 10 years farming group indicated that college publications were helpful. This percentage was sharply contrasted by the group preceding and following it. No possible explanation is ventured.

One individual in the 20 to 30 years farming category regarded college publications as not being very helpful.

Education in Relation to use
of College Publications

Table 14. Education in relation to use of college publications

Number years of formal education	Total number used	Average number used per farmer per year	Average number used per farmer per month
0 to 8	117	9	.75
8 to 12	1,922	31	2.59
12 to 16	302	43	3.59
16 or more	5	5	.42

This table indicates the use of college publications declined with lack of education as well as with superior education.

The farmers in the 12 to 16-years education level category led all other groups in the average number of college publications used per farmer per year. Farmers in this group each used an average of 43 bulletins per year (3.59 per month).

The 8 to 12-year education level category used the second greatest number of college publications. These farmers each used an average of 31 publications during the year (2.59 per month).

Farmers with an education level of eight years or less used considerably fewer publications than farmers with 8 to 19 years of formal education. They averaged only nine college publications per farmer per year -- less than one bulletin per farmer per month.

Similarly, farmers with 16 years or more formal education declined sharply in their use of college publications. This group used an average of five publications per year per farmer -- nearly one half as many as farmers with eight or fewer years of formal education.

During the interviews, it was noted that farmers with greater number of years of formal education more frequently observed that college publications did not go "deep" enough into the subject matter, whereas farmers with few

years of formal education were prone to complain that bulletins often were "too deep" to be readily understood.

Education in Relation to Attitude Toward
College Publications

Table 15. Education in relation to attitude toward college publications

Years of education	: Very helpful	: % of age group	: % of total group	: Helpful	: % of age group	: % of total group	: Not very helpful	: % of age group	: % of total group
0 to 8	4	44.44	4.44	5	55.55	5.55	0	0	0
8 to 12	20	31.25	22.22	43	67.19	47.88	1	1.56	1.11
12 to 16	6	37.50	6.66	10	62.50	11.11	0	0	0
16 or more	0	0	0	1	100.00	1.11	0	0	0

Nearly one-half (44.44%) of the farmers with eight or less years of formal education considered college publications very helpful. This percentage was sharply contrasted by the farmers with 16 years or more of formal education. None of the latter group regarded college publications as being very helpful.

In all education groups, a greater percentage of farmers considered college publications helpful rather than very helpful.

Only one individual with between 8 and 12 years of formal education considered college publications not very helpful.

In general, it may be concluded that the attitude of the farmers toward college publications became less favorable with increased age.

Sources of Information

<u>Most frequently mentioned first</u>	<u>No.</u>	<u>Most frequently mentioned second</u>	<u>No.</u>
Magazines	61	Neighbors	38
Newspapers	24	Magazines	28
County agent	12	County agent	20
Extension specialist	5	Newspapers	12
Experience	8	Direct from college by request	6
		Experience	4
		Feed, produce and implement co.'s	2
<u>Most frequently mentioned third</u>	<u>No.</u>	<u>Most frequently mentioned fourth</u>	<u>No.</u>
Radio	29	Radio	20
Feed, produce and implement co.'s	21	Television	19
County agent	21	Neighbors	17
Newspapers	17	Newspapers	10
Neighbors	14	Feed, produce and implement co.'s	12
Direct from college by request	8	Magazines	8
		Federal government	8
		Relatives	8
		Extension specialist	5
		Experience	3
<u>Most frequently mentioned fifth or more</u>	<u>No.</u>		
Radio	52		
Newspapers	45		
Extension specialist	41		
Federal government	36		
Direct from college by request	36		
Relatives	31		
Farm Bureau	28		
Neighbors	25		
Feed, produce and implement co.'s	21		
Agricultural teacher	21		
Evening classes	18		
Magazines	13		
Experience	3		

It is remarkable that only five sources of information were listed as the primary source by the 110 farmers interviewed. Of the sources mentioned, farm magazines were clearly the leading source of information for the vast majority of farmers.

Newspapers were considered the primary source of information by the second largest group of farmers. Newspapers may have received this distinction because of the daily market reports services it provides the farmers, rather than the

introduction of new farming ideas. This observation suggests the possibility of a misinterpretation of the question by some of the farmers. It is possible that the question was regarded in terms of the source of the greatest volume of farming information, rather than the source of the greatest volume of information regarding new farming ideas.

The inclusion of experience as a primary source of information on new methods of farming is surprising, and prompts one to question the farmers' definition of "new farming information."

