

A STUDY OF THE EVALUATIVE PRACTICES
IN MANAGEMENT EDUCATION AND
DEVELOPMENT PROGRAMS IN
SELECTED UNITED STATES COMPANIES

Thesis for the Degree of Ed. D.
MICHIGAN STATE UNIVERSITY

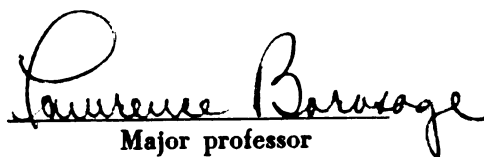
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ABSTRACT

A STUDY OF THE EVALUATIVE PRACTICES IN MANAGEMENT EDUCATION AND DEVELOPMENT PROGRAMS IN SELECTED UNITED STATES COMPANIES

by Carl I. Shafer

The purpose was to study the theoretical aspects and the practices of evaluation of formal management education and development programs in industry.

Procedures

The theoretical aspects of educational evaluation were synthesized from the literature of education, psychology and business. Major published evaluative research was reviewed and analyzed. A survey of evaluative practices was performed by sending a detailed questionnaire to 158 large companies. One hundred eighteen or 74.6 per cent of the questionnaires were returned which revealed the current practices of evaluation of management training programs in the selected companies.

Major Findings

1. Slightly over half of the training departments of the companies represented in the survey spend 1-5 per cent of their time on evaluation of their management training programs. About one-fifth spend less than one per cent

and one-fifth spend 6-10 per cent of their time on evaluation. Rarely does a training department spend more than ten per cent of its time on evaluation.

2. Nearly all companies that responded spend five per cent or less of their training budget on evaluation.
3. Indications were that a static position will be maintained and perhaps even a slight increase in evaluative effort will be made in the future. Many companies that reported the higher amounts of time and budget for evaluation were also those which planned to increase their evaluation activities in the future.
4. Evaluation effort, in terms of time and budget, appeared to be greater in companies where top management stresses the evaluation of management training programs as compared to those where top management shows little or no interest in evaluation of management training.
5. There was a tendency for evaluation effort, in terms of time and budget, to be greater in companies with the larger management training staffs (over five persons) and where the training department has been in operation longer (over ten years).

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6. Generally in the companies responding, there seemed little or no relationship between the effort, in terms of time and budget spent on evaluation of management training activities, and:

- a. the level of management training;
- b. who writes or develops the programs;
- c. who leads or conducts the programs;
- d. where the training program is given or
- e. the type of company (major product).

7. By far the major deterrent to effective evaluation in the opinion of the respondent companies was that evaluation research techniques were difficult to apply in productive or operating situations. There was also some indication that the research techniques which are available are inadequate and are too likely to be influenced by variables and contaminating factors in an industrial situation. Generally there appeared to be interest in evaluation; finances and time were available for evaluation; there is knowledge of the research techniques available; top management stresses evaluation and is interested in the findings when evaluation is performed.

8. As revealed by the survey, questionnaires of various design and purpose were the most often used method of

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evaluation. Questionnaires designed to assess the feelings or like of a program and the benefits of a program were the type most frequently used.

9. No companies offered revolutionary evaluative ideas or research methods other than variations of those found in the literature.
10. Few published studies could be located which attempted to give an industry-wide picture of evaluation practices. None were comprehensive in the sense of covering adequately the methods or effort in the area of evaluation. But all seemed to be using inadequate data and publicizing that they found a general lack of effective evaluation of management training programs. On the contrary, this more comprehensive study, in terms of evaluation practices and effort, showed the selected companies are engaged, at least to some extent, in effective evaluation activities and are somewhat cognizant of what effective evaluation includes.

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Carl I.^{van} Shafer

A THESIS

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in partial fulfillment of the requirements
for the degree of

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College of Education

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Sincere appreciation is expressed to a number of individuals for their contributions helping to make this dissertation a reality. Special appreciation is given to Professor Lawrence Borosage, the writer's doctoral program major advisor and dissertation chairman. His inspiration, the sharing of his time and experience, wise counsel, and his encouragement of individual scholarly pursuit made the dissertation a most interesting and meaningful project.

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Further appreciation is expressed to the author's colleagues for their suggestions and practical counsel; also to those who participated in the juryman group preceding the survey of companies; and to the industrial educators who completed the survey-questionnaire indicating their company activity in evaluation of management education and development programs. Acknowledgement by name is precluded, but the debt is real.

As usual, my wife Carol gave liberally of her time and comments and proved indefatigable in repeated typings

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of the manuscript. Her interest and willing helpfulness were a constant source of encouragement.

The contribution of these individuals made writing the dissertation a satisfying experience. While the author gratefully acknowledges the assistance, full responsibility for the research and the views expressed must inevitably rest with the author.

Carl I. Shafer

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CHAPTER I

NATURE OF THE STUDY

The theoretical aspects and the practices of evaluation actually used in formal management education and development programs in industry are the subject matter of this study. The theoretical aspects of evaluation are synthesized from the literature of education, psychology and business. The major published research on evaluation is reviewed and analyzed. A survey of evaluation practices in management education and development programs in selected companies in the United States is reported. The survey reveals current practices of evaluation in these programs.

Setting of the Study

The demand for qualified managers at all levels of industry has increased over the last twenty years. The era when an individual could develop slowly by experience is rapidly disappearing. Today, as industry grows and becomes more complex, the education of the manager needs to be broader and the pace of development quickened. This education and development, or lack of it in the managerial

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force, can be a factor of business success or failure (10:1,* 4:2).

To prepare the individual to make effective managerial decisions, industry has supported many activities aimed at the education and development of the manager. In-plant training, university or association sponsored programs, formal off-the-job training and informal self-development activities have received the greatest emphasis since World War II (10:1). In 1960 the number of managers in the United States enrolled in formal management training programs exceeded 500,000. The 1948 total in all formal programs was ten thousand (1:1).

Several large companies, it was revealed in the survey which is a part of this study, employ over twenty people as full-time management trainers. One corporation reports current yearly expenditures of four million dollars on training. Interestingly enough, smaller organizations appear as successful as the larger ones in implementing broad, all inclusive development programs for the various levels of their managements (7:7-8).

Ten years ago the American Management Association, a management training institution and disseminator of management information, had a staff of forty people; now it

*10:1. This method of giving bibliographic information will be used throughout the study. The number before the colon denotes the source in the bibliography at the end of the chapter. The number after the colon indicates the page in that source.

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has 400. Ten years ago AMA held twelve conferences or seminars a year, and now the number has increased to 1,000 a year. The American Society of Training Directors has grown in membership from 100, when organized in 1945, to considerably over 3,000 members currently--another indication of the increased emphasis of management training activity (6:12, 2:34).

Basically, management education and development imparts the knowledge, skills and attitudes required for effective performance on present jobs or for higher responsibilities. Therefore, any activity aimed at promoting growth and improvement in this area can be considered a part of management development (10:1). Courses, conferences and meetings of various types and having varied objectives, however, seem to be the major method, other than on-the-job training, to impart or generate this growth and improvement (7:21).

In summary, then, there is a great demand for effective managers to run companies successfully, and there are indications of increased management training to meet this demand. Courses or conferences are usually relied upon as the primary means of formal management education and development. But how are these programs evaluated? What are the major evaluation experiments in this area? What are the general practices of evaluation in management training programs in industry today? These basic questions and researched explanations are the subject of this study.

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Delimitation of the Study

This study is not an exhaustive investigation dealing with all aspects of evaluation. No attempt is made to explore every theoretical ramification of evaluation. Instead, a background and framework are presented which industrial educators may use as guiding principles in evaluative attempts within their companies. The theoretical principles concerning evaluation which are presented appear to have stood the test of time or are generally recognized as being authoritative by specialists in the literature.

Many evaluative studies are presented in the literature which discusses particular management training programs. Only those writings which appeared noteworthy in scope, pioneering or unique in method, however, are reviewed in this study.

While the phrase, "management education and development," in its broadest sense may include many activities, in this study it is delimited to include only formal programs, courses or conferences which attempt to promote managerial growth and improvement. The evaluative practices in the management education and development programs are confined by the survey to those found in 118 large companies in the United States. This representation, however, probably reflects much of the major activity in evaluation of management training programs in this country.

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Beyond the limitations of time and space of this study are two broad related areas: first, the methodology of training needs analysis; and second, personnel evaluation and its many ramifications. It is hoped that others interested in these related problems or in topics outside the scope of discussion of evaluation in this study might conduct the additional needed research.

Need and Importance of the Study

The need and importance of the research undertaken and described in this study were derived from several sources. One primary source was the literature of or related to industrial training. An increasing number of articles discussing evaluation seem to be appearing each year in the journals of training, psychology and business. Each of these articles usually attempts to shed light upon some facet of evaluation. There has been, however, no single comprehensive piece of research which pulls together and analyzes the many important articles and their ideas about evaluation in management training.

Frequently an author challenges the training profession to exert greater efforts in the area of evaluation. Exemplary of this challenge is that found in Kirkpatrick's (8:32,34) "The Most Neglected Responsibilities of the Training Department." In this article Kirkpatrick lists, in his opinion, three main neglects, one of which is: "To

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evaluate training programs and make use of evaluation results." Kirkpatrick emphasizes that while results of training evaluation cannot be transferred from one company to another, evaluation techniques and procedures can be frequently transferred and adapted.

Reeve (11), Belman and Bliet (3:51) and Mead (9:65) conducted surveys by mail of training directors in business and industry concerning their duties and responsibilities. Each study showed that evaluation was an important function of the director or training department, but the implication was that work in the area of evaluation left much to be desired. After Reeve's (11) comprehensive study of 308 training people and their responsibilities, he suggests that "methods of evaluation" is an area that has great need of research.

Another motivation for the present study was a recommendation by the 1950 Research Committee of the American Society of Training Directors. This five-man group composed of high level industrial and university educators surveyed 283 people by questionnaire in industrial firms, business concerns and in colleges. This Committee searched for problems broad in scope and interest and worthy of research in the training field. Of importance was that "evaluation of training programs" received the second highest consideration and was preceded only by the related research problem of "supervisory training." (13:2,4)

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Also, an endeavor was made to ascertain current expert opinion on the need for a survey of training evaluation which was to be included as part of this study. A sheet describing the "Overall Objectives of Survey," Appendix I, was sent to twenty-two people believed to be authorities in evaluation because of their experience or publications in this field. A proposed survey questionnaire was also included for their appraisal and comment.

Seventeen of the twenty-two selected jurymen, Appendix II, responded with proposed revisions to the questionnaire or personal letters of suggestion; however, only six returned the "Overall Objectives of the Survey," Appendix I. In every returned letter though, a "Yes" was given to the question, "Do you believe there is a need for such a survey?" One jurymen from a university also emphasized, "I feel the project is highly worthwhile . . ."

Later, as the questionnaires were sent to the industrial concerns participating in the survey, several encouraging letters were received. One letter from the head of the management development research staff in a large corporation stated in part, "The topic you have selected for study is indeed a most important one." Further evidence of the need and importance of the survey may be indicated, in some measure perhaps, by the fact that 101 of the 118 persons responding to the questionnaires requested a summary copy of the findings of the survey.

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Finally, it was believed the research undertaken and described in this study would be generally useful and interesting to university and industrial educators and personnel administrators, since the study seeks to uncover evaluation principles and practices which are not generally known.

Definition of Terms

Although most of the terminology in this study will be clear to the reader, several of the terms need defining because of varying connotations in various parts of the country and in different institutions or industries. In light of this, the following stipulative definitions are given so that the reader might readily understand the meaning intended by the writer.

1. "Evaluation" in this study is used primarily in its broadest sense, that is, any reasonable assessment of "To what extent was accomplished that which was attempted?" Evaluation may make use of measurement but is not limited to it (6:1, 12:21, 15:1-2). The words: theory, practices, ideas, principles, methods and purposes have their usual definitions but are frequently prefaced with the term "evaluation" describing a method concerning evaluation, a practice concerning evaluation and the like.



2. "Education" is used in its general sense, and also as it pertains to the acquisition of management information and principles through formal class or conference groups (15:9).
3. "Development" is the intellectual growth and emotional maturation of the individual in managerial competence (15:9). Education and development are used in the study to denote the combined intended result of company sponsored formal management conferences or programs as opposed to informal or self-development activities and job development prescribed by an individual's supervisor.
4. "Management training" in this study refers to any level of education and development given to individuals that direct people or operations in industry. Management training, a commonly accepted term in industry, is used interchangeably with management education and development.
5. Three management levels are discussed: "Top management" is the executive management which has overall responsibility for policy making. "Middle management" has administrative responsibility, that is, implementing, interpreting and carrying out company policy. "Foreman or other first

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level management" is supervisory management which directs the activities of the employee work group (15:9).

Investigational Procedures

After the study area was selected and outlined, several lines of inquiry were pursued--the first and second lines of attack were conducted somewhat simultaneously, and the third was built upon the first two.

The first line of attack examined documentary research concerning the theoretical principles of evaluation. Literature from education, psychology and the business area was minutely investigated and analyzed. An attempt was made to synthesize a reliable body of authoritative information concerning the theoretical aspects of evaluation. This served as the background for the review of research and the later survey of evaluation in management education and development programs.

