

# MEASURING RESULTS OF SUPERVISORY TRAINING

*a system based on correlation  
of needs determination  
with individual appraisals*

Evaluation is one of the most difficult aspects in the design of a supervisory training program. Because it is difficult, it is sometimes not done at all. Yet management has to know: has this program met the training needs of the organization?

Where training is in repetitive production operations, where results can be measured in units of work per units of time, the problem of evaluation is relatively simple. However, the further removed the training is from manual or manipulative skills and the closer it approaches the functions of cognition, judgment and personal effectiveness, the more difficult it is to determine the existence of measurable causal relationships between training and its effects. But because the evaluation may be difficult, it does not mean that it cannot or should not be done.

## WHAT DO WE EXPECT FROM EVALUATION?

If we expect hard, quantitative proof immediately visible in the financial scoreboard of the organization, if we expect complete objectivity and absolute certainty of success, then we are to be disappointed, for no evaluation techniques have yet been developed to provide this sort of objective proof of the success and effectiveness of a supervisory training program. Even the method of experimentation with control groups, which is so difficult and expensive to develop and administer, involves the use of elements of judgment based in part upon subjective opinion. The techniques of scientific methodology may be firm, but the evidence upon which the conclusions are based are still largely subjective.

We can ask that a systematic approach be used; that a planned method of evaluation be determined that assesses the results of training in terms of its stated objectives, that looks for all reasonable evidence both of success and failure, that accepts this evidence without bias, that provides for a system of cross checks, and that seeks an accumu-

lation and appraisal of obtainable data rather than an all or none answer. "If we abandon the quest for certainty, the task of evaluation becomes a practical one of seeking, with as little bias as possible, as much knowledge about the results of training as can be practically secured."

The objective is to determine how well the training job has been done in terms of the needs of the supervisors and the organization and the resources available to meet these needs. Evaluation then becomes the process of determining whether progress is being made toward stated objectives at a reasonable rate and expense.

## SOME PRACTICAL ASPECTS OF EVALUATION

A review of the literature on the evaluation of training and a study of the evaluation provisions contained in a large number of supervisory development programs indicate that little has actually been done to measure supervisory training in terms of its effect upon the productive efficiency and morale of an organization. Even in the few cases where studies of the impact of such training have been made there arises the question as to whether the supervisory training program was responsible for the improvement or whether other factors were involved.

The fact of the matter is that an organization that sponsors a good supervisory training program is probably carrying on a large number of other activities that contribute to its overall effectiveness, and to determine whether the training itself was the factor that resulted in the improvement of the organization is a difficult thing to do. We must remember that a training program, no matter how effective, will not be successful unless encompassed in the proper management climate. This means that, in general, our evaluation results are estimates only and should be judged accordingly.

In some instances, remarkable increases in production and savings in costs have

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been reported in connection with supervisory training programs. An analysis of these reports suggests that most of these improvements arise out of training in methods and work simplification. Training in this area is highly important, yet we know that training in other areas, the results of which cannot be so readily shown, are equally important in the improvement of supervision.

A minimum test that should be applied to a program of supervisory training is that the participants believe and report some instances or evidences that they have gained material from the training that is improving their effectiveness in their jobs. A second basic test is the judgment of the top executive. He usually is conscious of the effectiveness or the smoothness with which his organization is operating. He has clues upon which he bases his judgment, such as friction, complaints, low productivity in

certain units, failure of his staff to make rapid adjustment to indicated changes, and so on. The good administrator knows whether his organization is making progress or not — know it perhaps better than any separate tabulation of statistics that can be compiled.

#### REQUIREMENTS FOR AN EVALUATION PLAN

The plan that is used to evaluate a supervisory training program should:

1. Provide information to management as to the results of the training effort — that is, how close did the program come to achieving its established objectives.
2. Be administratively feasible — that is, practical to apply within the resources of the activity and with a minimum of expense and disturbance of personnel.
3. Provide for a systematic and un-

biased means of collecting information.

4. Contribute information that can be used to selectively improve the training program.

#### CHARTS ON THE EVALUATION

Following are four charts on the evaluation of supervisory training which may serve as a reference in the development of an evaluation plan. What has been done is to separate, for purposes of focus only, the evaluation of supervisory training into levels convenient for analysis.

Within each level we first ask: What are we looking for here?

Then we ask: — How do we find this?

And lastly: — What are the positive indications, the affirmative evidence that we have found what we are looking for; that is, measures of success in training.

