

MATERIALES DE ENSEÑANZA EN

EXTENSION

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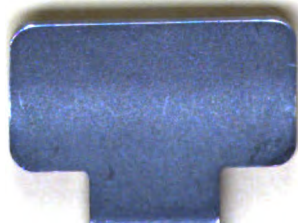
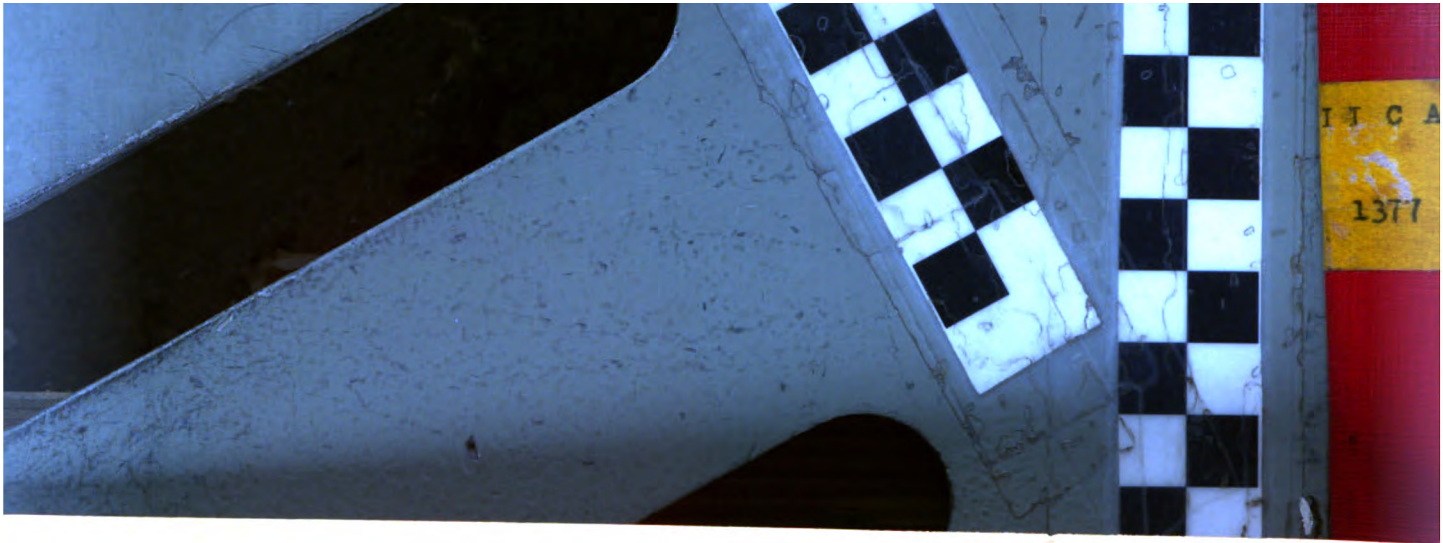
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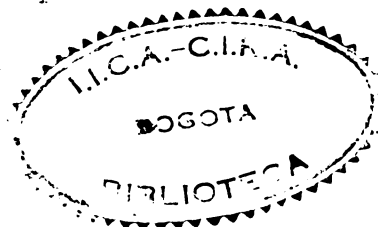
by

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Turrialba, Costa Rica
March, 1960

EVALUATION IN EXTENSION

by

Joseph Di Franco^{*}

Progress or improvement in any endeavor is only brought about through evaluating performance. Assuming that the extension worker strives to improve his work, he too must concern himself with evaluation. Although the results of educational efforts are much harder to evaluate than mechanical equipment or skills, it can, nevertheless, be done. The successful educator is one who recognizes this fact and does something about it.

It is also true that all of us do some evaluating. Daily we make judgments and decisions based upon opinions and observations. This is necessary and we become better equipped to do it as we gain experience. This is what we call informal evaluation.

There is also the more formal evaluation procedure. The formal procedure is an attempt to be able to be objective, and honest, and to obtain convincing proof or facts. Such a procedure should provide facts that can be used to convince others besides ourselves. This kind of job requires the use of certain rules, procedures, and skills. Scientific research is the highest order of the formal approach.