The second line of attack was also directed to documentary research. Studies were reviewed which in any manner surveyed or partially surveyed evaluation practices. Also, experiments which discussed evaluative attempts with management training programs in specific companies were consulted.

Finally, in the third line of attack, a questionnaire was determined to be the most effective method of

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gathering the data which would reveal the evaluative practices of management training in the selected companies. A questionnaire was designed and a mailing procedure set up believed capable of achieving maximum returns from the selected companies. Pilot questionnaires were sent to the jurymen group, Appendix II, for their appraisal. The overall objectives of the survey, Appendix I, were also sent to the jurymen with provision for their comments and suggestions for improvement. The revised questionnaire, Appendix III, later mailed to 148 companies, supplied the data upon which the survey findings are based.

Preview of Succeeding Chapters

The findings of the three lines of inquiry are discussed in logical order in the study. Chapter II, "The Theoretical Aspects of Evaluation," begins with a brief history of evaluation. This is followed by the purposes and principles of evaluation, the steps in an evaluative process, and the focus and methods of evaluation as synthesized from the literature.

Chapter III reviews the evaluation studies or experiments in management training as reported in the literature. Several industry-wide studies of specific evaluation practices are discussed. The major attempts with evaluation of "human relations" management training programs

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are reviewed, and a number of studies having unique purpose, scope or evaluative method are also presented.

Chapter IV describes the survey findings. The level of management training activity, size of staff, years of operation and the amount of effort in terms of time and budget spent on evaluation are given. Chapter IV reveals the stress which top management places upon evaluation and a number of other factors which may hinder or help the implementation of evaluation. Future effort to be devoted to evaluation was determined along with the greatest deterrents to evaluation in these companies. Lastly, the chapter notes the focus of evaluation in these companies along with the methods and systems used in their evaluation.

The major findings are summarized at the end of Chapters II, III and IV. In Chapter V these diverse findings are then brought together into a number of conclusions and recommendations which have been reached in a study of this purpose and scope.

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CHAPTER II

THE THEORETICAL ASPECTS OF EVALUATION

In this chapter an attempt will be made to synthesize some of the theoretical aspects of evaluation from the literature of education, psychology and business which is applicable to industrial management education and development programs. The writings concerning evaluation reveal that educators appear to be more proficient with evaluation theory and practice, as related to the topic of this study, than any other group. A perusal of the Journal of Educational Research shows that nearly every area of public and private education is concerned with evaluation.

Educators in business and industry have also become increasingly aware of the need for evaluation. Articles pertaining to this topic have become more frequent in recent years in the Journal of the American Society of Training Directors.

Much of the literature on evaluation, however, describes confessional accounts or experiments that were performed attempting to evaluate a course or program. A smaller number of articles gave insight into the topic of this chapter--the theoretical aspects of evaluation.

In this chapter, it is desirable to make a brief review of evaluation history so that evaluation will be

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more understandable in its modern context. The history of evaluation is followed by some principles of evaluation as synthesized from the literature. A series of steps, useful to obtain effective evaluation, are set forth. Lastly, the chapter is concluded by outlining the focuses of evaluation and some of the methods of evaluation which are applicable to industrial management education and development programs.

History of Educational Evaluation

Evaluation of management training has no history distinct from educational evaluation in general. The practice of evaluation as applied to management training programs appears from the literature to be only a late offshoot of the educational evaluation movement. This movement had its beginnings about eighty years ago with intelligence and psychological tests. The early tests gave way to the concept of measurement and finally to the broader concept of evaluation.

Schwartz and Tiedeman (18:6-7) recall that testing in America actually had its beginning in England, France and Germany. Notable early contributors were England's Sir Francis Galton, who developed a wide array of statistical techniques; Alfred Binet working in France, who published a scale for measuring intelligence; and the German Wilhelm

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Wundt, who formed the first experimental laboratory in psychology.

Travers (20:3-5) gives credit to Joseph Mayer Rice for the transmission of the earlier concepts of testing to America. Rice, an M.D. from Columbia University, after practicing medicine in New York, traveled to Europe in the 1880's to study pedagogy and psychology at Jena and Leipzig for two years. On his return to the United States, and filled with the zeal of educational reform which he had found in the centers of learning in Europe, he went on an inspection of the schools of the U. S. in 1892. Rice visited with more than 1200 teachers in their classrooms in the east and middle west and also visited some twenty institutions for the training of teachers. Travers (20:3-5) reports that Rice's studies were an outstanding piece of research and had far reaching implications, although at the time they seemed to have no observable effect on education in America.

The extension of public school education stimulated psychologists and educators to take a further look at the problems of testing and measurement in American education. Edward L. Thorndike developed standardized tests and scales for measuring achievement. Lewis Terman adapted the Binet intelligence test for use in the U. S. Rudolph Pinter and Donald Paterson brought out non-language intelligence tests, and Arthur Otis contributed to the development of the first

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group of intelligence tests during World War I (8:6-7).

Between 1910 and 1930 fashionable school systems began using batteries of standardized tests, although many were poorly constructed and not particularly useful to the classroom teacher (18:6-7). Micheels (15:1) termed the interest in testing "a rash-like outburst." He also said, "During this time tests, like some of the wonder drugs of modern medicine, were overused. In many instances they were also misused. Some of the apostles of the testing movement were certain that objective tests were the key to most of the educational problems then existing."

But an inevitable reaction set in during the 1930's. One reason was the renewed attention given to the objectives of modern education. As educators strove to achieve greater effectiveness in evaluation, it became obvious that formal tests alone were of limited use in appraising certain behavior changes. Under the leadership of Eulich, Raths, Tyler and Wrightstone, a movement developed to broaden the concept of measurement to include such attributes as attitudes, interests, ideals, ways of thinking, work habits and personal and social adaptability (7:428, 15:2).

The 1930 to 1940 period might be called the "Rise of Evaluation" era as opposed to the emphasis on measurement which preceded it. Many new batteries of tests came out. Personality tests such as the Rorschach and other projective tests appeared, interest inventories were devised

and anecdotal records were introduced as an evaluation technique.

Textbooks before the 1930's were designed to orient the students of education in the scientific method of measurement and usually had only the word measurement in the title. After 1930, book titles including the notions of measurement and evaluation became more frequent.

The term evaluation gained ever increasing acceptance as a result of Tyler's writings coupled with the revolt against the traditional curriculum. There were serious attempts to find ways not only to test tangible skills and knowledge but also the less tangible objectives of a modern educational program (23:6-7, 16:21).

The 1940 to 1950 decade marked the refinement of the techniques generated during the 1930's. The Eight Year Study (19) of thirty high schools published in 1942 illustrates the broad scope of a modern evaluation program. Here Tyler and others attempted to make evaluation operational. Teachers, administrators and research people engaged in evaluating the effectiveness of educational programs had to develop their own instruments as they sought to evaluate study skills, critical thinking, appreciation and interests. The study tended to show that testing specialists had too long been concerned with the knowledge aspects of education at the expense of the intangible outcomes of the educative process.

Even as World War I contributed to testing, so World War II created the conditions for further evolvement of the evaluation movement. The problem of how to train and use effectively the millions of men and women in and out of the armed service provided possibilities of unlimited experimentation (18:7-8).

The last decade of work in evaluation, and the resulting principles and methods are partially exemplified in the discussion in the remainder of this and the next chapter. This brief review of evaluation history will serve as a contrast showing the advancing thoughts in evaluation and why certain evaluative concepts and principles are presently stressed. Evaluation, then, is the evolution and product of about eighty years of research and experience by educators and psychologists.

Purposes of Evaluation

A number of authors (5:348-50, 6:1, 7:285, 17:205, 18:2) generally agree that the basic purpose of evaluation should be to achieve effectiveness in education. The basis for determining the effectiveness of education should be the extent educational objectives are realized.

Borosage (3:1) enlarges upon the basic purpose of evaluation and sets forth several purposes as related to a training program:

1. The chief purpose of evaluation is to validate the total approach to training that is used in the organization.
2. The second purpose is to determine whether content in a training program is functional.
3. The third purpose is to determine needed modifications in instructional method.
4. The fourth purpose is to provide greater psychological security and morale to the staff responsible for training both individually and collectively.
5. The fifth purpose is to provide information basic to effective guidance in an individual development program. Only as we appraise individual achievement are we in a position to plan additional improvement.
6. The sixth purpose of evaluation is to provide a sound basis for public relations.
7. The seventh purpose is to examine the extent to which financial resources have been used effectively.

Some Principles of Evaluation

Principles of evaluation might well be considered the pertinent, yet general framework of thoughts or ideas guiding the evaluator. Tyler (22:495-97) states the principle that any evaluation of educational achievement should not neglect the inter-relationship of the student's information, skills, ways of thinking, attitudes and interests. Instead the evaluation should make an effort to relate these factors. According to Tyler, humans act in a fairly unified fashion; hence in any given situation, information is not usually separated from skills.

Harris (7:38) believes that evaluation offers the greatest potential benefit if it is conducted over a period of time and is a continuous and built-in part of the total training process. Belman and Remmers (1:31-32) tend to agree but with this reservation: "It is difficult to evaluate long-range training programs." They suggest evaluation may be more workable if attempted in lesser units coinciding with the units of an educational program. Also, provision should be made for evaluation during the planning stages of training programs.

Harris (7:38) further submits that evaluation should be concerned with results rather than effort expended, i.e., evaluation of a particular teaching technique should be appraised in light of the changes in student behavior or knowledge.

Borosage (3:4) and Harris (7:38) agree that self-appraisal is usually better than evaluation by outsiders, although a combination of both is frequently even more desirable. They also concur that an evaluation project to be most effective should allow participation by all individuals involved. The factors of self-appraisal and participation, they believe, help achieve greater motivation to improve the education program.

Belman and Remmers (1:31-32) indicate the establishment of control groups is a desirable evaluation technique. The evaluator then has a basis for comparison. This technique, however, does not assure that variables and

contamination factors will be eliminated and these factors still must be isolated and taken into consideration.

A last evaluation principle according to Belman and Remmers (1:31-32) is "Results of the evaluation should be expressed in terms that are understandable to those involved." While mathematical terms or the language of statistics often express most accurately the results, common sense dictates that the interpretation of the data should be made in the terminology of the organization and understandable to those who are to use the results of the evaluation.

Steps in the Evaluation Process

A number of authors (3:1, 7:482, 22:497-501, 4:2, 13:97, 16:50, 23:26, 2:25, 6:15) list what they term as steps or guides in the evaluative process. While there is some variance in details, the writers from diverse fields of education agree on the content of a series of steps. A synthesis of these recommended steps from the various sources related to industrial management education and development follows:

1. OBJECTIVES. First is the establishment of the purposes or objectives which the education is to accomplish. In industry, the education and

training may have been or will be based on a needs survey. Thus in this step, the task would be to re-define needs in terms of objectives.

2. IDENTIFICATION. The second step suggests the identification of situations where the changes in behavior may be noted in the day-to-day work situation. This may include the selection of available tests or measures or a test situation appropriate for the major objectives as outlined in step one.
3. APPLICATION. Included in this step is the trial and refinement of the most promising methods or instruments for obtaining and appraising the evidence regarding each objective. The refinement may include the evaluation of the evaluative device or method itself in terms of how well it serves its purpose.
4. RESULTS. The fourth step proposes to analyze, interpret and use the results of evaluation. The data have their complete meaning only after they have been interpreted and related to the purpose and content of the program. Moreover, the results of the evaluation should be in a

form that can be interpreted by the intended reader.

5. IMPROVEMENT. Finally, evaluation is intended to be an integral and continual part of the educational process. The results of evaluation normally would result in modification and improvement in the educational program.

While five steps in the evaluative process have been listed here, the contributors are not in agreement as to the number of steps involved. Agreement, though, is not necessary. More important is the implication that an orderly process should be followed using sound evaluative thinking. The exact number of steps should be flexible enough to meet the demands of the program to be evaluated.

A brief elaboration of step one, Objectives, seems necessary. The literature is replete with guidance on setting objectives or goals in education and their importance to effective evaluation. Tschudin, Belcher, and Nedelsky (21:110) explain that objectives can be classified or separated into two components: "behavior" and "content." Behavioral objectives refer to the thinking, feeling or acting involved. Content refers to the subject area which is also inherent in the objectives.

The major problem in setting objectives of an education program, however, appears to be the clarification of the objectives in such terms so that it is later

possible to determine whether or not the objectives have been achieved. Workers in evaluation find that a statement of objectives in some form is readily available, yet often these objectives do not provide a suitable basis for evaluation because the objectives are stated in very general terms. The difficult task, then, is to translate broad, vague objectives into more specific results (7:483, 5:349, 8:13, 20:10). Rivlin (17:207) asks, "How can we measure progress toward a goal unless we know what the goals are?"