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Chart No. 1  
GUIDE TO THE EVALUATION OF SUPERVISORY TRAINING

Levels of Evaluation

WE CAN THINK OF EVALUATION IN TERMS OF

THE TRAINING OFFICE

- its staff
- facilities
- resources such as reference materials and visual aids
- how well it plans the training
- how well it administers the training
- its relationship to staff and line
- the support and policy framework

THE SUPERVISORY TRAINING PROGRAM OR COURSE OF INSTRUCTION

- how good, intrinsically, a management instrument is it
- was there a written plan
- how was need determined
- content developed
- methods chosen
- interest and participation
- how well was it taught
- did it include provision for follow-up
- adequacy of evaluation design
- what are the differential effects of different parts or elements of the program

OR IN TERMS OF

EFFECTS ON THE PARTICIPANTS WHILE IN TRAINING

- measurement of how much more is known at the end of the course than at the beginning
- "in-course" change in skills
- "in-course" change in knowledge
- relating instruction to work problems
- participation pattern
- other changes at the "training room level" as measured by tests

EFFECTS ON THE PARTICIPANTS AFTER TRAINING

- measurement of how much of what was taught has been translated into changed behavior on the job
- measuring specific results against specific objectives
- evidences of improved efficiency and satisfaction
- cost savings
- evidences that problems on which needs were based have been met and resolved
- other impact

## OR IN TERMS OF

### GROUP, INTERGROUP, AND ORGANIZATIONAL EFFECTS

- are the results of training visible in terms of improved overall group or organizational functioning.
- can we see improvements in the organization as evidenced by such indices as increased productivity, higher quality of service, lower product costs, reduction in waste, less turnover, reduced intergroup or departmental friction.
- are there evidences of improved employee productivity.
- have changes in participant behavior flowed over and favorably affected behavior and attitudes of nonparticipants.
- what has been the hierarchical effect -- changes in relationship of supervisors with their superiors.
- improvements in communication and coordination.

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### Chart No. 2

#### IN-COURSE EVALUATION OF PARTICIPANTS' PROGRESS

This is appraisal of the effects of supervisory training at the "training-room level"

#### WHAT WE ARE LOOKING FOR

- increased knowledge
- acquired skills
- changes in expressed attitudes
- indications of interest
- degree of participation
- acceptance of training given

#### HOW DO WE FIND THIS

- equivalent forms of the same test at the beginning of and at the end of training.
- end-of-course information test based on course content material.
- attitude questionnaire prior to and on completion of training.
- questionnaire given at end of course asking for participants' appraisal of course.
- record of attendance, particularly when voluntary.

#### POSITIVE INDICATORS

- significantly higher test scores at end of training.
- good performance on information test.
- expression of favorable view of course in end-of-course questionnaires, particularly when supported by specific illustrations of value of course.
- good attendance; trainees arrive on time.
- trainee participation in discussions is wide-spread, intense and thoughtful.

- amount of participation.
- extent to which trainees bring in questions and problems.
- have a trainee serve as "observer" at each session and report to group on effectiveness of session.
- reports by the training director.
- reports of outside observers.
- interviews with superiors of trainees to ascertain if any changes in supervisors' behavior while in training.
- direct observation during "follow-up."
- listen to what the trainees are saying.
- trainees bring in real problems that are important to them, with seeming expectation of getting help in the solution of these problems.
- initial indifference to training changes during the course to strong interest and enthusiasm.
- trainees say their bosses should have this training.
- favorable reports from participants, observers, superiors.
- observation, during "follow-up" that trainees are beginning to apply learned material on-the-job.

*Value* of evaluation at this level is that it provides information as to the internal effectiveness of the training as a process. It indicates how well you are doing while you are doing it. It demonstrates the immediate results of training.

*Limitations.* This is the level at which evaluation is most frequently done, when done. It does not give us the key answer, however; did the training result in better supervisors? We know this only by -- (Chart No. 3)

### Chart No. 3

## MEASURING IMPACT ON THE SUPERVISORS AFTER TRAINING

Appraisal of the effects of training as shown in subsequent modified behavior on-the-job

### WHAT WE ARE LOOKING FOR

- the transfer of instruction into changed behavior and attitudes on-the-job.
- the extent and duration of such change.
- whether changes are positive, contributing to efficiency, production, and employee satisfaction.
- whether progress has been made in meeting the specific objectives of the training.

### HOW DO WE FIND THIS

- by asking the trainees at periodic intervals following the completion of training whether they have benefited from the program.
- by having them complete a questionnaire at intervals following training.

### POSITIVE INDICATORS

- trainees report, over period of time, that they have benefited from the training.
- trainees support this opinion with specific illustrations of problems solved, production upped, etc.

- through interviews or questionnaires obtain concrete illustrations of behavior or attitude change by having them report specific incidents.
- use of attitude surveys.
- ask subordinates whether there have been any changes in their bosses, and obtain indications of this change.
- ask the superiors of the trainees—they usually are in the best position to judge.
- arrange for post-training meetings with trainees where progress can be reviewed.
- direct observation of participants at their places of work.
- analysis of unit records; turnover, grievances, production, waste, customer complaints, training time of new employees, etc.
- review of merit-ratings.
- compare those who have had training with those who have not. Are their work units more productive; are they obtaining better cooperation from subordinates?
- job measurement techniques.
- review of performance standards.
- refer to “need units” developed during initial need survey. Are problems which were evidenced then still in existence. Has there been some improvement.
- increase of positive responses on attitude surveys.
- bosses informally report improvements in their subordinates.
- systematically obtained judgments indicate improved supervisory performance.
- where training in democratic leadership has been part of the program, subordinates report favorable leadership qualities in their supervisors.
- at post-training review sessions, trainees report they have been using learned materials.
- you see the trainees actually using on the job what they have been taught.
- records analysis shows production up, lower turnover, etc.
- improved performance is reflected in merit ratings, or multiple-judgment appraisals.
- more supervisors are qualified for higher level assignment.
- trained supervisors are doing better than untrained.
- supervisors are meeting established performance standards.
- problems which were identified in needs study have been resolved or ameliorated. Evaluation is the reflection in time of the needs study.