More farmers indicated that neighbors were their second largest source of new farming information than any other category. Magazines were considered the second greatest source of new farming information by most farmers. It is noteworthy that experience was also regarded as an important source of new farming information by most farmers.

Radio was considered to be the third most important source of new farming information by most farmers. Feed, produce and implement dealers were given considerable emphasis as a source of new farming information. It should be noted that the County agent was relatively highly regarded by all farmers in the ranking of informational sources of their first three choices. College publications direct from college by request was also given consideration by the farmers interviewed as an important source of new farming information.

It is surprising to note the number of farmers who regarded television as an important source of new farming information, since it is currently restricted largely to market reports and reports on the proceedings of various local agricultural meetings.

Radio, the choice of most farmers as the third and fourth most important source of new farming information, was also considered most important by most of the farmers in the combined remaining categories. Experience, magazines, and

college publications appear in this final category. Since the County agent does not appear in this category, it may be assumed that most farmers considered his work important, as reflected in their first, second, and third choices, or not important at all.

Age in Relation to Sources of
New Farming Information

Age of farmers	First choice	Number	Second choice	Number
0 to 25	Magazines	4	County agent	3
25 to 35	Magazines	8	County agent	5
35 to 55	Magazines	33	County agent	12
55 to 65	Magazines	12	Newspapers	6
65 or older	Magazines	4	Experience	2
Age of farmers	Third choice	Number	Fourth choice	Number
0 to 25	Newspapers	4	Neighbors	2
25 to 35	Newspapers	6	Neighbors	2
35 to 55	Radio	11	Newspapers	6
55 to 65	Neighbors	8	Experience	3
65 or older	Neighbors	5	Newspapers	3

The majority of the farmers in the 0 to 25 and 25 to 35 age-group categories were in agreement as to the relative importance of the first four primary sources of new farming information.

Whether by coincidence or reflection of differences in age-group outlooks, the 35 to 55 age-group farmers considered newspapers to be of lesser importance as a source of new farming information, and radio as a more important source.

It is interesting to note that both the 55 to 65 and 65 or older age-group farmers rated experience highly as a source of new farming information. This was particularly true with the older group who regarded it as the second most important source of new farming information by the latter two groups than by the three preceding, younger age-groups of farmers.

Particularly significant is the fact that all age-group categories of farmers agreed that magazines were their primary source of new farming information.

Summary of the 0 to 25 Age-Group Characteristics

1. This age group averaged 12 college publications per farmer per year requested direct from college.
2. Of the group, 100 percent (6) of the farmers paid attention to charts and graphs in the college publications.
3. The group averaged 10 college publications per farmer per year from the County Agent.
4. Of the group, 0 percent found the publications they desired at the County Agent's office some of the time.
5. Of the group, 66.66 percent (4) of the farmers found the publications they desired at the County Agent's office most of the time.
6. Of the group, 33.33 percent (2) of the farmers found the publications they desired at the County Agent's office always.
7. Of the group, 0 percent of the farmers indicated that college publications were "too deep" to be readily understood.
8. Of the group, 0 percent of the farmers regarded college publications as not being "deep" enough.
9. Of the group, 100 percent (6) of the farmers considered college publications just about right as they were.
10. Of the group, 20 percent (1) of the farmers indicated they picked up other bulletins at the County Agent's office some of the time.
11. Of the group, 60 percent (3) of the farmers indicated they picked up other bulletins at the County Agent's office most of the time.
12. Of the group, 20 percent (1) of the farmers indicated they picked up other bulletins at the County Agent's office always.
13. Of the group, 0 percent of the farmers indicated they were influenced

by color covers on college publications.

14. Of the group, 100 percent (6) of the farmers indicated they were not influenced by color covers on college publications.

Summary of the 25 to 35 Age-Group Characteristics

1. This age group averaged 14 college publications per farmer per year requested direct from college.

2. Of the group, 100 percent (14) of the farmers paid attention to charts and graphs in the college publications.

3. The group averaged 8 college publications per farmer per year from the County Agent's office.

4. Of the group, 21.43 percent (3) of the farmers found the publications they desired at the County Agent's office some of the time.

5. Of the group, 64.29 percent (9) of the farmers found the publications they desired at the County Agent's office most of the time.

6. Of the group, 4.29 percent (2) of the farmers found the publications they desired at the County Agent's office always.

7. Of the group, 0 percent of the farmers indicated that college publications were too "deep" to be readily understood.

8. Of the group, 14.29 percent (2) of the farmers regarded college publications as not being "deep" enough.

9. Of the group, 85.71 percent (12) considered college publications just about right as they were.

10. Of the group, 28.75 percent (4) of the farmers indicated they picked up other college publications at the County Agent's office some of the time.