Focus of Evaluation

The focus of evaluation is, in general, what the researcher evaluates. Kirkpatrick (9:3, 10:21, 11:13, 12:28), Besco, Tiffin and King (2:18), Messer (14:36-37), Borosage (4:2-6) and Korb (13:19-104) designate a variety of focuses. The authors emphasize that several of these focuses should be considered for comprehensive, effective evaluation:

1. The ADMINISTRATIVE ARRANGEMENT under which this training program was given
2. The GOALS AND OBJECTIVES of the training program
3. The METHOD OF PRESENTATION of the training program (conference techniques, conference leaders)
4. The PARTICIPANTS' PROGRESS during the training program
5. The FEELING OF PARTICIPANTS about the training program
6. The LEARNING OF PARTICIPANTS as a result of the the training program (certain management principles, supervisory knowledge)

7. The BEHAVIOR OF PARTICIPANTS as a result of the training program (different actions back on the job resulting from the program)
8. The RESULTS, EFFECT, IMPACT on the group, inter-group relationships or organization as a result of the training program.

Kirkpatrick places the last four listed focuses of evaluation in ascending order of difficulty. He believes number five, "the feeling of participants about the training program," is the least difficult evaluation and most often performed; number six, "the learning of participants," less attempted; number seven, "the behavior of participants," and number eight, "results, effect, impact on the organization," the least attempted, yet most important.

Methods of Evaluation

The methods of evaluation are the "how to" or the techniques that may be used in the evaluation of management education and development programs. A sampling of the techniques suggested by Kirkpatrick (9:3-9, 10:21-26, 11:13-18, 12:28-32), Besco, Tiffin and King (2:13-27), Messer (14:44-64), Borosage (4:2-6) and Korb (13:99-104) reveals several possible evaluation techniques for management education and development programs. The following list of techniques was included as part of the survey questionnaire, Appendix III. A discussion of the systems of

evaluation and the interrelationship of these techniques in practice is included in Chapter IV of this study.

1. Course material information tests:
 - a. Before program
 - b. During program
 - c. Directly after program
 - d. Sometime after program
2. Attendance at program
3. Amount of participation by participants
4. Interviews with, or questionnaires to:
 - a. Participants
 - b. Participants' supervisors
 - c. Participants' employees
 - d. Participants' peers
5. Check of users' attitude toward service or product rendered by participants' department
6. Use of participant questionnaires on:
 - a. Changed attitudes
 - b. Feelings about program
 - c. Benefits from program
7. Control and experimental groupings
8. Reports by outside observers
9. Direct observation of participants' actions on job after program
10. Organizational attitude or communications surveys
11. Use of records on absenteeism, material waste, turnover and/or grievances in the participants' work group
12. Significant increases in "performance review" ratings of the participants by their supervisors

Summary

1. Historically, Schwartz and Tiedeman (18:6-7) mark the testing-measurement-evaluation movement as being about eighty years old. Early pioneers in the movement were England's Sir Francis Galton developing statistical concepts, France's Binet with scales for measuring intelligence, Germany's Wundt forming the first experimental laboratory in psychology and America's Rice who transmitted Europe's pedagogy and psychology to this continent around the turn of the century. The testing-measurement-evaluation movement grew in this country with the work of Thorndike (standardized achievement tests), Terman (adapted Binet's intelligence test for the U. S.), Pinter and Paterson (non-language intelligence tests) and Otis (intelligence tests during World War I).

The 1930's saw efforts to broaden the idea of testing-measurement and add the concept of evaluation. Eulich, Rath, Tyler and Wrightstone were leaders in this 1930-1940 "Rise of Evaluation" era. The 1940-1950 decade marked the refinement of the techniques founded during the 1930's. The summary thoughts that follow briefly set forth the theoretical aspects of evaluation as it has evolved in the 1950's and in particular how evaluation might be applied to management education and development programs today.

2. A number of authors (5:348-50, 7:285, 6:1, 17:205, 18:2) generally agree that the purpose of evaluation is to achieve effectiveness in education. The basis for determining the effectiveness should be the extent educational objectives are realized.
3. The principles of evaluation are many and varied. Principles might well be considered as the pertinent, yet general framework of thoughts or ideas guiding the evaluator. These principles appear important for the industrial educator:
 - a. Evaluation offers the greatest potential benefit if conducted over a period of time and a built-in part of the total training process.
 - b. Evaluation should be concerned with results rather than effort spent in conducting the program.
 - c. Programs with specific objectives can most easily be evaluated but variables which may influence results should be isolated and taken into consideration (7:38, 1:31-32).
4. A synthesis of recommended steps for evaluation from various sources (3:1, 7:482, 22:497-501, 4:2, 13:97, 16:50, 23:26, 2:25, 6:15) indicates an orderly yet flexible process that should be used in evaluative attempts:
 - a. OBJECTIVES the education is to accomplish should be formulated or re-defined. A clarification of objectives in terms of measurable change is frequently necessary.
 - b. IDENTIFICATION of a "measure" or "test situation" where changes may be noted is suggested.

- c. APPLICATION and/or refinement of the "measure" or evaluative device may be necessary.
- d. RESULTS are then to be analyzed, interpreted and put in usable form.
- e. IMPROVEMENT or modification of the educational program should then be instigated.

5. Lastly, the chapter reviews the various focuses of evaluation. It was suggested that several focuses be considered for comprehensive, effective evaluation. Finally, the research methods useful to evaluate management education and development programs were outlined from the literature. These focuses and methods of evaluation are reflected in parts of the survey-questionnaire, Appendix III, and were used to help obtain the data for Chapter IV.

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CHAPTER III

REVIEW OF EVALUATIVE STUDIES IN THE LITERATURE

The purpose of this chapter is to review briefly the evaluative methods used in the studies of management education and development programs as reported in the literature. Articles in journals and magazines, reports in pamphlet form, as well as portions of texts from the fields of education, psychology, and the general area of business were minutely investigated for evaluative research having to do with, or related to, management training.

Although the literature contains a surprisingly large number of evaluative studies, a review of all of the writings or even every detail of those desirable for inclusion would demand much more space than is allowable in a study of this scope. Thus only those writings which appeared of consequence in scope, pioneering or unique in method have been included.

For convenience, the studies reviewed have been categorized according to their purpose of inquiry or type of program evaluated in the following areas: that of industry-wide studies of specific evaluation practices; human relations programs; university programs given for industrial managers; and a general category of located studies.



Industry-Wide Studies of Specific Evaluation Practices

Few studies were found which gave an industry-wide picture of evaluation practices. None were comprehensive in the sense of covering adequately specific evaluation practices and most revealed only miscellaneous data and indictments about the lack of evaluation.

A Bureau of National Affairs (5) questionnaire found only one-fourth of the companies surveyed using specific training evaluation techniques, in most cases some form of an attitude survey. An American Management Association (16) study of company opinion about the effectiveness of their management education programs was based on evaluation methods the companies admittedly considered inadequate. Mahler (15) found that about one in ten companies used any systematic research to find out what training was necessary, only one in forty studied the merits of their training methods, and the big majority of the survey indicated they used somebody's opinion as to the effectiveness of their training.

Evaluation of Human Relations Programs

The evaluation of human relations management programs apparently is a favorite with industrial trainers.

Several varied attempts are reported in the literature. The foremost study located, in terms of elaborate research procedures used and most often cited by others in the literature, was the Ohio State-International Harvester Company study by Fleishman, Harris and Burt (4). They used a 150-item questionnaire designed to measure leadership attitudes in foremen. The questionnaire was given before, immediately after and sometime after the training program to the control and experimental groups.

The Bell Telephone Company study by Stroud (24) was similar to the Ohio State study in the research techniques used and in the attempts made to ascertain improved performance and organizational effectiveness resulting from the training. But both studies agreed about the inadequacy of the self-rating type of test directly after a program in determining increased performance and effectiveness.

In the Ohio State study (4) four external organizational criteria (absenteeism, accidents, grievances and labor turnover) were used as a measure of improved organizational effectiveness. A Detroit Edison study reported by Seashore (20), on the other hand, used a morale survey with extensive feedback to trainees, their supervisors and other employees, as a measure of organizational effectiveness.

Kirkpatrick (8) tested with comment sheets his human relations training program for foremen to reveal their

feelings about the program. Also, pre- and post-test scores on a human relations test were used to ascertain increased knowledge from the program, and correlation of the change in these test scores with job performance back at the trainee's company was performed--but with apparently inconclusive relationships. Soik's (21, 22) study at the Allen Bradley Company was patterned after Kirkpatrick's with the addition of group participation as an evaluative indicator.

To evaluate the effectiveness of training administration and training methods and to determine future training needs, the Proctor and Gamble Company (20) employed a systematic and intensive interview program with foremen candidates and with the candidates' supervisors.

Lawshe, Bolda and Brune (3, 9) used verbal responses to case problem situations after human relations training and correlated these responses with the judgment of so-called expert responses in order to test increased human relations knowledge.

Lastly, in an evaluative attempt with a human relations program, Osterberg and Lindbom (14) used a delayed questionnaire (three years after program) sent to program participants to determine any continuing behavioral or organizational change resulting from the training.

Evaluation of Management Education and Development Programs for Industry Given by Universities

Only one piece of research was located which attempted to give an overall picture of evaluation of the university conducted programs for management. The Opinion Research Corporation (6) report reveals that forty per cent (the largest percentage indicated) of the companies surveyed evaluate the worth of the university courses for their managers by observing the managers' performance back on the job after the program.

The Bell Telephone System appears to have obtained the most publicity in the utilization of university programs and also in the evaluation of their programs. One study at the University of Pennsylvania, reported by Viteles (26), evaluates a humanistic studies program for third and higher level supervisors. An extensive battery of tests, given on a before and after basis to control and experimental groupings, was used to determine increased intellectual background and modified attitudes, interests and values. The author of the Pennsylvania study is careful to emphasize that the research indicates only immediate outcomes. Another Bell study (2) on a program at Dartmouth and Williams Colleges, similar in research design, also included the use of tests plus personal interviews with participants one year after the program to ascertain longer range effects.

Trice (25) reports a unique evaluative experiment at Cornell where an initial and repeat study, and a study five months later were used to determine change in attitudes toward conference leading as a result of training. The evaluative instrument was a 100-item card sort on behavior compatible and incompatible with the management function of conference leading.

Other Attempts to Evaluate Management Education and Development Programs in Industry

Several other evaluative attempts with management education and development programs, other than university conducted or human relations programs, were noted in the literature. Three studies, two from the General Electric Company (12, 23) and the other at the B. F. Goodrich Company (7), reported attempts to measure changed behavior or improved performance as a result of management training. In one case an intricate composite index of various personnel statistics was used as a basis of evaluation. The second attempt utilized control and experimental groupings and series of questionnaires one year after the program to the program participants, their peers, those they supervised and the participants' supervisors. The Goodrich evaluators also used questionnaires but only those ratings by superiors. In addition, a series of participant attitude and achievement tests was employed in the Goodrich study.

Savitt (18, 19) went into an involved experiment to measure increased knowledge, as a result of management training, and then interestingly correlated the change of before and after test scores with the participants' age, formal education, supervisory experience and tests of mental ability.

The Monsanto Chemical Company (1) held a series of plant problem conferences which were also considered training ground for the participants. Evaluation techniques included the superiors' rating of participants' performance on the job on a before and after basis, a participant attitude survey, and attendance at the voluntary conferences.

Rich's study (17) at the Sharp and Dohme Company provided an interesting adaptation of the sociometric technique where conferees rated each other. Through a system of confidential interviews, in which the results were revealed to each participant individually and through continued inter-action in conferences, the leader attempted to improve inter-personal relations of the group inside and outside the conference room. Improvement resulting from the conferences was noted on repeated sociometric ratings during and at the end of the program.

Meadow and Parnes (11) report the only experiment located which strives to measure results of a creative problem-solving course made popular by Osborn (13) and his brainstorming procedure. Experimental and control groups

were employed with a battery of nine test measures including tests of creative ability, apperception and intelligence.

Lastly, the General Motors - AC Spark Plug Division study (10) was the only piece of research available which reported an attempt to evaluate comprehensively a number of management courses given over several years on a plant-wide basis. Structured personal interviews were extensively used with the participants of the various programs and were the evaluative technique in this case.

Summary

In the studies reviewed in the literature concerning the evaluation of management education and development programs, several evaluation methods and research designs were presented. The following appear as usable evaluation methods:

1. Tests designed to measure the course or content material imparted as a result of the program, given before, during, immediately after and some-time after the program
2. External organizational criteria, e.g., absenteeism, accidents, grievances, labor turnover, as a measure of improved organizational effectiveness as a result of the management training program
3. Morale, organizational attitude or communications type of surveys to determine improvement in the participants' work groups

4. Comment questionnaires of various designs after the program to ascertain the participants' like of or benefit from a program
5. Group participation and/or the attendance at a series of conferences which are held on a voluntary basis
6. Systematic interviews with program participants and/or their supervisors on the merits of the program
7. Systematic observation of the performance of the management person back on the job after the program
8. Tests of various design and purpose given on a before and after basis to control and experimental groupings
9. A composite index of selected personnel statistics with an index movement that would correspond with the desired behavior change or improved performance of the managerial group as a result of their training
10. Control and experimental groupings along with a series of related performance inquiry type questionnaires, one year after the program to the participants and/or their peers, those they supervised and the participants' supervisors

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CHAPTER IV

THE SURVEY AND FINDINGS

In this chapter a survey of the evaluation practices in management education and development programs in selected United States companies will be described and the survey findings discussed. The purpose of the survey was twofold: first, to determine the evaluative practices and second, the factors and relationships that perhaps hinder or help the implementation of evaluation.

