

THE VISITOR

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A RECITATION IN FARM MANAGEMENT¹

The teacher asked the class to name the problem for the lesson. One student stated that it was "How can we make farm labor more efficient." Another student stated that the aim was "to determine the existing deficiencies of farm labor and to outline suggestions for improvement."

After the statement of the problem and the aim the teacher asked "What is the present situation regarding the supply of farm labor?" The class reached the conclusion that there is a real shortage of farm labor and discussed the causes of this shortage. "How can a farmer get efficient hired help?" was the next question. A contract between the hired man and the farmer was one of the possible solutions offered. Floyd Eskra had prepared a contract which he read. This contract was couched in legal terms and worked out in detail. It must be omitted owing to lack of space.

A spirited discussion followed as to whether single or married men were more desirable farm help. Several members of the class presented pertinent and well organized arguments, the majority favoring single men. Several drew on experiences at home. Finally the teacher called for hands and all signified preference for single men.

"Another way of increasing labor efficiency is to list jobs which can be done on rainy and winter days in a notebook," said one student. "What are some of these jobs?" asked the teacher. Several were mentioned and then George Chambers read a prepared list as follows:

Work for winter months, other than regular chores—

I. December

- A. Store all machinery not already stored
- B. Repairing buildings—broken stanchions, window lights, broken and crumbling floors, cleaning hen-

¹ Conducted by F. E. Moore, Owatonna, Minn.

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TEACHING GENERAL INFORMATION

The subject matter in most of our textbooks in agriculture may be classified under three heads, i.e., specific facts, principles, and general information. For example, the discussion of the oat crop in almost any text in field crops describes the culture of oats. The rate of seeding is given. This is a specific fact. The statement is made that the high moisture requirement accounts for the adaptability of oats to heavier soils. A principle is inferred here. Facts and principles are intermixed in the text. Sometimes the principle is stated and facts are given as illustrations or applications. The method here is deductive. In other instances, facts are stated and principles are drawn or inferred; the method here is inductive.

Most of our textbooks start a discussion of a farm enterprise like oats with an account of its origin and history and importance, including an enumeration of countries and states. Let us call this general information. Often the time available for teaching an enterprise is limited. If not carefully planned we may witness good teaching of this informational material and a hurried passing over of the specific facts and principles which follow. Two questions arise here: (1) is this emphasis on the general information justified? and (2) should it be taught previous to the specific facts and principles of production.

The writer once heard a boy object to making maps which showed the importance of the various crops in certain states. His point was that this information would not help him in raising more or better corn. At the risk of being called narrow, the writer admits his sympathy with this boy's objection from a vocational point of view. Suppose we should teach this kind of material to a class of adult farmers. Their comment may be imagined. As general information and in connection with agricultural economics, marketing, and the like, this material has value. Toward

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house, repairing henhouse, white-washing henhouse

- C. Set horseshoes
- D. Repair milking machine

II. January

- A. Haul feed from town
- B. Haul each day's manure
- C. Repair machinery—build hay rack, build wagon box, build self-feeders
- D. Sharpen sickles
- E. Sharpen plowshares

III. February

Oil harness, clean grain, saw wood, sharpen posts for fences, keep manure out, repair sow-farrowing pens, overhauling tractor

IV. March

Test seed corn, treat grain for smut, sharpen cultivator shovels, get machinery

Distributing labor through the year was said to increase labor efficiency because one may keep a certain number of men employed steadily through the year. Diversified farming makes this distribution possible, especially if winter dairying is included. The teacher asked Norbert Vesley to present facts on this point. He presented Table I, explaining it very clearly. "I happen to live on this farm," he said. Referring to three cows which did not pay expenses, he said: "These cows are hardly worth mentioning. We sold them." Then he showed that dairy cows furnish work during the winter months and at the rate of 23 cents profit per hour of labor on his farm. A chart which he had prepared showed how the labor on dairy cows fills in the winter months and thus farm labor is distributed more evenly throughout the year.

TABLE I

Labor Income on 8 Cows on 80-Acre Farm		Lbs.	Value of
Total cost of feed		butterfat	butterfat
Cow No. 1	\$54.49	351.03	\$156.62
Cow No. 2	53.36	290.94	130.14
Cow No. 3	55.48	286.00	126.37
Cow No. 4	43.36	316.94	131.08
Cow No. 5	34.38	149.17	66.21
Cow No. 6	29.41	80.77	34.49
Cow No. 7	30.28	83.12	35.27
Cow No. 8	48.73	150.74	76.10
	\$349.49	1708.64	\$757.18

Expense		Receipts	
Feed	\$349.49	Butterfat	757.18
Int. on investment (barn)	\$43.50	Skimmilk	74.30
Int. on cows	31.20	Manure	40.00
Int. on equipment	8.00	Calves	17.04
Horse labor	64.70	Total	888.52

Total\$496.89
Total hours man labor, 1864.

Receipts \$888.52—expense \$496.89=\$411.63, labor income.

$\$411.63 \div 1864 \text{ hours} = \0.2315 .

\$0.2315 was received for every hour of labor expended on cows.

Then Carl Masche was called upon to give data on this same point. "These figures are from my project," he said. He presented Table 2 to show that labor on dairy cows is profitable altho he did not show records of individual cows as in Table I. Then he presented charts 1 and 2. Chart 1 shows when the labor on dairy cows occurs and chart 2 shows its relation to the crop labor on this particular farm and that dairying is a good means of distributing farm labor throughout the year.