11. Of the group, 71.43 percent (10) of the farmers indicated they picked up other college publications at the County Agent's office most of the time.

12. Of the group, 0 percent of the farmers indicated they picked up other college publications at the County Agent's office always.

13. Of the group, 0 percent of the farmers indicated they were influenced by color covers on college publications.

14. Of the group, 100 percent (14) of the farmers indicated they were not influenced by color covers on college publications.

Summary of the 35 to 55 Age-Group Characteristics

1. This age group averaged 17 college publications per farmer per year requested direct from college.

2. Of the group, 91.98 percent (45) of the farmers paid attention to charts and graphs in the college publications.

3. The group averaged 9 college publications per farmer per year from the County Agent's office.

4. Of the group, 18.75 percent (9) of the farmers found the publications they desired at the County Agent's office some of the time.

5. Of the group, 75 percent (36) of the farmers found the publications they desired at the County Agent's office most of the time.

6. Of the group, 6.25 percent (3) of the farmers found the publications they desired at the County Agent's office always.

7. Of the group, 0 percent of the farmers indicated that college publications were too "deep" to be readily understood.

8. Of the group, 0 percent of the farmers regarded college publications as not being "deep" enough.

9. Of the group, 100 percent (48) of the farmers considered college publications just about right as they were.

10. Of the group, 16.66 percent (8) of the farmers indicated they picked

at the County Agent's office some of the time.

11. Of the group, 79.19 percent (38) of the farmers indicated they picked up other college publications at the County Agent's office most of the time.

12. Of the group, 4.17 percent (2) of the farmers indicated they picked up other college publications at the County Agent's office always.

13. Of the group, 6.25 percent (3) of the farmers indicated they were influenced by color covers on college publications.

14. Of the group, 91.88 percent (44) of the farmers indicated they were not influenced by color covers on college publications.

Summary of the 55 to 65 Age-Group Characteristics

1. This age group averaged 6 college publications per farmer per year requested direct from college.

2. Of the group, 73.33 percent (11) of the farmers paid attention to charts and graphs in the college publications.

3. The group averaged 5 college publications per farmer per year from the County Agent's office.

4. Of the group, 26.66 percent (4) of the farmers found the publications they desired at the County Agent's office some of the time.

5. Of the group, 73.33 percent (11) of the farmers found the publications they desired at the County Agent's office most of the time.

6. Of the group, 0 percent of the farmers found the publications they desired at the County Agent's office always.

7. Of the group, 6.66 percent (1) of the farmers indicated that college publications were too "deep" to be readily understood.

8. Of the group, 0 percent of the farmers regarded college publications as not being "deep" enough.

9. Of the group, 93.33 percent (14) of the farmers considered college publications just about right as they were.

10. Of the group, 40 percent (6) of the farmers indicated they picked up other college publications at the County Agent's office some of the time.

11. Of the group, 40 percent (6) of the farmers indicated they picked up other college publications at the County Agent's office most of the time.

12. Of the group, 20 percent (3) of the farmers indicated they picked up other college publications at the County Agent's office always.

13. Of the group, 33.33 percent (5) of the farmers indicated they were influenced by color covers on college publications.

14. Of the group, 66.66 percent (10) of the farmers indicated they were not influenced by color covers on college publications.

Summary of the 65 or Older Age-Group Characteristics

1. This age group averaged two college publications per farmer per year requested direct from college.

2. Of the group, 42.86 percent (3) of the farmers paid attention to charts and graphs in the college publications.

3. The group averaged three college publications per farmer per year from the County Agent's office.

4. Of the group, 71.43 percent (5) of the farmers found the publications they desired at the County Agent's office some of the time.

5. Of the group, 28.57 percent (2) of the farmers found the publications they desired at the County Agent's office most of the time.

6. Of the group, 0 percent of the farmers found the publications they desired at the County Agent's office always.

7. Of the group, 0 percent of the farmers indicated that college publications were too "deep" to be readily understood.

8. Of the group, 0 percent of the farmers regarded college publications as not being "deep" enough.

9. Of the group, 100 percent (7) of the farmers considered college publications just about right as they were.

10. Of the group, 71.43 percent (5) of the farmers indicated they picked up other college publications at the County Agent's office some of the time.

11. Of the group, 28.57 percent (2) of the farmers indicated they picked up other college publications at the County Agent's office most of the time.