The impetus for the survey and the benefits that might be derived were as follows:

1. The more that is known about evaluation in practice, the better industrial educators armed with theory should be able to suggest, revise and use sound and practical evaluation procedures to promote more effective education.
2. The results should provide a comprehensive, up-to-date source of information on evaluation practices for those who plan and administer management training activities.
3. The knowledge of evaluation activities should throw light on existing conditions that may need change and improvement or that otherwise may go unnoticed.
4. The results can be used for comparison with earlier or later studies, thus identifying trends and also providing a sound basis for action.

Development of the Questionnaire

The questionnaire method was used to collect the survey data. Several authorities (5, 7, 8, 9, 15, 17, 20, 21) were consulted for the design and use of a questionnaire to secure the data. Necessarily, the final revision of a questionnaire becomes somewhat of a compromise between the desire of the researcher to secure ample, accurate data and a questionnaire design which he believes the respondent will consider and return.

The items for the questionnaire were derived mainly from the discussions of Chapter II, "The Theoretical Aspects of Evaluation," and Chapter III, "Review of the Evaluative Studies in the Literature." The questions were designed for ease of response, and the questionnaire was divided into four parts for the respondents' convenience:

- Part I - Your Company and Management Training
- Part II - Evaluation and Your Company
- Part III - Purposes and Methods of Your Evaluation
- Part IV - Your Company and You

A preliminary form of the questionnaire with individually typed letters was sent to twenty-two people believed to be authorities in evaluation because of their experience or publications in the evaluation field. This pilot group or jury was asked to appraise and comment upon the questionnaire. Those jurymen holding positions in industry were also asked to respond to the individual questions in the instrument indicating their company use of

evaluation. The jurymen are listed in Appendix II. From the suggestions given by the jurymen, the revised four-page questionnaire, Appendix III, was evolved.

Selection of Companies

The selection of companies and persons who ultimately comprised the mailing list was taken from the 1960 American Society of Training Directors' Directory of 3,095 members. It was believed these people had the interest and were most likely to be aware of the evaluation practices in their company. In order to acquire a representative listing of industry and provide a mailing that was economically practical in time and cost, only aircraft and missile manufacturers, automotive manufacturers, chemical, plastic or drug manufacturing firms, electrical and electronics companies, metal and steel manufacturers, paper producers, public utilities, rubber manufacturers and textile production firms were included. This list produced 239 companies. The person who appeared to have the highest ranking title in the Directory for a company was selected to represent that company.

The 239 companies were then compared with Fortune Magazine's 1960 listing of the 500 largest American industrial concerns and fifty largest utilities, size being measured in terms of dollar sales. This comparison

resulted in a list of 182 companies by excluding those not found on Fortune's list. Further refinement to 158 companies was made with the decision that only one letter be sent to the central office of a large corporation rather than to several of its divisions or plants. For example, a questionnaire was sent to American Telephone and Telegraph rather than each of the Bell Systems. Of these 158 companies and individuals' names, ten were selected to be part of the pilot or jury group. Thus the final mailing list included 148 names as selected and refined from the American Society of Training Directors' Directory.

Distribution of Questionnaire

Several efforts were made to induce response from those firms asked to participate in the study. An automatically typed letter, Appendix IV, with individually typed name and two questionnaires were sent to each of the selected companies. The extra copy of the questionnaire was enclosed for the respondent's file and reference.

After two and one-half weeks or when the first wave of returns began to taper off, eighty-seven follow-up letters, Appendix V, were sent to the non-respondents. Another copy of the questionnaire was included at this time. In both the first and second mailings, the offer of a summary copy of the results of the study was used as further inducement.

Number of Responses

One hundred nine survey-questionnaires out of 148 were returned from the regular group, and nine out of the ten were returned from the industrialists represented in the pilot or jurymen group. Fifteen companies returned questionnaires with additional letters of explanation or attached copies of evaluative experiments which included their research techniques. This combined return rate of 74.7 per cent compares very favorably with other questionnaire studies sent to similar people in business organizations (1, 5, 6, 18, 19).

Distribution of Responses

As mentioned earlier in this chapter, the mailing list was structured and refined to include only the very large companies. Table 1 indicates the number of responses from the selected industrial groups.

Table 1
Distribution of Responses by Industry Groups

Industry Group	Number of Responses	Per Cent of Total
Aircraft and missiles	6	5.1%
Automotive	13	11.0
Chemicals, plastics, drugs	15	12.7
Electrical and electronics	18	15.2
Metal and steel manufacture	17	14.4
Paper	6	5.1
Petroleum	14	11.9
Public Utility	4	3.4
Rubber	2	1.7
Textiles	2	1.7
General manufacturing	21	17.8
Total	118	100.0%

An endeavor was made to prevent the respondents from generalizing their answers to a larger population than represented. The person answering was asked to list the number of employees for the chosen representation of his answers. Table 2 enumerates the size of industry by employees and the organizational representation. Even though the largest firms (by sales) were contacted, the great majority of representation is from firms or parts of firms with 25,000 or less employees, and 41.5 per cent of the respondents represent organizations or parts of organizations of less than 10,000 employees.

Table 2
Distribution of Responses by Size of Company

Number of Employees	Response Generally Representative of:			No. of Responses by Size	% of Total
	Single Plant, Non-Affiliate of a Corp.	Div., Part of a Corp.	Corp. as a Whole		
Less than 10,000	7	21	21	49	41.5%
10,000 - 25,000		12	27	39	33.0
25,000 - 50,000		2	12	14	11.9
50,000 - 100,000			9	9	7.7
100,000 - 200,000			4	4	3.4
200,000 and over			3	3	2.5
Total	7	35	76	118	100.0%

Nature of Management Training Activities in the Selected Companies

Although the primary concern of the survey was to secure information concerning the practice of evaluation, it is useful to note the nature of the management training programs and the relationship, if any, to evaluation. A question was included in the survey which requested each company to indicate, if possible, the approximate time it was engaged in each of the designated levels of management training.

Table 3 gives a summary picture of the extent of the training at the various levels of management in the

Table 3

**Average Per Cent* of Time Management Training Departments
Engage in Various Levels of Training**

Level of Training	Per Cent of Time
Pre-supervisory training	10.0%
Foreman or other 1st level	40.2
Middle management training	31.3
Top management training	8.6
Other	9.9
Total	100.0%

* Based on survey question No. 3.

responding companies. It could be expected that the majority of time would be spent in foreman or other first level training and also at the middle management level. Naturally supervision is more numerous at these levels. Also, there would be less training at the pre-supervisory level and at the top management level, because there are fewer persons in preparation for supervision and in top management in proportion to the central two levels. Other training, 9.9 per cent, includes incidental programs the management training departments are called upon to give, e.g., special courses for engineers, technical people and secretarial programs.

Individual analysis of questions No. 3 and No. 14 on the returned questionnaires gave no support to the thought that firms heavily engaged in, for example, foreman or other first level training spend more effort in

evaluation of these programs than those heavily engaged in middle management training. Evaluation efforts were somewhat in proportion to the training at the other levels also.

Tables 4, 5 and 6 record the company activity with respect to the writing and development of training programs, the people or organizations conducting these programs and the location of the management courses or programs.

Table 4

Writing and Development of Management Training Programs

Written or Developed by	No. of Times Mentioned	Per Cent of Total Mentions
Outside consultants	39	21.0%
College or university people	39	21.0
Own staff	95	51.0
Other	13	7.0
Total	186	100.0%

Table 5

Instruction of Management Training Programs

Conducted by	No. of Times Mentioned	Per Cent of Total Mentions
Outside consultants	35	16.9%
College or university people	51	24.7
Own staff	92	44.4
Other	29	14.0
Total	207	100.0%

Table 6
Location of Management Training Programs

Conducted at	No. of Times Mentioned	Per Cent of Total Mentions
A college or university	48	23.0%
American Management Association	47	22.5
Own plant or within company	97	46.4
Other	17	8.1
Total	209	100.0%

It is shown that a surprisingly large percentage of companies mention that a portion of their management training is either written or developed by outsiders, conducted by outsiders and done outside the plant or company. The other categories showed a number of the training programs written or developed by people from special fields or functions, sometimes supervisory or technical personnel outside the training department, yet within the company.

These same people sometimes conduct the programs. Additional mentions were vendors and programs conducted by local management clubs. Management club sites, local hotels, resort type or special conference sites owned or rented, in addition to professional society and other training organization facilities, were mentioned as other places where management training programs are conducted.

Because of the limitations in wording of questions 4, 5 and 6, it was not possible to perform an overall comparison of programs developed or conducted by outsiders, or programs given outside the company, and the amount of evaluation in relation to these factors. It was found only that most companies relied on a number of sources in programing their training. Individual analysis of the questionnaires, however, seemed to indicate that the responding industries do not spend more effort, in terms of time or money, in evaluating programs developed or conducted by outsiders or in evaluating programs given outside the company as compared to the work done by their own staff.

Industry Groups - Time and Budget Spent on Evaluation

The type and size of companies reporting and the nature of their management training activities is useful for a preliminary understanding of the selected companies. But a more primary concern of the survey was to ascertain the present effort put forth by these companies toward the evaluation of management training. It was believed this evaluative effort could be partially determined by asking (a) a question pertaining to the per cent of time and (b) a question concerning the per cent of budget spent on evaluation in the management training department of each

contacted company. While these questions were closely allied and one would expect the response to be somewhat related, it was hoped that together the questions would secure more complete data. Table 7, then, points out the effort on evaluation in terms of training department time by the industry grouping.

Table 7
Industry Group and Per Cent of Time
Spent on Evaluation

Industry Group	None	Less Than 1%	1-5%	6-10%	Over 10%
Aircraft and missiles	1	1	1	1	
Automotive		2	5	2	
Chemicals, plastics, drugs		2	10		
Electrical and electronics		4	10	1	1
Metal and steel manufacture		3	5	4	1
Paper			4	1	
Petroleum		4	4	2	
Public Utility			3	1	
Rubber			1	1	
Textiles			2		
General manufacturing		2	12	3	1
Total (95)*	1	18	57	16	3

* Number responding to the time spent on evaluation question, No. 7.

From the data in Table 7, it appears that most companies spend some time, if even less than one per cent, on evaluation. Slightly more than half, or fifty-seven out of the ninety-five companies responding to this question,

spend approximately 1-5 per cent of the management training department's time on evaluation of formal management education and development programs.

Little or no relationship, however, appears to exist between the type of industry and the amount of time spent on training evaluation. The only exception might be the metal and steel manufacturing group where four out of the thirteen companies spend 6-10 per cent, and one company in this group spends over ten per cent of its time on evaluation. But there is no readily apparent reason for this one possible exception.

Table 8 details the other related question concerning the per cent of the training department's budget spent on evaluation of its activities.

Table 8

Industry Group and Per Cent of Budget Spent on Evaluation

Industry Group	None	Less Than 1%	1-5%	6-10%	Over 10%
Aircraft and missiles	1	2	1		
Automotive	1	4	2		
Chemicals, plastics, drugs		7	5		
Electrical and electronics		7	8		1
Metal and steel manufacture	1	7	5	1	
Paper			5		
Petroleum		7	2		
Public Utility	1	1	1	1	
Rubber			1	1	
Textiles	1	1			
General manufacturing	1	6	9	1	1
Total (93)*	6	42	39	4	2

* Number responding to the budget spent on evaluation question, No. 8.

In this case the majority do indicate they spent a part of their budget, how ever small, on evaluation. Nearly half indicate that it is less than one per cent. In the matter of the evaluation budget, there seems no relationship whatsoever between proportion of budget spent and a particular industry group. One aircraft and missile manufacturer justified their one per cent or less on evaluation in their budget by saying that most evaluation was useless in their opinion and "performance of people in present jobs" and "availability of people for promotion" were their main tools of evaluation.

One of the questionnaire responses might be cited which reveals the dollars that can be spent on evaluation, even though a small part of the management training budget. A large electrical and electronics firm replied that they currently spend \$40,000,000 yearly on education and training and indicated they spend over ten per cent of their budget on evaluation. Therefore, in this instance, a conservative estimate would be about \$400,000 devoted to evaluation activities.

Size of Staff - Time and Budget Spent on Evaluation

In Tables 9 and 10, the time spent on evaluation and the budget spent on evaluation questions are compared with

the size of training staff. The total companies in each per cent column of Tables 9 and 10 would necessarily be the same as in the two previous tables.

Table 9

Training Staff and Per Cent of Time Spent on Evaluation

Size of Training Staff	None	Less Than 1%	1-5%	6-10%	Over 10%	Total by Size
None						
1-5 people	1	17	40	8	2	68
6-10		1	10	3		14
11-20			3	1		4
21-30			2			2
Over 30			2	4	1	7
Total by Per Cent	1	18	57	16	3	95

It is readily evident in Table 9 that the majority (sixty-eight) of the firms responding in the survey have one to five people on their training staff. Forty or nearly half of all companies represented fall into the 1-5 per cent of time spent on evaluation with 1-5 people on their respective staffs.

There appears to be a tendency of increased evaluation effort, insofar as time spent, as the size of staff grows. Nearly all firms with over five training people spend at least one per cent of the department's time on evaluation, and there is a larger proportion from each

size grouping in the six per cent or over categories as the size of the staff increases.

