STANDARDS FOR JUDGING AGRICULTURAL CLUB EFFICIENCY.

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With the increased demand upon the part of the public that the school foster and support many of the extra-school activities of young people, school men have turned for help to the several agencies already organized and at work on different phases of this problem. Among the several movements which have enjoyed a certain measure of success in this respect is the boys' and girls' club work fostered and supported by the U. S. Department of Agriculture and the several state agricultural colleges. Until many school systems, county and city, had perfected organizations for carrying on garden and agricultural work, this was practically the only agency to which the school man could turn. Although with the development of the county farm bureau the active administration of club work in most cases has passed out of the hands of school authorities, school men are still represented in its counsels and interested in its success.

As in the case of most movements which were started to solve a particular problem whose success has led to rapid expansion, the aims and purposes of the movement have not been carefully defined. This condition led the writers to make this study.

In the fall of 1917 the writers started to make a scale for judging the efficiency of boys' and girls' clubs and now take the opportunity to report on their work. This is done, not because a scale has been perfected, but because of the startling lack of unanimity about the importance of items used in judging club efficiency.

In making the scale, the first step taken was to list a number of items which the writers presented to state club leaders with the request to add and eliminate such items as, in the opinion of the individuals consulted, were of importance in judging club efficiency. Upon the receipt of replies from state leaders, the following list of items was determined:

TABLE I. ITEMS BY WHICH THE EFFICIENCY OF BOYS' AND GIRLS' CLUBS MAY BE JUDGED.

1. Evidences of cooperation among members, such as the *legitimate* "changing work" among members, giving and seeking advice from one another.
2. Ninety per cent of the club show some "labor income."
3. Ninety per cent of the club make a report.
4. A picnic, round-up, or field day for members of the club.
5. Evidences of club spirit.

6. Evidences of application by members of knowledge gained in club work to nonclub activities.
7. A regular corps of officers for the club.
8. A complete report of the work of the club to the County or State Leader.
9. Cooperative buying and selling in the club.
10. Evidences of friendships centering around the project.
11. Ninety per cent of the club complete project.
12. Fifty per cent of the membership desire to continue the work.
13. Regular meetings, at least once a month.
14. A public demonstration by the club, or by a team chosen from it, of some "doing" phase of its work.
15. Evidences of desire on part of members for further education centering around training in agriculture or home economics.
16. Ninety per cent of the club make an exhibit.

These items were then assumed to be the items by which club efficiency would be determined. The ninety per cent mentioned in items 2, 3, 11, and 16, and the fifty per cent in item 12, were obtained by taking the medians of replies to the question asking what per cent in each of these cases was considered to be satisfactory in each case.

This list of items was then sent again to all the state club leaders with the request to rank them in order of importance from most important to least important. The response was generous and from the total returns, 55 were found to be complete in every detail and were used to determine what was the composite opinion of the state club leaders of the nation.

It was hoped that some emphatic consensus would be revealed. But exactly the opposite occurred as is shown in Table II.

TABLE II.

Showing the rank given to each of the sixteen items by 55 state leaders (Items are arranged along the top and ranks along the left-hand margin):

Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	5	---	8	---	1	3	5	2	---	1	13	3	2	1	7	---
2	1	1	8	---	2	8	1	7	---	2	9	5	7	---	9	1
3	8	4	8	1	6	5	---	9	2	2	8	6	2	2	7	4
4	5	4	3	2	3	1	1	4	1	3	2	3	2	3	2	3
5	2	1	5	1	4	3	7	3	---	4	2	10	7	7	3	5
6	3	6	3	1	2	3	2	4	1	1	5	3	4	5	3	5
7	2	3	4	5	3	5	4	3	---	1	3	4	3	6	2	4
8	3	3	2	4	7	4	8	---	1	2	2	3	4	5	3	2
9	3	4	5	7	8	3	2	4	3	5	2	5	3	3	1	3
10	3	2	3	4	3	2	---	3	4	4	2	1	1	2	2	4
11	3	4	2	7	2	6	4	6	4	2	4	3	5	6	3	6
12	3	2	1	12	4	1	6	2	3	4	---	3	6	4	3	6
13	2	6	1	2	4	2	5	1	7	4	3	---	6	4	1	4
14	3	7	2	4	3	4	6	2	9	6	---	4	2	2	6	1
15	4	1	---	3	1	3	1	3	12	7	---	---	1	4	3	4
16	3	7	---	2	2	2	3	2	8	7	---	2	---	1	---	3

In this table, the items listed in Table I are arranged across the page and their rankings are arranged in the vertical columns. For instance, item number one, cooperation among members, was ranked as of most importance by five persons, second, by one person, third, by eight persons, etc. (Where items were judged to be equal they were given an average ranking, as when items 4 and 12 were judged to be equal and next below rank 5 they were given a rank of 6.5, the average of 6 and 7. In this case they appear as rank 6 in Table II.)