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Extension workers are being called upon to supply more and more "scientific proof" that they are doing what they say they can or are doing. More and more extension workers are finding that evaluation is a helpful process for improving their own educational programs. And perhaps this may be the most important justification for extension workers' doing evaluation.

But how do we go about doing the job of evaluating? Contrary to most opinions, it is not something that only specialists can do. It is necessary, however, that extension workers develop a few skills. These skills are related to the job to be done in evaluation, and may be expressed as follows:

1. Determining what to evaluate.
2. Determining who can provide facts.
3. Determining where to get facts.
4. Determining how to obtain the facts.
5. Determining how to get true facts.
6. Determining how to analyze results.

These same steps are usually stated as:

1. Determining objectives.
2. Determining source of evidence.
3. Determining representative sample.

4. Determining appropriate methods.
5. Determining reliable questions.
6. Determining how to formulate results.

To help understand these important steps in the evaluation process, perhaps we need to explain them further.

I. Determining what to evaluate.

Before an evaluation can be made, we must have a very clear notion of what we are trying to do. In extension our fundamental aim is to bring about changes in people. We therefore need to clarify and state distinctly what change we are helping to bring about. We must be sure we do not express what we in extension are doing, but what change we hope to achieve in the people. For instance:

1. Did housewives learn to use balanced diets?
2. Did farmers learn to use fertilizers?
3. Did 4-H youth learn to use democratic procedures?

The answers to these objectives would also reflect on whether or not our teaching had been successful, but the purpose in determining objectives is to make them specific, clear, and precise.

II. Determining who can provide the facts.

Once the objectives of teaching are defined, it follows that only those people who were directly exposed to the teaching efforts can provide the answers. This means that we must think clearly about the

extension methods used to accomplish the teaching objective. Once you state what specific methods were used, you then select those people who participated in the teaching experience. For example:

<u>Identify teaching method used</u>	<u>Identify participants</u>
Meetings	Only those who attended
Farm visit	Only those visited
Demonstration	Only those participating
Radio program	Only those who listened
Farm tours	Only those who made tour

Thus it is necessary to: (1) identify the methods used to accomplish a teaching objective; and, (2) identify the actual participants.

III. Determining where to get the facts

After identifying the people who can provide the facts we want, we usually find we have a large number of individuals. Too often the number is too great for the time we can afford; also, they may be spread out over a geographic area that would make it too time-consuming to accomplish the job.

We all know that the ideal would be to contact everyone. However, experience has proved that we do not need to use the whole group. We may use a portion of the group, providing it gives a representative sample. The technique used in selecting a representative portion is called random sampling. This means making sure that every individual

has an equal chance of being selected. We use a systematic procedure that insures impartial choice, but also insures an equal chance that each one may be selected.

This can be done by the simple procedure of selecting every other name on a list, thus cutting the group in half. Or we could select every third or fifth or seventh name, etc., depending on the workable number that needs to be selected. This method may also be used in selecting geographic areas, providing the areas themselves are representative.

IV. Determining how to obtain the facts

This means we must decide on what method we will use to go about the job of collecting the information. There are three ways in which we usually gather evidence: (1) by what we see; (2) by what we feel; and, (3) by what we hear. All of these ways, however, must be based upon changes in behavior of people. We can observe (see) changes and record them. We can ask questions (interview), or we can have people fill out questionnaires.

Many factors will determine the system used to obtain the facts or evidence. There are such things as the time a person has for doing the evaluating job, the number of people or contacts involved, the nature and complexity of the evaluation, the travel distance involved, the cost of different methods, the availability and reliability of means of communication, etc.

Within the method to be used is also involved the establishment of some kind of basemark (or benchmark) to be used in composing evidence, or from which to measure changes in behavior.

All methods of collecting data require that a systematic plan be used for getting the job done.

We must remember, in collecting information, that besides determining who can provide useful information, it is also important to determine who can obtain the information. Not everyone can hold interviews or ask questions diplomatically, even if they are planned ahead of time. Not everyone makes a good impression. And it is not always best for the extension worker himself to do the job.