Additionally, the data revealed in Table 10 picture a tendency for the larger training staffs to spend a greater proportion of their budget for evaluation when compared with the smaller staffs. About two-thirds of the companies which have six people or over on the training staff spend one per cent or more of the budget on evaluation. Conversely, more than half the companies which have five or less on the training staff say they spend less than one per cent of their budget on evaluation. Six companies in this group spend none of their budget on evaluation.

Table 10

Training Staff and Per Cent of Budget Spent on Evaluation

Size of Training Staff	None	Less Than 1%	1-5%	6-10%	Over 10%
None					
1-5 people	6	34	28	1	1
6-10		5	6	1	
11-20		1	3		
21-30		1	1		
Over 30		1	1	2	1
Total by Per Cent	6	42	39	4	2

Years of Operation - Time and Budget Spent on Evaluation

In still another attempt to reveal some of the factors influencing the use of evaluation, it was thought that perhaps experience or years of operation of the management training department may have some bearing upon the evaluative effort as revealed by the time and budget questions. As Tables 11 and 12 show, there appears to be a relationship between years of operation and time or money spent on evaluation of training.

Table 11
Years of Operation and Per Cent of
Time Spent on Evaluation

Number of Years	None	Less Than 1%	1-5%	6-10%	Over 10%	Total by Years
Less than 1 year		1				1
1-5 years	1	4	13	2		20
6-10		7	25	4	1	37
11-15		3	9	6	1	19
16-20		2	5	2		9
Over 20 years		1	5	2	1	9
Total by Per Cent	1	18	57	16	3	95

Twelve of the nineteen training departments which spend six per cent or over of their time on evaluation have been in training over ten years.

Table 12, which follows, shows that five of the six training departments which spend six per cent or over of their budget on evaluation have been in training over ten years.

Table 12

Years of Operation and Per Cent of
Budget Spent on Evaluation

Number of Years	None	Less Than 1%	1-5%	6-10%	Over 10%
Less than 1 year					
1-5 years	1	11	8		
6-10	4	14	18		1
11-15	1	8	9	2	
16-20		5	2	1	
Over 20 years		4	2	1	1
Total	6	42	39	4	2

Top Management Stress on Evaluation-Time and
Budget Spent on Evaluation

In this final set of tables the effort, in terms of time and budget spent on evaluation, is compared with the extent top management stresses evaluation of management training programs. As Table 13 discloses, there does seem to be a tendency to spend more time on evaluation as top management emphasizes evaluation and results of training programs.

It should be noted that about two-thirds of the respondents report that their top management stresses

Table 13

Top Management Stress on Evaluation and Per Cent
of Time Spent on Evaluation

Top Management Stresses Evaluation	None	Less Than 1%	1-5%	6-10%	Over 10%	Total by Extent
To no extent	1	3	1	1		6
To little extent		7	15	3		25
To some extent		7	37	10		54
To a great extent		1	4	2	3	10
Total by Per Cent	1	18	57	16	3	95

evaluation to some extent or to a great extent. The other one-third say that none or little stress is placed on evaluation of their programs by top management. Fifteen out of the nineteen which spend six per cent or over time on evaluation have a top management which emphasizes evaluation to some extent or to a great extent, and the three companies which spend over ten per cent of their training department's time on evaluation all have evaluation stressed to a great extent by their top management.

In Table 14 there is less tendency to spend money on evaluation in relationship to the stress placed on evaluation by top management. But there does, nevertheless, appear some relationship between budget and the stress placed on evaluation by the companies in general. The six training departments which spend six per cent or over of their budget on evaluation have top managements

which place importance on evaluation either to some extent or to a great extent. The two training departments which spend over ten per cent of their budget on evaluation point out their top management stresses evaluation to a great extent.

Table 14

Top Management Stress on Evaluation and Per Cent
of Budget Spent on Evaluation

Top Management Stresses Evaluation	None	Less Than 1%	1-5%	6-10%	Over 10%
To no extent	2	2	2		
To little extent	2	15	8		
To some extent	2	24	24	2	
To a great extent		1	5	2	2
Total by Per Cent	6	42	39	4	2

Company Plans for Future
Evaluation Effort

No studies were located in the review of literature which attempted to determine specifically the level of management training evaluation effort in time or budget. The data from the previous tables do, however, give some indication of current effort in training evaluation. In brief review:

1. Slightly over half the companies spend 1-5 per cent of their time on evaluation of their management training courses or programs. About

one-fifth say they spend less than one per cent and another one-fifth indicate they spend 6-10 per cent of their time on evaluation.

2. Nearly all companies, with a few exceptions, reveal that they spend five per cent or less of their budget on evaluation of their programs.

Since no studies could be found which previously investigated the evaluation effort in management training, it is not possible to conclude whether the training profession is devoting more effort to evaluation than in the past. It can only be surmised that as the training profession has grown over the years, more evaluation theory and technique have been developed and used.

The survey, however, endeavored to ascertain if training people were satisfied with their present effort and if in the future they planned to give greater importance to and spend more time on the evaluation of their training activities. Table 15 presents their answers to this question.

Table 15

Future Effort and Time to be Spent on Evaluation

Future Effort and Time	Number of Mentions	Per Cent of Total Mentions
Less	2	1.9%
About the same	46	43.0
More	44	41.1
A great deal more	15	14.0
Total	107	100.0%

From the data collected, 41.1 per cent indicate that they are going to spend more time or give greater effort to evaluation activities and fourteen per cent say they will spend a great deal more time. Thus 55.1 per cent reveal that they are going to spend more or a great deal more time on evaluation. Forty-three per cent say they are going to spend about the same amount of time on evaluation. From the companies responding, then, it appears that at least a static position will be maintained and perhaps there will be even a slight increase in evaluative effort in the future.

It is noteworthy that thirty of the fifty-nine companies who said they are going to do more or a great deal more in evaluation are already spending 1-5 per cent of their time on evaluation. Ten of the fifty-nine are devoting 6-10 per cent of their time, and another three are already spending over ten per cent of their time on evaluation. So those who are spending less than the median time on evaluation are not necessarily those which will exert greater effort and spend time on evaluation in the future. Many of those companies devoting the greater effort in time and budget to evaluation already will actually increase their evaluation activities in the future.

Another relationship found was that twelve of the fifteen respondents who said they were going to do a great deal more in the future with evaluation also had their top

management stressing evaluation to some extent or to a great extent. It is quite possible then, that top management stress upon evaluation does result in somewhat greater intentions of future effort and time to be spent on evaluation of management training activities.

Deterrents to Effective Evaluation

In view of the current effort that is being put forth in evaluation of management education and development programs, and in light of future plans to have perhaps a slight increase in this area of training activity, it is interesting to note the respondents' answers to what they believe is generally the greatest deterrent to effective evaluation of management training in their company. Each respondent was requested to check what he thought in his experience was the one greatest deterrent. Their answers are recorded in Table 16. Since several were unable to choose just one item, their two responses were then included. This would not, however, appreciably change the relative relationship of the data in the table.

The data seem to show that by far the major deterrent to effective evaluation in the opinion of the respondents is that evaluation research techniques are difficult to apply in productive or operating situations.

Table 16

Greatest Deterrent to Effective Evaluation
of Management Training

Greatest Deterrent to Effective Evaluation	No. of Mentions	Per Cent of Total Mentions
Lack of time	21	16.5%
Lack of finances	4	3.0
Lack of interest	8	6.3
Lack of knowledge of evaluation research techniques	14	11.2
Evaluation research techniques difficult to apply in productive or operating situations	53	41.7
Top management does not stress evaluation of management training	10	7.9
Top management not interested in findings when evaluation performed	2	1.6
Other	15	11.8
Total	127	100.0%

All other deterrents fall behind in importance to this deterrent as indicated by the training people included in this survey.

Looking at the data in a reverse way, it seems that generally there is interest in evaluation; there are finances and time; there is knowledge of evaluation research techniques, at least in the eyes of the respondents; top management stresses evaluation and is interested in the

findings when evaluation is performed. None of these appear to be outstanding deterrents when compared with the difficulty of applying evaluation research techniques to productive or operating situations. The two companies, a metal firm and a petroleum company, which checked "top management not interested in findings when evaluation performed," also indicated top management did not stress evaluation but that they were going to give more effort to evaluation in the future.

This question on deterrents to evaluation evoked more written comment than any other in the survey. One person listed as a deterrent to effective evaluation the lack of demonstrable value of many of the supposed techniques of evaluation. Several others went on to indicate their belief that there were few techniques which can accurately measure the non-tangible nature of the results of a management training program. Still others said it was difficult to isolate the effects of training in a total organizational picture. Another maintained that variables which are difficult to control make scientifically valid evaluation impossible. Most of these comments, however, were from companies that indicated they did perform some evaluation even with these inadequacies.

Two similar comments came from a public utility and a general manufacturing firm listed as deterrents to effective evaluation in their companies. Both comments

ring with a seeming futility of evaluation and no evaluation attempts were reported.

We have read and studied almost everything available on the subject, and techniques even closely applicable are not good enough to justify time and effort.

We simply do not know of any technique whereby we can find an accurate evaluation at a reasonable cost. So, at least for the present, our evaluation is based pretty much on 'seat of the pants' judgment.

A final comment on deterrents to evaluation came from a respondent who said,

Too many people in personnel and training sections are afraid of what an effective evaluation would show.

Focus of Evaluation

At this point in the building of the questionnaire it became necessary to strike a compromise. There would probably be great amounts of data that possibly could be collected on the varied attempts of evaluation on a myriad of management training courses or programs in the selected companies. But in the interest of time on the part of the respondent, the questionnaire was tailored to secure data on a particular program that was representative in each company. In this case, the respondents were asked to list one formal course or program which was evaluated and was the best example of their company's use of evaluation

methods. Then the respondents were asked in related questions to describe the focus of their evaluation and also the evaluative techniques used for this particular training program.

The result of such an inquiry somewhat precludes that the total picture reported of industry management training evaluation will be the best picture available. But while individual training departments may not always focus their evaluation so broadly or utilize such elaborate or extensive evaluative techniques, the data reveal what has been done or perhaps could be done again. Thus the data seem indicative of the currently available and usable evaluative techniques.

The complete list of programs or courses which were referred to by the companies as their best example of the use of evaluation methods is included in Appendix VI. Generally three types of programs are most often mentioned: (a) courses having management in their title, (b) that of supervisor and (c) work simplification or methods improvement. Most of these programs were given at the foreman, first and/or middle management level, with no seeming concentration of evaluation of programs given in any one grouping.

It should be noted that the "human relations" type of course most often found evaluated in the review of literature, Chapter III, is only mentioned specifically three

times by company respondents, and this is not a major mention in light of the many other more frequently mentioned courses that were evaluated. "Human relations," however, could very well have been a sub-topic of several of the more general management courses listed.

Twenty-nine companies or about one-fourth stated they have no best or worthy example of their evaluation of a program. Since the questionnaire did not probe specifically as to the "why" in these cases, some of the reasons can only be surmised. Several did indicate that their top management did not stress evaluation and two mentioned the lack of adequate techniques. One said the cost of accurate evaluation was prohibitive. Several stated that since they had no formal management training courses or programs, they could perform no evaluation. But even though twenty-nine companies reported no best example of their evaluation, most indicated some time and budget spent on evaluation. So the conclusion must not be drawn that one-quarter of the companies do not perform evaluation, only that from the way the question was worded, one-quarter of the respondents deemed no evaluation worthy of reporting at this time.

With these varied types of management training programs given as best example of the company's evaluation, the next related question had to do with the focus of evaluation in each instance. Here the question was structured to include those focuses of evaluation as suggested

by Kirkpatrick (10:3, 11:21, 12:13, 13:28), Besco, Tiffin and King (3:18), Messer (16:36-37), Borosage (4:2-6) and Korb (14:99-104) as outlined in Chapter II on the theoretical aspects of evaluation.

In other words, if these focuses are deemed important by those who set forth the principles of effective evaluation, it should be revealing to see the focuses of evaluation as reported by the companies. It should be kept in mind that a respondent could check one or more statements of focus of evaluation, and nearly all industries indicated a multi-focus approach in their evaluation. Table 17 indicates the response under each of the items listed.

The highest number of mentions, the feeling of participants about the training program, tends to agree with Kirkpatrick's (10:4) thinking that reaction or feeling about a training program is most easy to measure, and nearly all training directors do it. Kirkpatrick (13:28) also believes that feeling, learning, behavior and results, the last four focuses of evaluation in Table 17, have an ascending order of difficulty. While the difficulty of evaluation may be greater in the latter focuses listed, it appears that there are still many attempts in these areas of evaluation as shown by the returns. It may be that industry practices more difficult evaluation than is indicated by the published articles in professional journals.