This table reveals the startling fact that every item used in judging club efficiency received every possible ranking with only a few exceptions. For instance, item one, cooperation of club members, was given first place in importance by five persons, second by one and sixteenth by three. If there were perfect agreement in opinion 16 of the 256 spaces would have been filled. If there were maximum disagreement the 256 would all be filled. As a matter of fact 235 of the spaces are filled.

It is startling because it shows that there is no national aim of pronounced importance in agricultural club work. No one aim and no group of aims predominate in importance. It would be supposed, as the writers expected, that some of these would definitely predominate. The literature of the Department of Agriculture stresses some more than others and the opportunities for occasional conferences should develop some of the unanimity which is not apparent in the returns. Federal domination is certainly not apparent in the field of club objectives.

It was quite as interesting to note that the leaders in the states which sent in more than one reply were also lacking in agreement as to the aims of club work in each particular state. A typical state which sent in four replies ranked the items as follows in Table III.

TABLE III.

Showing rankings given each item by the four leaders reporting from one state (Items are shown along the top, judges in the left-hand margin):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	13	5.5	12	9	2	11	5.5	14	9	7	2	4	15.5	2	15.5
2	3	14	7	13	9	1	16	6	4	10	8	11	15	5	2	12
3	2.5	15	2.5	8	6	2.5	16	11	10	9	6	6	14	13	2.5	12
4	9.5	16	1	11	15	9.5	5.5	3	13.5	13.5	2	5.5	4	7.5	7.5	12

This shows that judge one gives first place to items 6, 12, and 15, judge two to item 6, judge three to items 1, 3, 6, and 15, and judge four, to item 3. Judge two gives second place to item 15

and third to item 1, while judge four gives second place to item 11 and third to item 8. Thus the first three most important ranks include no item common to all the leaders in one state. Item 6 is common to three of the four, and item 3 is common to two, but items 1, 8, 11, 12, and 15 are also given high rank by only one leader each.

It would seem, therefore, that there is no unanimity about the ends to be obtained by state leaders either in the individual states or in the nation, although there is somewhat more agreement among leaders in the same state than among the different states.

In working with the data to see what approximate agreement appeared, the median rank for each item as shown in Table I was obtained. The device was also used for finding how often each item was included in the first, second, third, and fourth ranks. And the additional device was used of finding what per cent of the judges judged each item to be better than item 9 which was found to be the least important item. These are listed in Table IV.

TABLE IV.

Showing number of judges placing each item in each four ranks from 1 to 16, showing median rankings and per cent of judges who judged each item as better than item 9:

Items	1st	2d	3d	4th	Median	Per cent better than 9
1	19	10	12	14	8	73
2	9	13	12	21	10	67
3	27	14	11	3	5	87
4	3	11	30	11	11	67
5	12	16	17	10	8	71
6	17	15	12	11	7	67
7	7	21	12	15	8	80
8	22	10	15	8	6	78
9	3	2	14	36	14	
10	8	8	15	24	12	53
11	32	12	8	3	3	87
12	17	20	12	6	6	85
13	13	18	15	9	8	84
14	6	23	15	11	8	74
15	25	11	9	10	5	84
16	8	16	19	12	10	69

Table IV should read as follows: Item 1 was judged by 19 leaders to be in ranks 1, 2, 3, or 4; by 10 leaders to belong to ranks 5, 6, 7, or 8; by 12 to belong to ranks 9-12; and by 14 to belong to ranks 13-16. It has a median rank of 8 and was judged to be better than item 9 by 73 per cent of the judges.