12. Of the group, 0 percent of the farmers indicated they picked up other college publications at the County Agent's office always.

13. Of the group, 28.57 percent (2) of the farmers indicated they were influenced by color covers on college publications.

14. Of the group, 71.43 percent (5) of the farmers indicated they were not influenced by color covers on college publications.

With the exception of the 0 to 25 age-group category, the average number of college publications requested direct from Kansas State College decreased as age increased. Thus, the 0 to 25 age-group farmers averaged 12 publications per year, and the 65 or older age-group category used an average of only two college publications per year. That the request for publications decreased with increasing age was expected, but no explanation is ventured for the apparent contradiction in this trend on the part of the 0 to 25 age-group category farmers. Nevertheless, there is sufficient supporting evidence to regard the overall trend valid.

All the farmers using college publications in the 0 to 25 and 25 to 35 age-group category indicated they paid attention to charts and graphs in the publications. The majority (91.98%) of the 35 to 55 age-group farmers did

likewise, but only about three-fourths (73.33 %) of the 55 to 65 age-group category farmers gave consideration to charts and graphs found in college publications. The farmers in the 65 or older age-group category, requesting the least amount of publications from the college of all age-group categories, also paid the least attention to graphs and charts contained in the publications. Less than one-half of these farmers (42.86%) indicated they considered graphs and charts when reading the publications.

Again, the trend toward indifference of attitude toward college publications with increasing age was reflected in the lack of attentiveness of older farmers to the graphs and charts contained in the publications.

Younger farmers preferred to make their requests for college publications direct to the college instead of the County Agent. The 35 to 55 age-group category farmers requested an average of 17 bulletins per farmer per year from the college and only nine from the County Agent. Likewise, the 25 to 35 age-group farmers each requested an average of 14 college publications from the college and only eight from the County Agent. The 0 to 25 age-group category farmers reflected only a small margin in the number of college publications they requested from Kansas State College as compared to the number requested from the County Agent. This group requested an average of 12 college publications from the College and 10 from the County Agent. The 55 to 65 and 65 or older age-group farmers did not demonstrate a similar preference for requesting college publications direct from the College. The 55 to 65 age-group farmers requested an average of six publications per farmer per year from the College, and the 65 or older age-group farmers averaged two publications each from the College compared to three publications each from the County Agent. Several of the younger farmers indicated they preferred to pick college publications up at the College so they could talk over their problems in person with appropriate college staff members.

Older, more experienced farmers possibly regard themselves as having less need for personal council.

All age-group categories with the exception of the 65 or older age-group farmers had similar percentages of farmers who found the college publications they wanted most of the time at the County Agent's office. The percentage varied from 64.29 percent to 75 percent. Only 28.57 percent of the 65 or older age-group category farmers indicated they found the bulletins they sought most of the time at the County Agent's office. No explanation is ventured for this extraordinarily low percentage.

The younger farmers tended to be more optimistic toward obtaining college publications from the County Agent than older farmers despite the fact they procured a greater proportion of the publications they used direct from the College. One-third of the 0 to 25 age-group farmers indicated they always found what they desired, whereas only 14.29 percent of the 25 to 35 age-group farmers and 6.25 percent of the 35 to 55 age-group farmers always found the college publications they desired at the County Agent's office. The 55 and 65 or older age-group category farmers expressed much less optimism in always finding the publications they desired. No farmers in either group indicated that they always found what they wanted at the County Agent's office.

Inversely, nearly three-fourths (71.43%) of the 65 or older age-group farmers indicated that they found the publications they desired at the County Agent's office only some of the time. Considerably lower percentages of the remaining age-group categories indicated they found the desired publications at the County Agent's office only some of the time. These percentages ranged from 0 percent (0 to 25 age-group) to 26.66 percent (55 to 65 age-group).

The vast majority of all age-group categories regarded college publications as neither being too "deep" or not "deep" enough but, rather, about right as

they were. One individual out of the 15 members of the 55 to 65 age-group category considered the publications to be too "deep." On the other hand, only two farmers, both belonging to the 25 to 35 age-group category, regarded the publications as not being "deep" enough. This age group was composed of 14 farmers.

The age of the farmers was directly related to the frequency in which they picked up college publications, other than the ones they came for specifically, at the County Agent's office. The majority of the 0 to 25 age-group category (60%) indicated they picked up other publications most of the time, 20 percent some of the time, and 20 percent always. In contrast, 71.43 percent of the 65 or older age-group category farmers picked up publications some of the time, 28.57 percent most of the time, and 0 percent always. An exceptionally high percentage of the 35 to 55 age-group category farmers (79.19%) indicated they picked up other publications most of the time.