Table 17

Focus of Evaluation in Companies' Example
of Their Use of Evaluation Methods

Focus of Evaluation	No. of Mentions	Per Cent of Total Mentioned
ADMINISTRATIVE ARRANGEMENT under which the training program given	30	8.2%
GOALS AND OBJECTIVES of the training program	44	12.1
METHOD OF PRESENTATION of the training program (conference techniques, conference leaders, etc.)	50	13.7
PARTICIPANTS' PROGRESS during the training program	38	10.4
FEEELING OF PARTICIPANTS about the training program	62	17.0
LEARNING OF PARTICIPANTS as a result of the training program (certain management principles, supervisory knowledge, etc.)	55	15.1
BEHAVIOR OF PARTICIPANTS as a result of the training program (different actions back on the job resulting from the program)	45	12.3
RESULTS, EFFECT, IMPACT on the group, intergroup relationships or organization as a result of the training program	41	11.2
Total	365	100.0%

In theory, Borosage (4:2) states, "Evaluative considerations involve a variety of facets each providing evidence to determine the extent to which a training program

is meeting its goals. All of these must be considered rather than a fragmented approach." In practice, it appears from the data resulting in Table 17 that training people are generally doing a comprehensive job of evaluation and probing its various "facets" by a multi-focus approach. An analysis of individual company returns on this question seems to indicate small industries, in size of employment or training staff, or industries in the management training field only a few years, are as active in a multi-focus approach to evaluation as are the larger industries or those having management training over a longer period of time.

Methods and Systems of Evaluation

In Chapter II, the writings of a number of authors (3, 4, 10, 11, 12, 13, 14, 16) suggested a variety of methods for evaluative assessment. These methods were combined into a workable question and their use asked of the selected companies for this study. Here, also, the respondents were requested to check those methods of evaluation which were used in their best example of evaluation of a management training program. Attempts were made in the construction of the question to give the respondent recognizable methods of evaluation yet combining those methods which seemed related. Table 18 reveals the total number of responses per method of evaluation.

Table 18

Methods of Evaluation in Companies' Example
of Their Use of Evaluation

Method of Evaluation	No. of Responses	Per Cent of total Responses
Course material information tests:		
Before program	23	4.7%
During program	21	4.3
Directly after program	32	6.6
Sometime after program	7	1.4
Attendance at program	30	6.2
Amount of participation by participants	40	8.2
Interviews with, or questionnaires to:		
Participants	63	12.9
Participants' supervisors	34	7.0
Participants' employees	7	1.4
Participants' peers	4	.8
Check of users' attitude toward service or product rendered by participants' department	3	.6
Use of participant questionnaires on:		
Changed attitudes	18	3.7
Feelings about program	49	10.0
Benefits from program	45	9.2
Control and experimental groupings	10	2.0
Reports by outside observers	20	4.1
Direct observation of participants' actions on job after program	30	6.2
Organization attitude or communications surveys	7	1.4

Table 18--Continued

Method of Evaluation	No. of Responses	Per Cent of Total Responses
Use of records on absenteeism, material waste, turnover, grievances increased production, cost reduction, or safety in the participants' work group	17	3.5
Significant increases in "performance review" ratings of the participants by their supervisors	14	2.9
Others	14	2.9
Total	488	100.0%

Several possible observations can be drawn from the data. First of all, there appears a relationship between the high 12.9 per cent on interviews with, or questionnaires to participants and that of the use of questionnaires to ascertain the feelings about or benefits from a program, 10.0 and 9.2 per cent respectively.

Course material information tests seem well used in comparison to the other possible evaluation methods. A sizeable number use tests before, during and after their programs. A smaller percentage, however, test their trainees sometime after the program to determine lasting effects of their training. The method of testing sometime after the program may be most meaningful in terms of real results of a program. Nevertheless, as is emphasized by

Table 16, this may be a research technique which is difficult to apply in productive or operating situations in industry.

A check of users' attitude toward service or product rendered by the participant's department is perhaps a good measure of effectiveness of a program according to the principles set forth in Chapter II. On the other hand, the method is least used by the respondents. This, too, may be due to indications that as an evaluation technique, it is perhaps difficult to apply in an operating situation.

Control and experimental grouping, often found in the review of literature as part of an evaluation design, is one of the lesser used techniques by the bulk of practitioners responding in this study. The difficulty of use of this evaluative technique in productive situations, however, was generally recognized throughout the review of literature.

The methods of evaluation given under the "other" category included: promotions as a result of the training; discussions with instructors or conference leaders; one chemical company has set up a top management evaluation committee; and a metal firm gives actual on-the-job problems which incorporate the training material given during their management course. Several companies specifically mention results in terms of dollars saved as a method of evaluation of their programs. Two companies

stress what they term a "climate of acceptance" by top management, that is, through informal interviews or chance meetings with top management, feedback is given on the believed results of the training programs. One of the respondents says that in his situation, "Oral feedback from top management is of more value than statistical analysis." Another says, "Basically, I feel if the responsible management now requesting the program feels the needs he wanted met are met, the program was successful."

Now, to carry the analysis of evaluative methods a step further, an attempt was made to discover what systems of evaluation might be in use in the various companies. Table 19 was developed to ascertain which evaluative methods from Table 18 might be used singularly or in combination to assess the various focuses of evaluation as described in Table 17.

Any observations drawn from the data of Table 19 should be prefaced by two limitations. First, many of the respondent companies indicated a multi-focus approach to evaluation and also gave a sizeable number of evaluation methods to assess the focuses of their evaluation. It was not possible, in all cases, to match focus with method or determine the system used. In these instances only the determinable data were included in the table. Secondly, the data of Table 19 give only a summary picture. The data

Table 19

Systems of Evaluation

Method of Evaluation	Focus of Evaluation							
	Admin. Arrangement	Goals and Objectives	Method of Presentation	Participants' Progress	Feeling of Participants	Learning of Participants	Behavior of Participants	Results, Effect, Impact
Course material information tests:								
Before program				5		15		
During program				18		28		
Directly after program					7	6		
Sometime after program								
Attendance at program			20					
Amount of participation by participants			15	2	14			
Interviews with, or questionnaires to:								
Participants			11	3	10	15	5	4
Participants' supervisors								
Participants' employees	3	4				9	7	3
Participants' peers							4	1
Check of users' attitude toward service or product rendered by participants' department							2	1
							1	1

Table 19--Continued

[illegible]

Table 19--Continued

Method of Evaluation	Focus of Evaluation							Results, Effect, Impact
	Admin. Arrangement	Goals and Objectives	Method of Presentation	Participants' Progress	Feeling of Participants	Learning of Participants	Behavior of Participants	
Significant increase in "performance review" ratings of the participants by their supervisors							10	

take on greater meaning in light of some of the individual questionnaire returns and attached letters of explanation. With this preface the following observations can be made from Table 19, from the questionnaires and related information supplied by several of the companies.

It is apparent from Table 19 that course material information tests are the most useful, in the eyes of the respondents, to measure the participants' progress during the training program, and to measure the learning of participants on a before, after and sometime after the program basis. The learning of participants as a result of the training program is also frequently evaluated by means of interviews or questionnaires to the participants, but less to the participants' supervisor--a method which may have more meaning than its use would seem to indicate.

It became evident that when evaluation of learning was the objective of the evaluation, frequently the program title indicated the course was more concerned with principles than being philosophical. Also, most of the attempts to use control and experimental groupings apparently are performed when the evaluation involves the learning of participants.

There seems to be reliance upon the attendance at a program, the amount of participation, and interviews or questionnaires as evaluative techniques when evaluating the method of presentation. On the other hand, an

evaluation of the administrative arrangement or the goals and objectives of a training program appears less attempted, at least through the formal evaluation methods as listed. The companies reported that evaluation in these areas is more often done by informal means than the formal ones as specified in the survey-questionnaire.

Insofar as the feeling of participants about a program, there is some indication that a number of companies believe that participation by the conferees is at least one expression of this. Of course the high figure in Table 19 is the thirty companies which used a questionnaire to determine feelings about the program. This is a relatively inexpensive, easy to administer measurement with limited, yet valuable, information according to Kirkpatrick (10).

To ascertain the behavior of participants or the results and effect on the organization, (both focuses may be closely related), a variety of methods have been used by the respondent companies. According to Kirkpatrick (12, 13), these are the more difficult areas to evaluate; however, there were several reported attempts with methods of potential validity. The observation of participants' action on the job after the program, organizational attitude surveys, the use of department personnel or production statistics and the use of "performance review" ratings were mentioned by a few of the companies as brought out in Table 19.

Probably the most elaborate example of an evaluation program measuring the results or effect upon the organization was turned in by a large, but decentralized chemical company. In this case the plant manager at one of their locations, with about 400 men in his management group, set forth seven organization goals for improved operations. It was determined that training in problem solving and communications would help reach their goals. Eight line people were selected to carry out the training as developed by the plant manager, his staff and the education staff.

Briefly these were some of the goals and reported results. The evaluation method was simple personnel and production statistics.

1. Reduced lost time injuries--accident frequency rate reduced from 1.7 to 0 in four years. Minor injuries reduced in the same period from 1,200 to 485.
2. Improved quality of product--rejects reduced by twenty-seven per cent.
3. Improved cost performance--operating costs down ten per cent.

It was made evident by the respondent that the training, while perhaps not entirely responsible for all of the improvement in operations, at least played a major role helping the organization to reach its goals.

Several other firms reported various statistics as a technique of evaluation for impact upon the organization. Five companies that held a methods improvement program used

their records of dollars saved as a result of improvements as the basis for their evaluation. An unusual statistic for evaluation was used by a petroleum company. After a course in "discussion leading" they actually cut down the number of plant meetings.

A metal and steel manufacturing firm structured, with the participants' supervisors, on-the-job problems to discover the behavioral change and increased learning resulting from a "management principles" course. These problems included the principles of the conference session which could be applied directly under the eyes of the supervisor. A furniture manufacturing firm performed a similar on-the-job evaluation using the principles of a quality control training program as applied to day-to-day operational quality problems.

Another petroleum firm put on a course entitled "counseling" for their first through middle management levels. Their evaluation involved one focus--that of behavior of participants as a result of the training program. Their basic evaluation technique was indication of any increases in "performance review ratings." Their choice of supporting techniques, however, indicated substantial effort and thought. They not only used before and after ratings but control and experimental groupings as well to help validate any changes that might result from the training program.

A number of companies returned examples of their questionnaires. One electrical and electronics firm exhibited a questionnaire for assessing progress during a training program. Most of the questionnaires returned as evaluation examples, however, had roughly three parts or levels:

1. Questions about the method of presentation
2. Questions concerned with the feeling of participants about the training program, e.g., questions regarding their preference of parts of a program
3. Questions about change in behavior resulting from the program

Although the questions in the third category are the opinions of the participants and perhaps biased, they are still revealing to the evaluator. In the eyes of the companies these questions are better than no evaluation at all. The same electrical and electronics firm questioned, "Has this program helped you do a better job in your present position? If so, how?" A chemical plant used, "Has the program helped you in carrying out your present or future job duties? In what way?" A utility asked, "Of the following subjects, how effectively have you been able to apply them to your work?" and "Of the following subjects, to what degree has each been of assistance to you in dealing with your fellow employees?"

Finally, Table 20 is the last table of this chapter and presents a matter directly related to the evaluative method and system. It will be recalled from Chapter II

that Belman and Remmers (2:31-32) suggest that provision for evaluation should be made during the planning stages of training programs. They cautioned that evaluation should not be thought of as an appendage at the end of a program. The question asked by the present researcher sought to gain an indication of industry practice in this matter.

Table 20
Planning for Evaluation

Planning and Evaluation Performed	No. of Mentions	Per Cent of Total Mentions
Before a program starts	55	26.8%
During a program	49	23.9
Directly after the program	55	26.8
Sometime after the program	44	21.5
Other	2	1.0
Total	205	100.0%

Since there were 118 respondents to the survey, the data suggest that about half the practitioners are aware that effective evaluation is a continuous process. These companies indicate they do plan for and perform evaluation of some focus and with some method regularly before, during, directly after and some time after their management training programs. The two checking the other category mentioned they used a once-a-year, overall method of evaluation.

Summary of Findings

1. A questionnaire survey was sent to 158 companies to ascertain the practice of evaluation in management education and development programs. One hundred eighteen or 74.7 per cent of the questionnaires were returned. The survey probably is representative of the major evaluation activities in management training in large United States companies.
2. The 118 firms which responded to this survey spend the majority of their time (71.5 per cent) engaged in foreman or other first and middle level management training programs. An overall picture reveals that much of the management training at these companies is done by their own staff. The rest of the management training is developed and programed by outside consultants or college and university people and frequently is conducted away from the plant or outside the company.

About two-thirds of the companies responding have 1-5 people on their management training staff. Years of operation vary greatly. Approximately one-fifth have operated a management training department for 1-5 years, two-fifths of the companies indicate a management training department for 6-10 years, another one-fifth for 11-15 years, one-tenth for 16-20 years and one-tenth have been in management training over twenty years.

3. Slightly over half the training departments spend 1-5 per cent of their time on evaluation of their management training courses or programs. About one-fifth indicate they spend less than one per cent and another one-fifth indicate they spend 6-10 per cent of their time on evaluation. Nearly all companies responding, with a few exceptions, reveal that they spend five per cent or less of their budget on evaluation of their management training programs.
4. About two-thirds of the respondents report their top management stresses evaluation to some extent or to a great extent. The other one-third report little or no stress by top management on evaluation of their programs.
5. Generally in the companies responding, there appears little or no relationship between the effort, in terms of time and budget spent on evaluation of management training activities, and:
 - a. the level of management training;
 - b. who writes or develops the programs;
 - c. who leads or conducts the training;
 - d. where the training program is given or
 - e. the type of company (major product).