This information is shown in another form in Table V. Here

it is found that if the item judged to be better than item 9, co-operative buying and selling, by the most judges, is placed first in rank and the others arranged in order of the number judging each as better, items 11 and 3 are given first place, 12 is given third place and so forth. If the median rank as determined from Table 1 is taken as a basis and the item which has the highest median rank is placed first, item 11 is given first place, and items 3 and 15 are next and equal in rank and so on. It is found in the third line of the table from the facts found in Table IV, that if the number of judges which give each item first, second, third, or fourth rank is counted and the item receiving the highest vote is given first rank, item 11 comes first, and item 3 second rank, etc. Finally, if the number of judges who gave each item the ranks of thirteenth, fourteenth, fifteenth, or sixteenth are added as found in Table IV and the item receiving the smallest vote is given first rank and that receiving the largest vote the sixteenth rank, items 11 and 3 are judged to be equal and highest and item 9 lowest.

TABLE V.

Showing items arranged in order of importance by four standards:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Per cent better than 9 ranking	11	3	12	13	15	7	8	14	1	5	16	2	4	6	10	9
Median rank'g	11	3	15	8	12	6	1	5	7	13	14	2	16	4	10	9
Frequency of 1-4 ranking	11	3	15	8	16	12	13	5		2	10	16	7	14	4	9
Frequency of 13-16 ranking	11	3	12	8	13	5	15	4	6	14	16	1	7	2	10	9

CONCLUSIONS CONCERNING A FEW ITEMS.

From these figures the statement may be made that items 11, (90 per cent completing the project), and item 3, (90 per cent making a report), are considered to be of most importance in general. It is also found that item 9, co-operative buying and selling, and item 10, club friendships, are regarded as of least importance. Item 10 ranks higher in line three, but obviously line three is of more value in placing items of higher rank than of low rank. Beyond these four items little can be said about any marked consensus of opinion and even in these cases it must be remembered that items 11 and 3, which here receive first rank, are ranked as least important by some judges and items 9 and 10, receiving lowest rank in this table, are judged as of relatively high value by some judges.

A SIGNIFICANT QUESTION.

These facts reveal such a lack of agreement of aims in boys' and girls' club work that the question arises as to the advisability of the leaders reaching some agreement about what the proper function of the club is. It may be that the purpose of the appropriation made by the Federal Government may be achieved in various ways and it is certain that the clubs can achieve many purposes other than these mentioned in the enabling act. And it may be, also, that this noticeable lack of agreement is desirable in the sense that each leader or group of state leaders ought to be left to set his own aims deliberately arrived at. But the suspicion cannot be allayed that this wide variety of aims is not the result of deliberation so much as the result of failure to deliberate. One is inclined to believe that state leaders have given little attention to the question of what results they shall labor to achieve. It is obvious that some policy of determining club aims should be developed.

QUICKSILVER PRODUCED IN THE UNITED STATES DURING THE SECOND QUARTER OF 1920.

From April 1 to June 30, 1920, inclusive, 3,685 flasks of quicksilver of 75 pounds net, was produced in the United States, according to F. L. Ransome, of the United States Geological Survey, Department of the Interior, who obtained the figures from the producers. This is 1,214 flasks less than was produced in the first quarter of 1920 and 255 flasks less than was produced in the second quarter of 1919. Only 13 mines, were reported as productive—8 in California, 1 in Nevada, 1 in Oregon and 3 in Texas. California produced 2,704 flasks, Texas 952 flasks, and Nevada and Oregon together 29 flasks.

The average monthly price of quick-silver per flask in San Francisco for the quarter, as quoted in the Mining and Scientific Press, was \$100 in April, \$87 in May, and \$85 in June. The average price for the quarter was therefore about \$91 as compared with about \$86 for the first quarter.

The chief cause of the decrease in production during the second quarter was the destruction by fire, on June 20, of the reduction plant of the New Idria mine, in California, and the consequent loss of quicksilver already reduced during the earlier part of that month. Because of this misfortune the production for the third quarter of 1920 will probably be still smaller than that for the second quarter. Reconstruction is in progress, and it is expected that the plant will be in partial operation in August or September of this year. Other causes that contributed to the decrease in production were a shortage of efficient labor and a reduction in the average grade of the ore.

At a time when initiative in the quicksilver-mining industry is at a low ebb and the tendency is rather to abandon enterprises already begun than to embark on new ones it is of interest to note that the formerly productive Klau mine, in San Luis Obispo County, Calif., has been reopened under very capable management as the Carson mine, and that its 50-ton furnace has been put in repair, so that the mine is likely to become a considerable producer.—[*U. S. Geol. Survey.*