*Value.* This tells us what we really want to know about the program: its effect on people in the organization.

*Limitations.* How good the evaluation is depends on the appraisal procedures used, the extent to which these procedures were systematically and impartially applied, and the quality of the analysis of the data obtained. One should bear in mind that the response one gets to interviews or questionnaires depends to a considerable extent on the questions asked and how they were asked. You can be reasonably sure of your results, however, if the obtained judgments substantially correspond to evidences obtained from records analysis, observations, and reports of specific instances. The tighter you can tie your evaluation down to specific items of performance, the more valid the results.

#### Chart No. 4

### MEASURING IMPACT ON THE ORGANIZATION

This is appraisal of the effects of supervisory training on the organization. What we have said about effects on the supervisors also has application here. It is merely a matter of focus. It is taking a look at training within the framework of the activity as a whole.

Most of the indices of successful training that we have discussed above are subgoals of a larger objective. Examples of subgoals are high scores on a supervisory information test, expressions of satisfaction with training given, specific application of learned material, lower turnover, etc. What we are interested in is the meaning of these in terms of a more effective organization; in terms of objective accomplishment and goal attainment.

Since training is an administrative subsystem, one of the instruments by which management promotes its goals, we probably cannot accurately measure its relative contribution, but we can obtain evidence that it has played a significant part in organizational success.

### WHAT ARE WE LOOKING FOR

- an improved supervisory force.
- improved interdepartmental functioning — intergroup impact.
- improved productivity and morale, organization wide.
- improved communications, vertically and horizontally.
- greater customer or public satisfaction with services rendered.
- an adequate reservoir of talent to meet present promotion and future expansion needs.

### HOW DO WE FIND THIS

- through a management audit.
- survey by specially appointed committee.
- questionnaires, morale surveys, analysis of records.
- ask the customers or public about the kind of service or product they are getting.
- budget, accounting, cost and production records.

### POSITIVE INDICATORS

- there is a direct relationship between that which has been taught in training and the expectations and practices of higher management.
- favorable audit or survey reports indicating good management practices and healthy organizational climate.
- improved organizational effectiveness is showing up in cost and quality figures.

- executives report adequate supply of management personnel to meet present and future personnel needs.
- observation of staff conference functioning and effectiveness.
- reports of reduction in "bottlenecks."
- expressions by employees and employee groups of satisfaction with supervisory force.
- ask the "boss," he knows.
- good supply of promotable supervisors.
- better teamwork and communication between organizational segments.
- evidence of greater adaptability and flexibility on part of staff.
- reduction in intergroup frictions.
- major "bottlenecks" in production cleared away.
- good labor-management relationships.
- the "boss" is pleased.

*Value.* Analysis at this level is usually done by higher administrative levels with or without the participation of the training staff. It indicates how the training effort is intermeshed into overall management. It puts perspective on the ultimate goals of training.

*Limitations.* The relative contribution of the training can only be estimated. Where other phases of management are good, training results will be good. Training may have been effective, but if it is bucking a downstream poor management current, its results may be difficult to discern.

Since training deals principally with behavior change, judgment should be tempered with the knowledge that such change comes slowly; that we move toward ultimate goals by the progressive achievement of proximal goals; and that with training, we do not seek to remake the organization, but to achieve some favorable modifications in what its people do and how well they work together.

## PERSPECTIVE ON RESULTS

An evaluation study may show that some changes in the direction of improved attitudes or performance have taken place. The next question is: How much improvement does there have to be in order for a program to be considered successful? The answer to this lies in the expectations of management.

There is a tendency to expect too much from short, formal training courses. We cannot look for large results from one-

shot courses, nor dramatic changes in the basic social behavior of people on the basis of a few weeks of training.

Supervisory training is a slow and cumulative process, which when intelligently and regularly applied tends in time to bring improvement in the work performance of employees. What we can look for is interest on the part of the trainees, and some indications of progress toward established goals.

Training is given in order to improve

performance and organizational efficiency. What has to be improved is revealed through a needs survey and individual appraisals. To find out if this improvement has taken place as a result of training, we re-examine the same factors, in much the same way, that were analyzed in the initial study of needs. By comparing conditions after training with those that existed prior to training, we obtain an estimate of accomplishment. Evaluation, thus, is the correlate of need determination.