On the other hand, there seems to be a tendency for evaluation effort, in terms of time and budget, to be greater in companies with the larger management training staffs (over five persons) and where the training

departments have been in operation longer (over ten years). The survey also reveals a tendency for evaluation effort to be greater in companies where top management stresses or places importance on the evaluation of management training programs as compared to those where top management shows little or no interest in evaluation of management training.

6. From the companies responding, indications are that at least a static position will be maintained and perhaps a slight increase in evaluative effort will be made in the future. Many of the companies reporting the higher amounts of time and budget for evaluation plan also to increase their evaluation activities in the future. Furthermore, top management stress upon evaluation appears to result in greater intentions of future effort and time to be spent on evaluation.
7. By far the major deterrent to effective evaluation in the opinion of the companies participating in the survey is that evaluation research techniques are difficult to apply in productive or operating situations. Generally it seems there is interest in evaluation, finances and time are available, there is knowledge of evaluation research techniques in the opinion of the respondents, and top management stresses evaluation and is interested in the findings when evaluation is performed.

8. The most frequent focus of evaluation, the questionnaires revealed, is to ascertain the feeling of participants about a training program, that is, the participants' liking or impression of the program. Most companies indicate, however, that they are doing a comprehensive job of evaluation by probing its various "facets" by a multi-focus approach.

9. The survey disclosed that the companies use a variety of methods for evaluation assessment. Frequent use is made of interviews with, or questionnaires sent to participants in a training program which attempt to ascertain their feelings about or believed benefits from a course or program. Course material information tests before, during and after programs are frequently used also. A small percentage, however, test their trainees some time after the program.

Attendance at programs, amount of participation, interviews with, or questionnaires sent to participants' supervisors and direct observation of participants' actions on the job after the program are frequently used methods of evaluation also. No companies offered revolutionary evaluative ideas or research methods other than variations of that found in the theoretical aspects of evaluation chapter and the review of the literature in Chapters II and III.

10. Lastly, the findings of the survey indicate that about half the management training practitioners in the industries reporting are aware that effective evaluation is a continuous process, as the writings of the authorities in the theoretical chapters suggest it should be. These companies report that they do plan for and perform evaluation of some focus and with some method regularly before, during, directly after and some time after their management education and development programs.

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CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This study reported the theoretical aspects and the practices of evaluation actually used in formal management education and development programs in industry. In Chapter I the need and importance of the study were outlined as derived from several sources. Selected theoretical aspects of evaluation were synthesized from the literature of education, psychology and business in Chapter II. The chapter began with a brief history of evaluation and was followed by the purposes and principles of evaluation, the steps in an evaluative process and the methods of evaluation as suggested in the literature.

In Chapter III, the studies or experiments in the literature discussing the evaluation of management training were reviewed. Chapter IV covered the questionnaire-survey's findings of evaluative practices in management education and development programs in 118 selected United States companies. The levels of management training activity, size of staff, years of operation and the amount of effort, in terms of time and budget spent on evaluation, were given. Also revealed in Chapter IV was the degree of stress which top management places upon evaluation and a number of other factors which were revealed as hindering or helping the implementation of evaluation. Future effort

to be devoted to evaluation was determined along with the greatest deterrents to evaluation in these industries. Lastly, the chapter noted the focuses of evaluation in the selected companies along with the methods used in their evaluations.

A summary at the end of each of the chapters highlighted the major points and findings of the research. The main task of this chapter, then, is to cast these diverse findings into several major conclusions and recommendations which have been generated in a study of this purpose and scope.

Conclusions

1. Generally the authorities, in the literature of evaluation, agree that the basic purpose of evaluation should be to achieve effectiveness in education.
2. The following principles, or guide-lines, should be considered by the evaluator of industrial management training programs:
 - a. Evaluation usually offers the greatest potential benefit if it is conducted over a period of time and as a built-in part of the total training process.
 - b. Evaluation should be more concerned with the results of programs rather than effort expended in conducting the programs.
 - c. Programs with specific objectives can most easily be evaluated.

- d. Variables which may influence the results of evaluation should be isolated and taken into consideration.

3. Evaluation of management training programs should be performed in an orderly, yet flexible process. These steps are recommended:

- a. Define the problem to be studied or evaluated and formulate the objectives the education is to accomplish.
- b. Identify a measurable or test situation where changes may be noted.
- c. Apply the measure or evaluative method.
- d. Analyze and interpret the results.
- e. Improve or modify the management training program.

4. A comprehensive evaluation of a management training program is encouraged. Evaluation attempts in several of these areas will provide evidence upon which improvements or greater effectiveness of programs might be achieved:

- a. The method of presentation of the training program, e.g., evaluation of conference techniques, conference leaders
- b. The participants' progress during the training program
- c. The feeling of participants about the training program
- d. The learning of participants as a result of the training program, e.g., certain management principles, supervisory knowledge
- e. The behavior of participants as a result of the training program, e.g., different actions back on the job resulting from the program

- f. The results, effect or impact on the group, inter-group relationships or organization as a result of the training program

5. As indicated by the companies responding to the survey, (c) "The feeling of participants about the training program" is the focus of evaluation which is most often attempted by these companies; however, there were numerous other evaluative attempts with other focuses also indicated. It appears that industry is doing a somewhat comprehensive job of evaluation by frequently using a multi-focus approach. Small companies, in size or training staff, or companies in the training field only a few years, are as active in a multi-focus approach to evaluation as are the larger companies or those having management training over a longer period of time.
6. Management training practitioners in about half the companies reporting are aware that effective evaluation is a continuous process as the authorities in the earlier theoretical chapters suggest it should be. The companies report that they do plan for and perform evaluation of some focus and with some method before, during, directly after and some time after their management education and development programs.
7. In the experiments in the literature concerning the evaluation of management education and development programs, several evaluation methods appear workable with,

of course, the inherent limitations various situations may present. In most cases, the evaluator should seek to isolate all contaminating factors which may influence the result of using any of the following methods.

- a. Some form of test, designed to measure the course or content material to be imparted as a result of the program, given before, during, immediately after and some time after the program. (However, there is some indication in the reported studies on human relations programs that the self-rating type of test given directly after a program has serious inadequacies in determining increased managerial performance or effectiveness as a result of the training.)
- b. External organizational criteria, e.g., absenteeism, accidents, grievances, labor turnover, as a measure of improved organizational effectiveness as a result of the management training program
- c. Morale, organizational attitude or communications type of surveys to determine improvement in the participants' work groups
- d. "Comment" questionnaires of various designs after the program to ascertain the participants' like of or benefit from a program
- e. Group participation and/or the attendance at a series of conferences which are held on a voluntary basis
- f. Systematic interviews with program participants and/or their supervisors on the merits of the program
- g. Systematic observation of the performance of the management person back on the job after the program
- h. Tests of various design and purpose given on a before and after basis, administered to control and experimental groupings
- i. A composite index of selected personnel statistics, with an index movement, that would correspond with the desired behavior change or improved performance of the managerial group as a result of their training

- j. Control and experimental groupings along with a series of related performance inquiry type questionnaires, one year after the program to the participants and/or their peers, those they supervised and the participants' supervisors
8. As revealed by the survey, questionnaires of various design and purpose are the most often used method of evaluation. Questionnaires designed to assess the feelings or like of a program and the benefits of a program are the type most frequently used. Most questionnaires are given to the participants or managers in the program. Somewhat less common is the questionnaire filled out by the managers' supervisors, and few questionnaires are used to question the managers' employees or the managers' peers.
9. Course material information tests are also frequently used on a before, during and directly after the program basis but rarely used some time after the program to determine the lasting effects, if any, of the training program.
10. Group participation and/or attendance at a voluntary series of conferences is often used as an evaluative measure.
11. Systematic observation of participants actions on the job after the program is also frequently used as an evaluative method by the companies represented in the survey.

12. A number of the other evaluation methods and research techniques expounded in the literature are infrequently used, as revealed by the survey. They are:
- a. Check of users' attitude toward service or product rendered by participants' departments
 - b. Control and experimental groupings
 - c. Morale, organizational attitude or communications surveys in the managers' work groups.
 - d. Use of records on absenteeism, accidents, grievances, labor turnover and the like in the participants' departments
13. No companies offered revolutionary evaluative ideas or research methods other than variations of those found in the literature.
14. Few published studies could be located which attempted to give an industry-wide picture of evaluation practices. None were comprehensive in the sense of covering adequately the methods or effort in the area of evaluation. But all seemed to be using inadequate data and publicizing that they found a general lack of effective evaluation of management training programs. On the contrary, this more comprehensive study, in terms of evaluation practices and effort, shows industry is engaged, at least to some extent, in effective evaluation activities and is somewhat cognizant of what effective evaluation includes.

15. Slightly over half of the training departments of the companies represented in the survey spend 1-5 per cent of their time on evaluation of their management training courses or programs. About one-fifth say they spend less than one per cent and another one fifth say they spend 6-10 per cent of their time on evaluation. Rarely does a training department spend more than ten per cent of its time on evaluation.
16. Nearly all companies responding spend five per cent or less of their budget on evaluation of their management training programs.
17. Indications are that at least a static position will be maintained and perhaps even a slight increase in evaluative effort will be made in the future. Many companies reporting the higher amounts of time and budget for evaluation plan also to increase their evaluation activities in the future.
18. Top management stress upon evaluation activities appears to result in greater intentions of future effort and time to be spent on evaluation.
19. About two-thirds of the respondents in the survey report their top management stresses evaluation to some extent or to a great extent. The other one-third say that there is no stress or little stress by top management on evaluation of their programs. Evaluation

effort, in terms of time and budget, appears to be greater in companies where top management stresses or places importance on the evaluation of management training programs, as compared to those where top management shows little or no interest in management training evaluation.

20. There is a tendency for evaluation effort, in terms of time and budget, to be greater in companies with the larger management training staffs, that is over five persons, and where the training department has been in operation longer, that is over ten years.
21. Generally in the companies responding there seems to be little or no relationship between the effort, in terms of time and budget spent on evaluation of management training activities, and:
 - a. the level of management training;
 - b. who writes or develops the programs;
 - c. who leads or conducts the programs;
 - d. where the training program is given or
 - e. the type of company (major product).
22. Lastly, it can be concluded that by far the major deterrent to effective evaluation in the opinion of the respondent companies is that evaluation research techniques are difficult to apply in productive or operating situations. There is also some indication

that the research techniques which are available are inadequate and are too likely to be influenced by variables and contaminating factors in an industrial situation. Generally there appears to be interest in evaluation, finances and time are available for evaluation, there is knowledge of the research techniques available, and top management stresses evaluation and is interested in the findings when evaluation is performed.

Recommendations

The author wishes to point out the distinction between the "Conclusions" just discussed and the "Recommendations" which are made in this section. The distinction is that the conclusions are derived exclusively from the data revealed by the research while the recommendations do not necessarily grow out of conclusive data. The recommendations, and in some cases implications, have as their genesis the revealed data but may also be influenced by the author's philosophy, observations and experience conducting industrial management education and development programs.

Recommendations Concerning Evaluative Methods

The frequency of usage of an evaluative method appears directly related to the difficulty of administering

that method in productive or operating situations. Tests and questionnaires of various designs and purposes, which were reported most frequently used, usually require less effort to prepare and administer in industrial situations. There is, however, some indication in the literature of the inadequacy of tests and questionnaires as a measure of program results, especially the self-rating type used directly after a program.

It seems, then, if the test or questionnaire method of evaluation is to be continued because of its relative ease of administration, greater attempts should be made to assure that the method measures adequately the program results. Several suggestions could be made in this direction:

- a. Strive for greater use of experimental and control groupings.
- b. Give the tests or questionnaires on a before and after basis, but most important some time after the program to ascertain any lasting results of the program.
- c. Questionnaires given to the participants' supervisors, the participants' employees or the participants' peers may reveal some interesting results.

Additionally, the evaluator should make greater attempts to isolate variables and contamination factors which may affect the result of his evaluation. Furthermore, if the evaluative technique is apt to be riddled with variables and contamination from outside factors that are not likely to be able to be controlled, then it would be best to

abandon that method rather than pursuing evaluation for the sake of the research exercise.

The evidence from the study does not reveal, nor was it the purpose of the study to determine, the most effective evaluative method. It does not seem possible to determine or recommend the one most effective method applicable in many situations. One program and situation may vary greatly from the next. Rather, it seems best to use that evaluative method which best assesses, with the least amount of bias, the results of a particular program in a particular situation. Moreover, several or a combination of methods, sometimes objective and sometimes subjective, should be used to evaluate in a multi-focus approach.

It is recalled that there were a number of people in the survey who voiced dissatisfaction with the present research and evaluation methods available. There does appear to be room for improvement in many of the techniques or at least in the sound application of some of them. Naturally, an ingenious new technique would be welcomed. On the other hand, it is wholesome that devices are being employed, however inaccurate, because rough evaluation may be better than none at all. Probably the steel rule was used before the micrometer and contributed to the development of the micrometer. In like manner, evaluation techniques may be borrowed, adapted and are often times refined into workable, more precise evaluation tools.

Beyond specific evaluation methods, a few companies revealed what might be termed a "climate of acceptance" on the part of top management. Perhaps this "climate of acceptance" could very well be cultivated through an involvement process. One chemical company indicated they instituted an evaluation committee of top management people. The committee in this case designed and implemented the evaluation devices with the help of the training department. This appears to be a very practical, yet effective, plan to get evaluation performed with the plus factor of built in involvement of higher management.