TABLE 2

Net Returns per Hour of Labor		Receipts	
Expenses		Receipts	
Feed	\$415.90	Butterfat	1180.50
Int. on \$1700.	102.00	Skimmilk	160.00
Int. on equip.	84.00	Manure	60.00
Horse labor	15.30		
Car	10.00		1400.50
	\$627.40		627.40
			\$773.10

$\$773.10 \div 2262 \text{ hours man labor} = \0.34 per hour. labor income.

Several boys in the class live on farms included in the local statistical routes conducted by the College of Agriculture. The teacher asked how the returns per hour on the route compare with the figures given in the reports. One boy gave some figures and these were supplemented by the teacher.

A year ago the teacher asked the class why they should keep farm accounts in connection with their project. The answer was that in this way they could learn to keep such accounts. "Do you see now any other reasons why we should keep cost accounts?" the teacher asked. The boys gave other reasons suggested by the five charts, such as knowing



Chart 1. Carl Masche made this chart from his home project records. It shows how labor on dairy cows is distributed through the year. On Carl's farm the greatest labor on dairy cattle comes in the winter and the least in the summer months. The figures at the left side represent hours of man labor.



Chart 2. The labor on dairy cows (white) is combined with the labor on crops (black) to show their relation. The maximum labor on dairy cows comes when the labor on crops is at a minimum. On Carl's farm there is setady work throughout the year. The figures at the left side represents hours of man labor.

which cows to sell and which enterprises are most profitable.

The teacher then called for conclusions as to how farm labor may be made most effective. Members of the class formulated the conclusions and the entire class incorporated them in their notebooks. The following twelve conclusions were given. Some of these had not been developed during this class period.

1. Labor should be distributed evenly throughout the year.
2. Single men are more desirable than married men as farm laborers.
3. Labor on the farm should be systematized.
4. Rotation of crops is desirable because it distributes labor.
5. Correct layout of farm economizes labor.

6. Correct arrangement of buildings and equipment economizes labor.

7. Listing odd jobs makes it possible to utilize spare time and bad days.

8. It is economical to employ high grade labor.

9. Family sized farms simplify the labor problem.

10. Diversified farming (especially if dairying is included) helps distribute labor through the year.

11. There should be an agreement between the hired man and his employer.

12. There should be a close relationship between land owner and laborer.

Judged by McMurry's four standards, this recitation is shown to be instruction on a high plane. The individual reports offered *opportunity for initiative*. The individual reports indicated initiative as shown by the completeness of the contract and the form and presentation of the chart material. *Provision for motive* was evidently made in the assignment. The frequent recurrence to home experiences showed that the boys could see the practical value of the lesson. The teacher asked the boys to discuss topics which gave the boys *opportunity to organize subject matter*. The boys discussed the topics completely and, usually, without interruption by the teacher. *Consideration of relative values* was not stressed altho the comparison of single and married men as farm laborers was a good example of this.

Four noteworthy characteristics of this recitation stand out clearly even in the foregoing inadequate description: (1) the pupils carried the burden, the teacher's chief function being to guide the discussion. (2) There was a constant recurrence to the home experiences of the students. (3) The students had a real interest in the scientific study of farm problems as evidenced by the charts. (4) And not least, the teacher made careful preparation and plans.

F. W. L.

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training in crop production and animal husbandry its contribution, if any, is indirect.

Suppose, however, we take the position that some of this indirect, non-vocational material should be taught. The question still remains as to whether it should be taught before or after the specific facts and principles of production.

We might all agree that the best approach, psychologically, is from the known to the unknown. Which of these three divisions of subject matter is most familiar, specific facts, principles, general information? The specific facts of crop and animal production are best

known to farm boys. It is for this reason that a very good way to attack a crop or animal enterprise is to make a study of the farms of the community to find out the prevailing practices used in the various phases of these enterprises. Such a survey brings these facts in an organized form to the attention of the class. Or perhaps it will be advisable to bring out the important principles at once and use the known specific facts to illustrate and apply these principles.

The argument is sometimes offered that the subject matter on importance, origin, history, and the like, if taught first has a motivating effect. The appetite of the class is whetted for the subject matter which follows. It probably does have some such effect if well taught. The weakness in this argument is that more economical and effective motivating devices are at hand. For example, while a class may listen to the teacher's statement that oats is an important crop, the boys will be more convinced if they can see wherein instruction in growing oats will make their farming more profitable. Some agricultural classes are justified in doubting the value of agricultural instruction when assigned this informational material as an approach to an animal or crop enterprise. This general information is not an effective or economical motivator.

If we desire to teach the general information most effectively we should teach it when the boy knows thoroly the specific facts and principles for an enterprise. Does the reader prefer information about familiar or unfamiliar crops?

In other words, many of our teachers of agriculture, and agricultural textbooks have the cart before the horse. Teach the specific facts and principles first. If you feel that general information will have a vocational value for your class, spend the rest of the available time on it. If most of this informational material must be omitted because time is lacking, the loss is not great.

This discussion has led us straight to the use of textbooks. Teachers of agriculture constantly challenge statements in textbooks which do not hold good under all conditions. Many have not stopped to consider the order in which material is presented. This is the greatest defect in our agricultural textbooks. We need to assign reading in these texts not as it comes but as it should come. This means a change in the order in which certain chapters are assigned. In other chapters the last part of the chapter should be read first. Use the text. Do not follow it. F. W. L.