THE VISITOR

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SUPERVISED STUDY FOR ADULT EVENING SCHOOLS FOR FARMERS

Some results of instructing evening classes for farmers have led to the conclusion that methods of instruction for adults do not materially differ from those of all-day classes in vocational agriculture.

The term "evening school" implies much more than a group of farmers listening to a twelve-period discourse on some phase of farming. It means that a group of farmers have gathered for the purpose of study and to think for themselves about the problems that confront them.

In view of this fact, it becomes the duty of the instructor to train these men in habits of study and in methods of analyzing their problems in such a way that they may form bases for their successful solution.

The first great handicap of these students is their lack of practice in reading. This makes the individual a slow reader, and, added to the lack of training in his former school days, causes him to find study laborious.

The results of a survey of a group of eighteen farmers in an evening school brought out their reading habits as shown in Table I.

An explanation of the present day practice in teaching reading and the desirability of training in rapid reading aroused the desire on the part of the group to know their own rates of reading.

In order that they might clearly see the need for rapid reading, a comparison was made of the kind of writing and editing of articles found in a newspaper with the kind found in the Farmers' Bulletins of the United States Department of Agriculure, the farm magazines, and also in the farm machinery advertising pamphlets. The discovery to them that newspapers often repeated the central thought or idea and filled columns, with sometimes nothing but a mere statement to begin with, as compared to the more scholarly written bulletins of the United States Department of Agriculture, in part explained why they were not reading with pleasure material other than the daily newspaper. Habits formed in reading newspapers cause them to demand articles of that kind. Comparisons of several farm magazines brought out the fact that magazines usually follow a middle ground, some articles being similar to those in newspapers and some containing very thorough discussions.

The reading test as given to this group was as follows: A mimeographed copy of part of a discourse on dairying was given to each member and on the signal of the instructor the men were to begin reading. When any member in the group had finished the article, he raised his hand and the time was recorded by the instructor. Immediately a group of objective questions on the material just read was passed to the reader for his answers.

The answers to the questions were corrected by the students so that in later tabulation they would recognize their own scores and could tell where they placed in the group. The scores were put on the board as in Table II.

TABLE I. READING HABITS OF AN EVENING SCHOOL GROUP OF EIGHTEEN FARMERS

Reading material	No. reading	Time devoted to reading
1. Daily newspapers	18	15 minutes to 1 hour daily
2. Farm magazines	15	10-30 minutes on arrival of magazine
3. Farmers' bulletins	6	15 minutes occasionally
4. Mechanical magazines	3	1 to 1½ hours daily
5. Farm machinery advertising pamphlets	10	5 minutes occasionally
6. Bible	3	30 minutes daily

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TABLE II. TABULATION OF READING SCORES

No. of student	Reading rate	Examination score	Material read* by student
1	280	18	1-2-3-5-6
2	260	18	1-2-3-5-6
3	255	16	1-2-3-5-6
4	225	16	1-2-4
5	220	14	1-2-3-5
6	215	14	1-2-4
7	210	12	1-2-5
8	210	10	1-2-5
9	210	10	1-2-4
10	205	10	1-3-5
11	205	8	1-2
12	195	8	1-2-4
13	190	8	1-5
14	184	6	1-2
15	169	6	1-5
16	160	4	1-2
17	157	4	1-2
18	120	2	1-2-5

* 1, Magazines. 2, Farm magazines. 3, Bulletins. 4, Mechanical magazines. 5, Pamphlets. 6, Bible.

It is significant in this case that the three men who read the Bible daily were far above the group average in their rate of reading, while those who had limited themselves to the daily papers were much lower. Not all this difference can be credited to the fact that some were getting more practice in reading, for if mental tests were given the group, the estimate that the lower half of the group was considerably lower in mentality than the upper half would in all probability be shown.

With such a wide range in the students of the class, the problem of keeping all the men interested and of bringing out the best thought of each presents some real difficulties of method.

The first problem is to get the men to state the problems that confront them, for at first many hesitate to talk in a group of this kind.