V. Determining how to obtain true facts

This is the one area in which it can be said that there is a need for professional experience. The job of developing clear and unbiased questions and statements is not easy. Too often most of us end up with questions that confuse the person answering them or that influence the answers that are given. The questions are designed to obtain the true facts. Questions should not give clues or infer the kinds of answers that are expected. The best way to develop a set of questions (for interviews or mailed questionnaires) is to obtain advice from specialists in this field; sociologists can provide the best advice in this area. In addition to asking others for advice, however, it is necessary

to do pre-testing. This simply means trying the questions out on people who are similar to the people from whom you expect to gather data.

It is necessary to work out as short a list of questions as possible for getting the job done. Usually there is a tendency to add another question or two -- this is dangerous because each added question takes time to answer, tabulate, evaluate, etc. Pre-testing will also give us an idea of the time element involved.

Too often we discourage answers or return of questionnaires. We must remember that the higher the percentage of completed questionnaires returned, the more valid the evaluation can be. Unless at least more than 60% of returns are received, the evaluation effort is worthless. Of course, should this occur, it would prove that the study was ill-timed, too long, too complicated, not useful. In short, its failure could be due to these or many other reasons which would result in a waste of time and effort. Perhaps what would be even worse is that it would make it very difficult to get cooperation on the next evaluation effort.

VI. Determining how to analyze the results

Here again the evaluation becomes valuable. If we use the information, it is a valuable exercise and a justifiable use of time, effort and in some cases, money. Thus it becomes important that the material

gathered can be classified, recorded, and tabulated. Of course this should also be thought of when developing the questions, selecting the samples, etc. It is always easiest if you can convert data to percentages and averages. Questions which require personal opinions should be to establish reliability and truth of the yes-or-no questions or the questions answered by check mark or "x" or the cross-out type of questions.

The way the summary is made often requires interpretation. This may or may not reflect the true facts to the best advantage. The person summarizing, however, needs to be honest in making the results. He must also make sure he uses the results in developing a better extension program.

JDF:bb
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BIBLIOGRAPHY

1. Brunner, Edmund de S., and Yang, E.H.P. Rural America and the Extension Service. New York, Bureau of Publications, Teachers College, Columbia University, 1949. 210 p.

In reading this book, a person not familiar with this phase of adult education may learn what it is, how it came to be, and how the extension service is organized. The authors describe and evaluate the extension service program.

2. Gallup, Gladys, et al. Evaluation in Extension. Division of Extension Research and Training, Federal Extension Service, United States Department of Agriculture. Revised edition, 1959.

This manual gives a complete step-by-step insight into the elements and procedure involved in extension evaluation. This is expanded and revised from the 1956 edition. It is aimed at extension personnel and others interested in extension evaluation -- an excellent quick reference and teaching guide.

3. Good, C.V., and Scates, D.E. Methods of Research: Educational, Psychological, Sociological. New York, Appleton-Century-Crofts, Inc., 1954. 920 p.

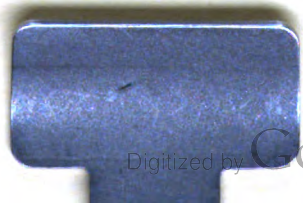
A text dealing with the entire problem of scientific evaluation. A good reference for advanced students engaged in or responsible for scientific studies. Not for the lay person.

4. Kelsey, Lincoln D., and Hearne, Cannon C. Cooperative Extension Work. 2nd edition. Ithaca, New York, Comstock Publishing Associates, 1955. 424 p.

This covers cooperative extension, its objectives, philosophy, and methods. It was written for use of the upper classman and graduate student interested in cooperative extension education. It is a well organized text with footnote references suggesting further sources of information.

5. Sabrosky, Laurel K. Discussions: Evaluation Workshop. April 5-23, 1954. Aguas Buenas, Puerto Rico. Discussion VII, "How You Will Get the Information." United States Department of Agriculture, Federal Extension Service. Mimeographed ER & TI (1-59).

6. Sabrosky, Laurel K. Six Keys to Evaluating Extension Service. United States Department of Agriculture, Federal Extension Service. Bulletin PA 377, November, 1958.
7. Workshop for Extension Specialists: Program, Lecture Notes, and Group Reports. Ithaca, New York, Cornell University, April 17-28, 1950.





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