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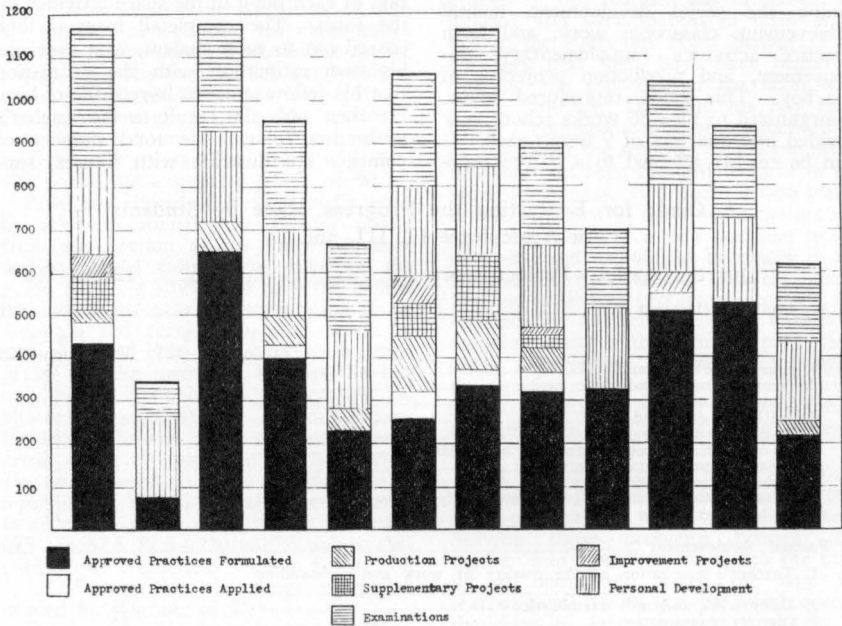
No. 1

Grading the Individual Work of Students in the Fairmont High School

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This article is a follow-up of the material presented in the July issue of the Visitor. It is descriptive of the method used in grading the individual work of agriculture students in the Fairmont High

develop the abilities of the student to understand and master the many problems involved in operating a farm. A reasonable place to start is with the problems of the home farm of the student.



A graph showing the grades of an agriculture class, Fairmont, Minnesota, determined with the Evaluation Guide discussed in this issue of *The Visitor*. Page 3-4 explains the grades pictured on the graph.

School, as they study the problems of their home farms through an integrated course of study.

Our main objective in teaching vocational agriculture is "To train present and prospective farmers for proficiency in farming."

We learn to do by doing. The doing part of our high school course of study in agriculture is the farm practice work of the individual student. We wish to

But we wish to do more than study the farm's problems; we wish to do something towards their remedy. One way to encourage greater activity towards a remedy is to take accomplishments of this kind into account when grading student progress. As the classroom study should grow out of the home farm problems, it is only fair to combine the results of the mental and physical activity of the student when determining levels of achieve-

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ment, rather than marking the two types of activities separately. As an aid in accomplishing this at Fairmont, an evaluation guide was devised to aid in combining the social development, mental achievement, classroom work, and farm practice activities (supplementary, improvement, and production projects) of the boy. This guide, reproduced below, is organized to fit a 36 weeks school year divided into quarters of 9 weeks each. It can be readily adapted to a 6 weeks or-

ganization plan by using $\frac{3}{4}$ of the values indicated. In this manner part A would receive 170 points instead of 250, part B, 230 instead of 350, etc. The total number of points for a 6 weeks period would be 800.

Part A of the guide, Form 1, deals with the personal factors which have to do with the development of the boy as an adjusted member of society. Ten traits are listed, each with a given evaluation. A student is asked to rate himself and two of his classmates. The teacher can quickly designate which students are to be rated by using his class record book.

The teacher gathers the forms after they are filled in, clips off the two evaluations at the right end, and gives them to the student whose name appears at the top. The teacher then makes his evaluation of each pupil in the space provided on the form. The completed form is then passed out to each student, who averages his own estimation with the estimation that his fellow students have made of him. He then adds the result to the teacher's evaluation to get his total number of points. To illustrate with figures, sup-

A Guide for Evaluating the Progress Made by Students in Agriculture II, III, and IV

Quarter grades—Perfect score.....		1200
A. Personal Development		250
	Teacher's Evaluation—125	Pupil's Evaluation—125
1. Starts work promptly	15	15
2. Keeps himself and desk neat	10	10
3. Class posture and appearance	10	10
4. Initiative exhibited	15	15
5. Spells words correctly	10	10
6. Co-operates with classmates and with teacher	15	15
7. Pleasant and congenial attitude	10	10
8. Exhibits leadership ability	15	15
9. Gets to class promptly; goes immediately to seat	10	10
10. Talks quietly, not noisily	15	15
B. Factual Achievement		350
1. Teacher's evaluation of the quality of work and outstanding endeavor		150
2. Daily work and unit examinations		125
3. Quarter examination		75
		350
C. Farm Practice Work		600
1. Each approved practice written and diagrammed in the classroom		10, 15, 20
2. Each approved practice put into effect with approval of Dad and the instructor		20 (15-35)
3. Planning and executing job connected with production project		250
4. Planning and executing jobs connected with improvement and supplementary projects		200
D. Final Grade—Perfect Score		5,500
1. Total possible points made during the year		4,800
2. Production project completion		700
a. Outstanding project work	586-700	
b. Average project work	466-585	
c. Below average project work	350-465	

posing the two students who rated Raymond gave him 107 and 114 points, and his evaluation of himself totaled 112 points. The teacher's evaluation was 110 points. $107+114+112=333$ divided by