When a problem is decided upon for study, an analysis is made to determine the factors that enter into its solution. After all the factors are decided upon, the group discusses each in order to find out whether it is already known by the group or whether further authority must be consulted before an accurate solution can be had.

For an example of this method, we may consider some phases of the discussion regarding the judging of dairy cattle as brought out by the group. All the members had dairy cows, and at least three-fourths had some purebred cattle. In the first discussion, practically all the points found on a score card were discussed. The group markedly disagreed on the question of the necessity of very prominent milk veins as an indication of milk production, and also as to just what constituted quality in the udder of a dairy cow. They further disagreed as to whether or not the condition of an udder when dry was any indication as to what the quality of the udder would be after milking.

The answers to these questions were only in part furnished by the books and bulletins at hand, and it was finally agreed that the class would make a study of cows when dry and then again when milking.

Prominent feeders and owners of dairy cattle and recognized authorities were the sources of the other information.

In the discussion of rations fed, the desire for information as to the comparative values of feeds came as a result of having a study of actual rations, using feeds from each herd owner's home and showing samples of hay, silage, and grains fed. Differences in the value of silage cut early or late, and in alfalfa that had been wet in curing as compared to good alfalfa were sought by the group members themselves. Aid in balancing a good ration was asked for. The brighter students were asked to serve as tutors to those desiring help.

About the middle of the course a short objective test was given in order to test the effectiveness of the instruction, and again to check up as to whether or not enough drill and review were indulged in to insure the mastering of certain facts.

Gradually, as the class progressed in habits of study, more actual reading study was given, until during the latter part of the course very detailed study was offered and the greater part of the evening was given to study, with only a few minutes for final discussion, summary, and drill.

An example of the procedure of this type of study exercise follows:

Step I.

Problem: Factors in Cost of Producing Milk

An explanation was given that an investigation of this problem had been made by the Division of Farm Management at the College of Agriculture, of the University of Minnesota, and that we should find out the results of this investigation before giving our own answers.

In order to determine the adaptability of the results of the investigation to our conditions, it was necessary that we find:

1. Method used in getting data for the report
2. Communities surveyed and their similarity to our own locality.
3. The factors of cost in producing milk as given by the bulletin, and list them.

Note.—The bulletin selected for this study was Minnesota Bulletin 173, Factors in Cost of Producing Milk, and represents a type particularly valuable for this kind of work. It presents clearly the data and the results, and then gives methods for using the conclusions in a similar study of the individual farm.

The time taken by the group in getting the solution to the problems given above was between 25 and 30 minutes. Following the study a common basis was obtained, and the discussion brought out the need for the study of the next step.

Step II.

Problem: Formulation of a Method for Determining the Factors in Cost of Producing Milk in the Home Herds

Each member of the group was now able to take part in the discussion and the resulting survey blank was the product of the group thinking. Each member knew definitely just what was to be done and why, so the work of gathering the data was quickly completed.

Step III.

Problem: Interpretation of Results of Study of the Factors in Cost of Producing Milk on the Home Farm.

1. Before the meeting of the class, reports from the individual herds were collected and tabulated on mimeographed sheets. In this case there was an added advantage in using mimeographed copies of the reports in that they served as a means for making each member do his own thinking in interpreting results. If the work had been put on a large chart or on the blackboard, too much of the lecture method would have to be resorted to and some of the group would listen only, and not follow the factors closely and in detail.

Interest in finding the status of the herds owned by members of the group provided an excellent motive for analyzing the large amount of data accumulated. For 20 to 25 minutes the study was uninterrupted and then questions began to arise until there was an intense discussion as to *why there were so many variations* in the several herds.

This variation was taken up factor by factor and constant references made to the bulletin to find the recommendations made by the College of Agriculture in respect to the various factors.

The many times that the bulletin was consulted in the attempt to determine the remedies for unusual variations in some of the herds brought the group to a thorough knowledge of the factors of cost in producing milk. Not only was the information valuable, but the drill in adapting results of experiments to their home conditions was the beginning of habits of study and analyses for use at any later time.