Contrary to expectations, older farmers were influenced more by college publications with color covers than were younger farmers. One of the 0 to 25 and 25 to 35 age-group categories indicated he was influenced by color covers. The vast majority of the 35 to 55 age-group farmers (91.88%) were not influenced by color covers, although 6.25 percent indicated they were influenced by them. A lesser percentage of the 65 or older age-group farmers were influenced by color covers than the 55 to 65 age-group category. Of the 55 to 65 age-group farmers, 33.33 percent were influenced whereas only 28.57 percent of the 65 or older age-group farmers indicated they were influenced by color covers.

SUGGESTIONS FROM FARMERS

The last section of the questionnaire utilized in fathering information consisted of a ruled space with this heading:

"The remaining space is reserved for additional comments, observations, or suggestions that you may wish to make which might be useful to the Kansas State College Extension Information office in its preparation of future publications."

Approximately half of the farmers responded. The majority of the comments were complimentary to the quality of work being performed by the Extension Information office at the present time. Several offered constructive criticism, others responded but indicated they were unable to contribute any suggestions for further improvement of college publications or the service, and still others, a small minority, ridiculed the entire program of assistance.

There was considerable repetition and overlapping of suggestions. Nine representative responses were reproduced for consideration in this study, however.

County Agent too Aggressive

"Any changes I make are small and gradual. The County Agent pushes big changes which are expensive and sometimes fail, so I don't go to him very often for help."

Personality development obviously lies outside the realm of authority and responsibility of the Extension Information office. Students majoring in Agricultural Education are given a well-rounded program of studies; one of the objectives being to acquaint the students with the way of life in rural communities, and to teach them methods and practices designed to assist them to work more effectively among farm folks. Specific courses in the Agricultural Education curriculum which contribute to this end include:

Educational Psychology I and II, Vocational Education, General Psychology, Rural Sociology, Principles of Secondary Education, Methods of Teaching Agriculture, and Teaching Participation in Agriculture.

Sufficient Blueprints Unobtainable

"They are doing a fine job in most of the fields of experiments. I was disappointed last fall, though, when I tried to get a set of plans for a dairy barn. All they had was screw ball plans. They told me to build a barn and they would come out and make a blueprint of it."

This farmer was either misinformed or misunderstood the communication directed to him.

Blueprints are not kept in supply by the Extension Information office's Distribution Center for general distribution in response to requests. The Engineering Extension office supplies blueprints to farmers for a nominal charge of 20¢ per sheet of blueprint to cover costs. Building blueprints vary from one to six sheets per set.

The Engineering Extension office has three sources of blueprints: (a) From the Agricultural Engineering department, (b) from the United States Department of Agriculture, and (c) from the Midwest Plan Service.¹ The Engineering Extension office normally keeps approximately 500 blueprints of different designs for farm buildings of all types and demensions.

Place Bulletins in Commercial Establishments

"You ought to keep a supply of bulletins where farmers get repairs for their machinery, at feed stores, and other places in town."

¹ The Midwest Plan Service is a non-profit organization composed of 14 state agricultural colleges. Building plans are distributed to member colleges from the head office at Iowa State College.

Farmers tend to congregate in such places of businesses as feed and produce stores and implement companies to visit. A farmer may stay 30 to 45 minutes or longer to discuss farm problems with other farmers present.

Local feed and implement dealers indicated that other farmers are attracted by the numerous bills of various types which are posted in their business establishments. Without exception, they enthusiastically endorsed the idea of making college publications available to farmers through their facilities. They believed the practice would contribute to the popularity of their business establishments, but would make a greater contribution to the farmers, since they habitually gather to visit and discuss mutual problems in these places of businesses.

Publish Articles in Magazines and Newspapers

"Kansas State College has a lot of good articles that are useful to farmers, but they don't know about them or how they can be obtained. I would suggest publishing them in some of the widely read farm magazines or papers. The Weekly Star Farmer or Capper's Weekly, etc., would be good."

Articles are frequently published in newspapers and magazines by members of the School of Agriculture staff. These features vary from short releases announcing the availability of new college publications of particular interest to farmers to lengthy articles complete with illustrations. Bob Jones, Kansas State College Agricultural Editor, writes a regular column of timely agricultural news in the Kansas Farmer, for instance.

Editors of local newspapers expressed doubt about printing entire college publications because of their excessive length. They were also doubtful that the material could be treated as a community service with no charge being exacted from the College. If given the same consideration as advertisements, it would

cost the College 6¢ a word to publish a bulletin.