85=248-281
80=214-247
75=180-213

C=222-264
D=180-221

A high 95 could receive 340-350 points.
A low 95 could receive 316-325 points.

A Personal Rating Chart

Name of student

	Self Evaluation	Teacher's Evaluation	Classmate Evaluation	Classmate Evaluation
1. Starts work promptly (15)				
2. Keeps himself and his desk neat..... (10)				
3. Class posture and appearance..... (10)				
4. Exhibits initiative (15)				
5. Spells words correctly (10)				
6. Co-operates with classmates and teacher (15)				
7. Pleasant and congenial attitude..... (10)				
8. Exhibits leadership ability (15)				
9. Gets to class promptly, goes immediately to seat his seat (10)				
10. Talks quietly, not noisily..... (15)				

Average pupil rating..... + teacher's rating..... =Total Score.

Form 1

$3=111$. $111+110=221$ points. He would receive 221 points of the 250 points provided in the guide.

Students are usually quite interested in their classmates' impression of them. The conceited student often takes quite a fall. They also compare results from quarter to quarter to see if they are making definite progress in the total number of points earned. Part A of the guide performs a service if it merely calls the ten personality traits to the attention of each student.

Part B of the Evaluation Guide is a transmutation of the usual high school agriculture grades into numbers which may be figured in the total. Three hundred and fifty of the possible 1,200 points are allotted to this section. This may seem rather low, but parts of the characteristics often used in determining grades are included elsewhere. Grades are kept in the standard class record book, averaged in the usual manner, and transmuted into numbers at the end of the quarter. At Fairmont, the following points are allotted to each grade:

Numerical rating	(ABCD rating
scale—1	scale)—1*
95=316-350	A=308-350
90=282-315	B=265-307

In this way greater differentiation could be made between grades which would lessen the error in determining the final grade.

Part C is the most important section of the Evaluation Guide, and the part which aids in encouraging greater participation in farm practice work. It encourages students to consider their own problems in the light of their home needs, serving as an excellent plane upon which student interest, teacher guidance, and parental interest can meet and join in the mutual solution of farm problems. As explained in the July, 1938, issue of the Visitor, enterprises organized into teaching units and learning units are furnished each student, who considers each as it applies to his home farm. His next step is to formulate approved practices to improve the farming procedures of that enterprise on his farm. As the student finishes the teaching unit, which necessitates individual study, planning, and teacher-pupil discussion, he gives it to his instructor who checks the approved practices for accuracy of statement, information, and organization, grading 15 points for an average quality of work, 20 points for a good approved practice of complete statement and organization (above aver-

* The ABCD rating scale is given as a convenience for schools using this system.

age), and 10 points for an approved practice of less than average quality. Approved practices which are misstated, or which have related information and jobs mixed or incomplete do not receive any points until the errors are corrected.

After a period of time students become very proficient in their ability to spot approved practices as they scan the reference material, and equally proficient in organizing the related information, jobs and devices.

Form 2, set up on 8½x11 size sheets, is used to facilitate bookkeeping. After each unit is graded it is only a moment's work to check the correct grade in the proper column. As all of the numbers used are multiples of 5 and arranged vertically, adding the total for the quarter is equally simple. The headings on the sheet for form 2 are:

each activity to the discretion of the teacher, as the work connected with doing jobs varies greatly from farm to farm. At times they were asked to make their own evaluation of their work.

Students report their farm practice activities on a prepared form which is divided into 4 sections. Students write in the names of applied approved practices in the first section. In doing this they are asked to include the date of completion, the number of the approved practice, and the teaching unit and learning unit in which it was formulated. The second section is for reporting production project jobs. Here the date of completion, enterprise, and nature of the job performed are required. The supplementary project jobs are written in the third section, stating the date of completion. The fourth section is used to record improvement

Name

Enterprise	Teaching Unit	Learning Unit	App. Pract. No.	10	15	20
Swine	II	B	7		✓	
			8			✓
			9		✓	
			10	✓		

Form 2

C 2 considers the practical home usage of the approved practice after it has been formulated in the classroom. Varying numbers of points are allowed for doing this, as some approved practices require little work and others require a great deal of time and effort to put them into satisfactory operation. Twenty points for each approved practice successfully established on a reasonably permanent basis is the average allotted for this activity. The number actually varies from 15 to 35 points.