On the final evening of the course, an objective test was given as a means of showing the student his achievement, giving him a final review, and correcting errors of information. The test again gave the members opportunity to read material other than newspapers and furnished one more drill in the formation of habits of reading for information and study rather than for pastime only.

V. E. N.

BOOK REVIEW

Sowers, John Irving: The Boy and His Vocation; Peoria, Ill. The Manual Arts Press, 1925. Price $1.50.

The book deals in a general way with boys' problems of selecting a vocation. The chief topics discussed are: (1) Value of an education, (2) Choice of a vocation, (3) Need of physical efficiency, (4) Relationship of government and individual to each other, (5) Specific information about obtaining employment.

Each chapter is followed by a set of exercises to be completed by the student and by a bibliography for more extensive reading.

PRESERVING CHARTS AND POSTERS

Shelves, drawers, and closet corners are the most common storage places for charts and posters. Consequently, the short life of these aids to teaching; they become wrinkled; the corners curl and break; they sometimes become soiled and always become dusty; they are relatively inaccessible because they may be found in any one of several places, and we must unroll or unfold them to find out what they are.

To remedy this situation a storage box for charts and posters is proposed. This device is simple and is surely an improvement over facilities commonly found; but it should be understood that the writer knows of no box in existence like the one he has in mind.

The accompanying drawings are an end view and a side view:

This chart box is not much more than a box with a cover on it Along the ends of the box at A and B, two cleats are attached. The charts or posters are thumb-tacked on thin wood strips with

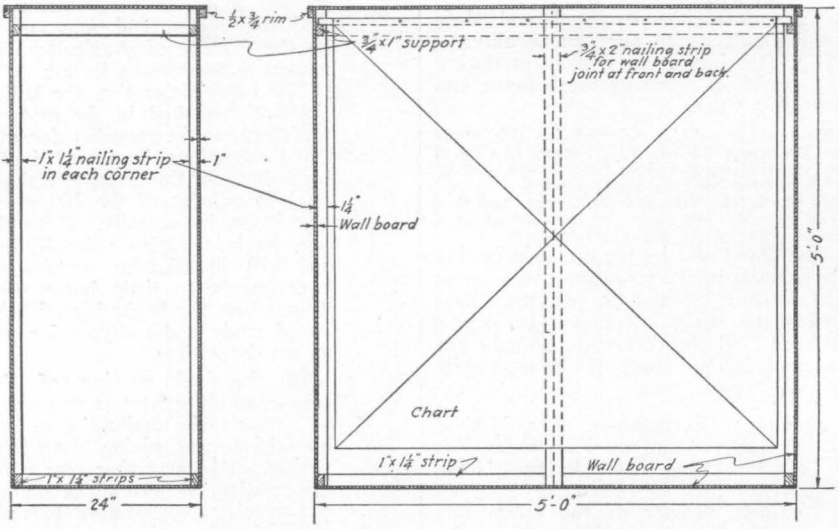

CHART BOX

a cross-section one-half inch to one inch square and 60 inches or slightly less in length. The ends of these strips rest on the cleats. A chart of any size up to 56 inches wide and 56 inches long can be hung in this box. The largest charts the teacher wishes to store may be larger or smaller than 56″×56″. The dimensions of the box may be changed accordingly.

Suppose you have two screw eyes about 58 inches apart over your front blackboard. When the charts or posters are to be used, they may remain attached to the strips the ends of which can be placed through the screw eyes. Thus the charts or posters are easily displayed.

On the top of a strip to which the chart is attached a label may be placed. Thus it is possible to read the titles of the charts without removing them from the box Charts and posters made of cardboard, heavy paper, all sorts of chart cloth, may be stored in this box equally well.

Thin material or wall board may be used, but the construction should be such that dust is kept out. The cover may be hinged or it may fit over the top of the box. Such a box is worth having if we can lengthen the life of our charts and posters, keep them clean and unwrinkled, and make them more accessible and usable.

Teachers who construct such a box are requested to communicate with "The Visitor" and give criticisms, improvements made, and other information by which other teachers will be benefited.

F.W.L.