Distribute List of Publications to Farmers

"I don't get around the County Agent's office enough to see any of his pamphlets. I believe the best way would be to do it like they do in Washington, D. C. Just check which you would like."

A similar type list is compiled periodically by the Kansas State College Extension Information office and sent to County Agents. From it, County Agents order college publications in sufficient quantities to meet the anticipated demand of the farmers in their county. In addition, farmers are always welcomed to review this consolidated list of available college publications and request other publications of interest which may not be stocked by the County Agent.

Send Bulletins Direct to Farmers

"I do think a lot of time if bulletins were sent direct to the farmers a lot more of the farmers would get them, and be a lot of information read that would not otherwise. Farmers shy away from the County Agent's office unless they have a big problem, and I doubt if some farmers have ever received any bulletins at all."

The Extension Information office's Distribution Center sends college publications direct to the farmer upon request. In addition, a farmer may request to be placed on the mailing list. By so doing, he is placed on the automatic distribution mailing list for all new publications as they are printed. It is doubtful that a very great percentage of the farmers are aware of this service, however.

Utilize more Pictures in Bulletins

"I think more pictures in most instances would be much better. Even where it's telling how to plant something, etc., pictures make it a lot more interesting."

Over the past few years, there has been a trend toward utilizing a greater number of pictures and other illustrations in college publications. The contents of many publications are now arranged in convenient charts with appropriate illustrations to enable the reader to digest much of the information at a glance.

Color pictures and illustrations are also being utilized extensively in college publications by the Extension Information office. They believe color publications attract the interest of farmers and, therefore, endeavor to hold this interest by using color pictures and other illustrations throughout the publications. The majority of farmers indicated they were not influenced by color pictures and illustrations on the covers of college publications.

The use of color in college publications is a relatively new idea and more research is needed to investigate the unconscious attraction it stimulates in farmers.

Utilize Facilities of Radio Stations

"Why don't you make use of the radio stations? Noon would be a good time when most of the farmers are in the house. You could give talks on new developments, etc."

A 30-minute program of timely farm information is broadcast daily, Monday through Friday, at one o'clock from Kansas State College. Staff members from the various departments of the School of Agriculture participate in this program on a rotation basis.

Moreover, numerous 3-minute tape recordings of agricultural information are made by the School of Agriculture staff members during the year. These recordings are sent to radio stations over the state for their use.

Keep County Agent Fully Supplied

"I've seen the time when the County Agent was out of some bulletins and couldn't get any more. You ought to be able to give him all he wants."

Since funds for the publishing of United States Department of Agriculture publications are very limited, the Extension Information office's Distribution Center occasionally runs out of USDA publications for short durations. Likewise, County Agents are not always given as many copies as they desire initially because of USDA fund shortages. USDA publications undergo revision sometimes, and this action naturally takes the ones being revised temporarily out of circulation.

The supply of state publications is rarely hampered by fund limitations. These publications are always readily available for immediate distribution to farmers unless they are undergoing revision, or unless the supply is temporarily exhausted while additional copies are being printed.

CONCLUSIONS

Summary of Facts

In general, it may be concluded that college publications are performing well the functions they were originally designed for: basically, to make available to the farmer the latest information regarding all areas of his farming enterprise. This conclusion has been borne out by the overwhelming majority of farmers who indicated their belief that the college was doing a fine job with the publications, and that no changes were needed.

There is a definite relationship between the age of the farmers and their

attitudes toward college publications. Younger farmers tend to utilize the publications to a greater extent than older farmers, and have a greater appreciation for their value and the task they are designed to perform. Older, more experienced farmers tend to be more indifferent toward college publications, the majority seldom using them. Moreover, older farmers often regard experience more highly than college publications, and are sometimes critical of the efforts of the County Agent.

The amount of formal education a farmer has greatly influences his attitude toward college publications and, perhaps consequently, the frequency in which he obtains them. Farmers with less than average years of formal education are apt to have a less favorable attitude toward college publications than farmers with a greater number of years of formal education. On the other hand, farmers whose years of formal education exceed that of the majority of farmers do not value college publications as highly as farmers with fewer years of formal education. These farmers are generally better equipped to personally deal with routine farming problems than farmers with fewer years of formal education. Moreover, these more highly educated farmers (viewed from the perspective of number of years of formal education) more frequently take specific problems direct to college research men in preference to the County Agent.