If boys are to become established in farming, production projects should be encouraged early in the course. Part C 3 allows points for doing jobs connected with production project work. The points allotted are based upon the outline prepared by L. H. Harden, University of Minnesota, "An Evaluation of the Progress made in Farm Practice at the Owatonna High School."* These jobs are reported on the same form as the applied approved practices.

Improvement and supplementary project work is evaluated in a like manner, using Harden's evaluation as a basis for allotting points. The boys in Fairmont voted to leave the number of points allowed for

projects. Students are asked to record in this section the name of the project job and the date of completion. This form for reporting farm practice work is given to each student at the beginning of each quarter. As the student does the project jobs he enters them in their proper place. Thus he will have a complete record of his farm practice activities at the end of each quarter, and a complete record for the year at the end of four quarters. The forms are due one week before the end of each quarter. This allows the teacher time in which to check, allot points, and total the data preparatory to determining grades.

The highest grade given in the Fairmont High School is 95; the lowest passing grade 75. Intermediary grades are 80, 85, 90. Students are expected to earn a total of the following points to receive the respective grades for each quarter:

Numerical rating scale—2	(ABCD rating scale)—2
1,080-1,200=95	A=1,050-1,200
960-1,079=90	B= 900- 949
840- 959=85	C= 750- 899
720- 839=80	D= 600- 749
600- 719=75	

* The complete outline will appear in the next issue of the Visitor. (January, 1939)

This allotment of points for each grade gave a fair distribution of the separate grades when compared to a normal curve. With the exception of the 95 grade, which three students of the twelve earned, two of whom were grade 95 students, the grades checked very closely with the grades given by other high school teachers. This was the criterion used to determine whether the students were receiving a fair grade for the work they were doing.

As an example, let us assume that John has formulated 19 approved practices for which he has received a total of 260 points (C_1), he has done enough jobs in connection with his sow and litter and gilt and litter production projects to give him 150 points (C_3 on the evaluation guide). He has earned 50 points from supplementary projects around the farm; 65 points from improvement projects (C_4); his teacher, himself and his class mates evaluate his personal improvement at 212 points. (A). His examination grades show he is entitled to 260 points from (B) of the evaluation guide. He has applied 3 new approved practices at home which total him 70 points (C_2). This will total 997 points, or a quarter grade of 90.

Provision is made for extra credit work by allowing students to transfer points from any section of the guide to other sections at $\frac{1}{2}$ value. For example, the guide allows a student to earn 600 points through farm practice activities. If he did this and received a high score on section A and B he would receive a grade of 95 for the quarter. Perhaps he has only earned 230 points of the possible 350 allotted to examinations. He could transfer any additional farm practice activity credit above 600 points at one half value. He would need to earn, in this case, a minimum of 175 additional points in order to receive a grade of 95. (To illustrate, $175 \div 2 = 87.5$. $87.5 + 230 = 317.5$ points. According to Numerical Rating Scale, No. 1, 317.5 is within the range of points needed for a grade of 95.)

Final grades for the year may be determined in the same manner by using part D of the Evaluation Guide. Type and quality of project completions are considered in this section. A project with accurate records and summary and which has been of benefit to the student and his home can receive up to 700 points. Other projects can be graded accordingly, allowing 350 as a low score on an acceptable project. Projects not acceptable would not receive any points, the theory being that the effort required to complete a satisfactory report should be worth 350

points. Scores for final grades are:

Numerical rating scale—3	(ABCD rating scale)—3
4,951-5,500=95	A=4,812-5,500
4,401-4,950=90	B=4,125-4,811
3,851-4,400=85	C=3,437-4,124
3,301-3,850=80	D=2,750-3,436
2,750-3,300=75	

As the student has received credit for jobs done with his project, this part of the guide considers only completion and quality.

Teachers have often stated that a system of this kind must entail much routine work. The author found it to require very little more time than that required to average the usual high school class records and that its use was highly gratifying.

Individual study of approved practices graded in this manner has increased the interest and participation in farm practice in the Fairmont High School. Parents say that their boys have begun to consider the problems of the farm with a new interest. Dad and his boy have found a common source of companionship in discussing the solution of a home problem that had been brought to light in the agriculture class. It brought a new pleasure and interest in teaching to the author. Each day brought a new problem which was vital and its solution necessary to the welfare of the student and his home. Dealing with live problems increased the satisfaction of achievement. Discipline trouble became a thing of the past. Students experienced the thrill of helping to organize a course of action. Following that course with teacher encouragement and guidance gave them a new experience in teacher-pupil relationship.

The teacher became a friend and counselor in which students could confide personal problems as well as farm problems. Solving those problems brought the teacher into close harmony with the family at home and paved the way for teacher-pupil-parent activity which opened the door to far mpractice work on an apprenticeship with Dad basis. This made possible a much wider range of experience and activities than would be possible on an ownership basis, as well as developing an all-important spirit of cooperation. This spirit was augmented by a number of evening schools in which the entire family participated in an educational and recreational evening. Much of the planning of these meetings was done by the members of the Fairmont F. F. A., helping this organization to function in the development of department services in the community.