The vast majority of farmers of all ages are not influenced by color covers on college publications. Farmers most frequently seek college publications in response to the need for specific information to solve a specific problem and are, therefore, not daunted if the publication(s) sought are in black and white rather than in color. Farmers, particularly younger farmers, often pick up other college publications while at the County Agent's office, and it is among these publications that the influence of color is greatest. Most farmers deny being influenced by color covers, but this writer suspects that while farmers

are conscious of the pleasing effect of color covers, they receive unconsciously a greater stimulus. It would be an interesting and informative study to determine the number of farmers who showed preference to a college publication with a color cover over an identical publication lacking color illustrations, whether the farmers were more prone to read it, rather than only look at it, whether they more frequently took the color publication home or not, etc.

A far greater number of farmers are introduced to new farming ideas through the medium of observations of other farms than via demonstrations. The unpopularity of demonstrations is particularly significant among older farmers.

Similarly, the vast majority of farmers use caution in experimenting with new farming ideas. Approximately one out of 17 farmers, on the average, will try out a new farming idea without having first observed it being practiced on another farm. These leaders are most frequently middle-aged or younger farmers.

Unquestionably, farm magazines are the farmers' greatest source of new farming information. This conclusion is true of the majority of all farmers, regardless of age groups. Newspapers are also deemed highly important sources of new farming information by the majority of farmers. It is believed newspapers would warrant an even higher rating if evaluation was made in terms of farming information provided instead of new farming information provided. The County Agent, Extension Specialist, and experience are also regarded as important sources of new farming information, although this writer questions the contributions of the experience of farmers as a fruitful source of new farming ideas. Rather, it is believed that the experience of farmers, as far as new farming ideas are concerned, is primarily a process of learning the hard way about facts which have previously been made available in college publications by the joint efforts of trained college research men and extension personnel.

Suggestions for Improvements

Since farmers of all age groups regard magazines as their primary source of new farming information, serious consideration should be given the possibility of adapting college publications to the needs of farm magazines. This activity should be limited to college publications which, by nature of their subject material, will produce timely articles of current interest to farmers. Moreover, emphasis should be directed toward publishing these articles in magazines whose circulation is limited to Kansas, since much of the information utilized would not necessarily be applicable to conditions in other states.

Publications of articles should not be limited to Kansas magazines, however. Newspapers are an important source of new farming information for farmers, so an effort to publish articles in farm newspapers should be made. Farm newspapers, unlike regular newspapers, would be able to use many timely articles pertaining to all phases of agriculture, providing the articles weren't too long. Information regarding the needs of various Kansas farm newspapers would be readily obtainable.

Greater encouragement should be given School of Agriculture staff members to also write timely articles for publication in Kansas agricultural magazines and newspapers. In addition to helping provide an essential service to Kansas farmers, the publication of articles would also gain the authors greater recognition and, thus, would serve to advance them in their respective professional fields.

News releases should be made to Kansas agricultural magazines and newspapers regarding all significant new developments in agricultural research. Although the information contained in these news releases would of necessity be limited, yet better informed farmers would be stimulated to a greater interest in the subject and, thus, would be more enthusiastic customers for future, more detailed college publications on the subject.

It is acknowledged that some articles are being published and some news released, but the frequency of these activities is regarded as being far too limited in view of the importance of farm magazines and newspapers to farmers as sources of new farming information.

A quarterly list of more recent college publications should also be published in Kansas farm newspapers. This list should be designed in a manner which will enable the farmer to clip the list out, check the publications desired, and send the clipping to the Extension Information office's Distribution Center for prompt action. A similar type list is regularly compiled by the Extension Information office and sent to County Agents for their added convenience in ordering new college publications. This list, with minor alterations, could be utilized effectively in Kansas farm newspapers.

The possibility of distributing college publications via feed, produce and implement dealers should be tested for practicability. Farmers habitually congregate at these places of businesses to visit and discuss mutual farming problems. Convenient, nearby racks of college publications would provide solutions to many of these problems, would stimulate additional exchange of farming information, and would influence a greater number of farmers to take them. Many farmers might come in contact with them only under these circumstances.

Farmers should be limited on the mailing list to college publications concerning areas of agriculture in which they have expressed interest. A farmer who has concentrated his interest on wheat production can hardly be expected to enthusiastically receive timely bulletins on such subjects as sheep production and horticulture. A realistic reappraisal of this particular service to the farmer would result in considerable savings without penalizing the farmer or the efficiency of the service.

It is realized that to initiate these suggested changes for improvement

would result in a considerable alteration of the present Extension Information program for the distribution of agricultural information. Yet, it is believed appropriate consideration should be given communications media most utilized by farmers in order to facilitate the greatest degree of efficiency in the Extension Information office's program of distribution of agricultural information.

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APPENDIX

- (1) Age _____. (2) How many years of school have you had? _____.
- (3) What is the status of your farm? (check the correct description)
- own the land _____ number of acres _____
 - own some and rent some _____ total number of acres _____
 - other (cash rent all, share crop, etc.) _____ number of acres _____
- (4) How many years have you been farming? _____
- (5) List the source of new farming information according to their importance to you. (Thus, the source in which you get more information from than any other will be your first choice, etc.) A number of suggested sources are listed to help you. You may know of others which are more important, however.
- _____ county agent
- _____ newspapers
- _____ magazines
- _____ extension specialist
- _____ evening classes
- _____ neighbors
- _____ relatives
- _____ radio
- _____ television
- _____ agricultural teachers
- _____ feed, produce, or
_____ machinery dealers
- _____ farm bureau
- _____ federal government
- _____ college publications
_____ direct from the college
_____ by request
- (6) Do you see if new farming ideas will actually work (rather than only reading or hearing about them) before you try them out? _____, or are you one of the first to try them out in your community? _____.
- (7) Where do you see most of these new ideas tried out — demonstrations? _____, or on other farms? _____.

- (8) What was your net income in 1957? (check the correct category)
- a. less than \$1,000 _____ c. \$2,500 to \$5,000 _____
- b. \$1,000 to \$2,500 _____ d. \$5,000 or more _____
- (9) Are college publications too difficult to understand? _____, don't go in-
to the subject deep enough? _____, or are just about right as they are? _____
- (10) How many of these publications do you estimate you request from Kansas
State College in a year's time? _____. Do you pay much attention to the
charts, graphs, etc. in them? _____.
- (11) How many of these publications do you estimate you pick up at the County
Agent's office in a year's time? _____. Do you some of the time? _____,
most of the time? _____, or always? _____, find what you're looking for?
- (12) Do you some of the time? _____, most of the time? _____, or always? _____,
pick up some other bulletin while you're at the County Agent's office?
- (13) Does a college publication with a color cover cause you to want to read it
more than one with a black and white cover? _____.
- (14) How are these publications, in your opinion--very helpful? _____,
helpful? _____, or not very helpful? _____.
- (15) In the remaining space, tell what you believe the Extension people could
do to make these college publications better, how they could get them out
to the farmers better, or anything else that you think would help them
to do a better job.

COMPARATIVE EVALUATION OF AGRICULTURAL PUBLICATIONS
AND OTHER FARMING NEWS MEDIA

by

LOWELL E. PAULI

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The number of Extension publications distributed by the Kansas State College Extension Information office was more than doubled between 1947 and 1957.

Several changes in the appearance of the publications has accompanied this increase in numbers of publications distributed. The publications have become progressively shorter, contain a greater number of pictures, and utilize color.

Research is needed to more accurately evaluate these publications from the standpoint of their usefulness to the farmer, however. To conduct such research was the endeavor of this study.

A questionnaire was taken to 117 farmers in Geary county. Of these, 110 responded, effecting a representation of 20 percent of the Geary county farmers.

In general, the results indicated that college publications are performing well their intended functions. Younger farmers, it was discovered, tended to utilize the publications to a greater extent than older farmers; older farmers sometimes being critical of the efforts of the County Agent.

Farmers with less than an average number years of formal education were seen to have a less favorable attitude toward college publications than farmers with a greater number years of formal education. On the other hand, farmers whose years of formal education exceeded that of the majority of the farmers did not value college publications as highly as farmers with fewer years of formal education.

The vast majority of farmers interviewed indicated they were not influenced by color covers on college publications. Younger farmers were more often influenced than older farmers.

A greater number of farmers were introduced to new farming ideas through the medium of observations of other farms than via demonstrations. The unpopularity of demonstrations was particularly significant among older farmers.

Unquestionably, farm magazines are the farmers' greatest source of new farming information. This conclusion was true of the majority of all farmers interviewed, regardless of age group.

Since farmers of all age groups regarded magazines as their primary source of new farming information, serious consideration should be given the possibility of adapting college publications to the needs of farm magazines.

Greater emphasis should be given School of Agriculture staff members to write timely articles for publication in Kansas agricultural magazines and newspapers.

A quarterly list of more recent college publications should be published in Kansas farm newspapers.

The possibility of distributing college publications via feed, produce and implement dealers should be tested for practicability.

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