Recommendations If There Is to be Greater Effort in Evaluation

As shown by the survey, evaluation effort by management training departments in general is somewhat related to the stress top managements place upon evaluation activities. It seems, then, any indictment of training people concerning a lack of evaluation perhaps should also be an indictment of their top managements. Furthermore, if top managements want evaluation of their companies' management training activities, then by stressing more evaluation their training people will probably respond. Likewise, if top management is concerned with effectiveness in evaluation and demands it, the training departments will probably respond with effective evaluation.

This related implication might be ventured. Articles in journals and texts continue to be published giving accounts of evaluation experiments and describing evaluation research methods. As important as they are to increasing the training person's research background, the general status of evaluation and the amount of evaluation in industry will not significantly increase until top management requires greater activity in this area by its management training department staff.

Again recalling the relationship between evaluation effort, in terms of time and budget, and those industries having the larger management training staffs (over five people), top management apparently allows sufficient manpower to perform the evaluation in these cases. Therefore, if top management really desires effective evaluation, it is necessary to allow the manpower to perform the research. One, two or more people in a training department expected to devote the majority of their time to conducting management training conferences will, after having performed the attendant duties of a conference leader, have little time for effective evaluation research.

Top management, if it deems effective evaluation desirable with its management training activities, would be wise to assign one man, who has background in educational and psychological research, at least part-time to evaluation activities. The evaluation, in some instances, might also

be performed by someone on a nearby university staff. The research specialist, however, should be brought into the program at its inception in order not to handicap the performance of complete and effective evaluative research.

Recommendations on the Purpose of Evaluation

The political implications within an organization shadowing evaluation research should not be overlooked. Indicative of such a situation is a respondent who stated in the survey, "Too many people in personnel and training sections are afraid of what an effective evaluation would show." From the author's personal experience, this statement would fit more situations and programs than would be readily admitted. Beyond the major indicated deterrent to evaluation--that evaluation research techniques are difficult to apply in productive or operating situations--there is a withdrawn feeling on the part of training people that if effective evaluation is performed, the management training department may be researched out of a job.

On the other hand, if the basic purpose of evaluation is as it should be--to achieve effectiveness in education--and if this is communicated to all concerned, there should be no fear of what the evaluation reveals. Evaluation set up merely to justify the program's effectiveness or the continuance of the management training activity is treading dangerous ground. But most important, the evaluation in

such cases would have missed the basic purpose of evaluation--the achievement of effectiveness in education.

Recommendations for Further Study

Several attendant problems presented themselves, either during or as a result of this investigation, and in the author's thinking are worthy of further study. Certainly these are not the only problems confronting those concerned with evaluation. It is believed, though, any revealing facts or principles of action regarding these problems would be welcomed by students of evaluation as well as those who direct management education and development activities and those who perform the evaluation of the management training courses or programs.

1. Cost of Evaluation: The present study was concerned in this respect with the per cent of a training department's time and budget spent on evaluation as compared to a number of other factors. Little or no work has been done on the cost of evaluation, that is, are the research results really worth the effort and the dollars spent? Studies relative to the cost of one evaluation method as compared to another in a similar situation may prove useful. Some methods of evaluation may be very effective; however, the cost of application may make them prohibitive to use in certain situations.

2. **Establishment of Criteria for Evaluation:** Some work was noted in this area; but further research should be undertaken as to usable, practical criteria, i.e., plus or minus measurable factors in the manager's work group or the organization as a result of the training program. Also, successful means of eliminating contamination which affect the selected criteria should be determined. This is a very difficult area and research producing even a few guide lines would be helpful.
3. **Program Results in Terms of Dollars Saved:** In the eyes of many theorists and practitioners as well, the basic purpose of evaluation is to achieve effectiveness in education. Nevertheless, cost-conscious top management would probably be extremely interested in indications of dollars saved, costs reduced and other criteria which may be converted to a dollar figure. Few experiments were noted in this also very difficult area.
4. **Uses of Specific Evaluative Methods:** The present study reported a number of evaluative methods and some of their uses in different companies with various management education and development programs. Beyond this, extensive

research on a particular evaluative method, its limitations and possible applications in industrial management training situations may make more usable the present methods. A compilation of the findings in several of these evaluative methods areas would be highly desirable.

5. Collection of Usable Evaluation Devices: In the present study a partial attempt was made to secure forms, sheets, questionnaires and similar evaluation devices used successfully by companies. The response was negligible. Another study with its primary purpose the acquiring of such devices may provide a collection of helpful idea material for those about to embark on evaluation of their programs. While the results obtained in using such evaluation devices would not be transferable, the devices themselves might very well be revised and adapted for use in another evaluation project.

Careful studies with any of these problems or parts of these problems, even if they fail to solve all aspects of the problem, would undoubtedly lead to some valuable conclusions and guide-lines in the implementation of evaluation for management education and development programs.

APPENDICES

APPENDIX I

OVERALL OBJECTIVES OF SURVEY

- A. The survey will attempt to expose new or additional ideas, techniques, methods, explanations, reasons concerning evaluation of management training programs in industry that have not been uncovered in the literature and to see how data revealed compares with the literature.
1. The more that is known about evaluation in practice, the better industrial educators armed with theory can suggest, revise and use sound and practical evaluation procedures.
 2. The results will provide an up-to-date source of information on evaluation practices for those who plan and administer management training activities.
- B. The survey will attempt to reveal the status of management education and development evaluation activities in a major segment of U. S. industry.
1. This should throw light on existing conditions that may need change and improvement, that may otherwise go unnoticed.
 2. The results can be used for comparison with other studies, thus identifying trends and also providing a sound basis for action.
- C. The survey will be searching for the levels of evaluation, practices used, not used, factors and relationships that perhaps hinder or help the implementation of evaluation.
1. While simple statistical calculations may be necessary to arrive at partial bases for conclusions, the survey is more concerned with the "what," the "how's" and the "why's" of the evaluation in practice.
 2. Several authors suggest that the returns on mail questionnaires are inversely proportional to their length and intricacy. Also that the most effective questionnaire attempts to tackle one subject in a brief manner, with a minimum of effort by the respondent.

MAILINGS: Suggestions by you and others from this pilot survey will be incorporated into a revised instrument and sent to 158 major industries and utilities selected from the 1960 American Society of Training Directors' membership listing.

Do you believe there is a need for such a survey? Yes ____,
No ____. Comments: (pencil is O.K.)

Does it appear that the values or outcomes described might
be derived with the use of the questionnaire?
Yes ____, No ____. Comments:

Do you suggest any other values or outcomes? Other com-
ments:

APPENDIX II

LIST OF JURYMEN THAT WERE SENT QUESTIONNAIRE
AND OBJECTIVES OF SURVEY FOR APPRAISAL AND COMMENT

INDIVIDUAL	ORGANIZATION	LOCATION
Belman, Harry S.	Chairman and Professor Industrial Education Purdue University	LaFayette, Indiana
Bright, William E., Jr.	Manager, Employee Development & Training Pure Oil Company	Chicago, Illinois
Burr, Elbert W.	Manager, Personnel Dev. Monsanto Chemical Company	St. Louis, Missouri
Crissey, Dr. Orlo L.	Chairman, Personnel Evaluation Services General Motors Institute	Flint, Michigan
Duenweg, Louis	Director, Training and Communication Detroit Edison Company	Detroit, Michigan
Fleishman, Dr. Edwin A.	Professor, Industrial Administration & Psychology Yale University	New Haven, Connecticut
Form, Dr. William	Associate Director, Labor and Industrial Relations Center Michigan State University	East Lansing, Michigan
Goodacre, Dr. Daniel M.	Industrial Psychologist B. F. Goodrich Company	Akron, Ohio
Guerin, Quintin W.	Chief, Regional Training Branch, Internal Revenue Service	Chicago Illinois
King, Dr. Donald C.	Professor, Industrial Psychology Purdue University	LaFayette, Indiana
Kirkpatrick, Dr. Donald	Advanced Management Development Administrator International Mineral and Chemicals Corporation	Skokie, Illinois

INDIVIDUAL	ORGANIZATION	LOCATION
Lawshe, Dr. C. H.	Director, University Extension Purdue University	LaFayette, Indiana
Seashore, Dr. Stanley	Program Director Survey Research Center University of Michigan	Ann Arbor, Michigan
MacAndrews, Carl G.	Manager, Training Division E. I. duPont Company	Wilmington, Delaware
Marcus, Leonard	Director, Management Information Service American Management Assoc.	New York City
Pearson, Archie A.	Manager, Training Department Ford Motor Company	Detroit, Michigan
Sahrbeck, Charles, Jr.	Manager, Management Training General Motors Institute	Flint, Michigan
Sorensen, Olav	Personnel Development and Education Relations Service General Electric Company	Ossining, New York
Steinmetz, Cloyd S.	Director, Sales Training Reynolds Metals Company	Richmond, Virginia
Tiffin, Dr. Joseph	Professor, Industrial Psychology Purdue University	LaFayette Indiana
Whitlock, Dr. Gerald	Professor, College of Business Administration University of Tennessee	Knoxville, Tennessee
Wrightnour, William F.	Director of Management Development U. S. Rubber Company	New York City

APPENDIX III

SURVEY OF EVALUATION
OF SUPERVISORY, MANAGEMENT OR EXECUTIVE
TRAINING PROGRAMS

In order to play the game right -- so we're both talking about the same thing -- keep these ground rules in mind as you make your check marks:

- 1) We're primarily concerned in this questionnaire with your company's EVALUATION of formal management courses, conferences or programs. We are not concerned with the subject matter of these training activities.
- 2) We're talking about any level of MANAGEMENT training (supervisory, foremen, executive too) but not apprentice, sales, technical training, and the like.
- 3) By "EVALUATION" we mean any reasonable assessment of "To what extent did we accomplish what we tried to do?"

PART I - YOUR COMPANY AND MANAGEMENT TRAINING

- | | |
|---|---|
| <p>1. Size of full time <u>training staff</u> engaged in <u>management training</u>? (Consider two half-time people as one full-time, etc.)</p> <p> ☐ None
 ☐ 1-5 people
 ☐ 6-10
 ☐ 11-20
 ☐ 21-30
 ☐ Over 30 </p> | <p>4. <u>Management training programs written or developed by</u> (Check as many as necessary please)</p> <p> ☐ Outside consultants
 ☐ College or university people
 ☐ Own staff
 ☐ Other _____ </p> |
| <p>2. Number of <u>years management training department or an organized management training function</u> has been in operation?</p> <p> ☐ Less than 1 year
 ☐ 1-5 years
 ☐ 6-10
 ☐ 11-15
 ☐ 16-20
 ☐ Over 20 years </p> | <p>5. <u>Management training programs conducted by</u> (Check as many as necessary please)</p> <p> ☐ Outside consultants
 ☐ College or university people
 ☐ Own staff
 ☐ Other _____ </p> |
| <p>3. Indicate approximate percentage of <u>management training department's time</u> regularly engaged in</p> <p> ☐ % Pre-supervisory training
 ☐ % Foreman or other 1st level
 ☐ % Middle management training
 ☐ % Top management training
 ☐ % Other
 100% </p> | <p>6. <u>Management training programs conducted at</u> (Check as many as necessary please)</p> <p> ☐ A college or university
 ☐ American Management Assoc.
 ☐ Own plant or within company
 ☐ Other _____ </p> |

PART II - EVALUATION AND YOUR COMPANY

7. Approximate percentage of training department's time spent on evaluation of management training courses or programs? (Rough estimate is O.K.)
 ___ None
 ___ Less than 1%
 ___ 1-5%
 ___ 6-10%
 ___ Over 10%
8. Approximate percentage of training department's budget spent on evaluation of management training courses or programs? (Rough estimate is O.K.)
 ___ None
 ___ Less than 1%
 ___ 1-5%
 ___ 6-10%
 ___ Over 10%
9. In the future, to what extent is your training department planning to give importance to and spend time on evaluation of management training activities?
 ___ Less
 ___ About the same
 ___ More
 ___ A great deal more
10. Does your company regularly plan for and perform management training evaluation? (Check as many as necessary please)
 ___ Before a program starts
 ___ During the program
 ___ Directly after the program
 ___ Sometime after the program
 ___ Other _____
11. To what extent does your top management stress or place importance on evaluation of management training programs? (Check one please)
 ___ To no extent
 ___ To little extent
 ___ To some extent
 ___ To a great extent
12. What would you say is generally the greatest deterrent to effective evaluation of management training in your company? (Check the one greatest please)
 ___ Lack of time
 ___ Lack of finances
 ___ Lack of interest
 ___ Lack of knowledge of evaluation research techniques
 ___ Evaluation research techniques difficult to apply in productive or operating situations
 ___ Top management does not stress evaluation of management training
 ___ Top management not interested in findings when evaluation performed
 ___ Other _____

PART III - PURPOSES AND METHODS OF YOUR EVALUATION

13. List the name of a management training course or program which was evaluated and is the best example of your company's use of evaluation methods. (If no evaluation was performed, write "none" and move on to PART IV please.)
14. This program (in No. 13) given to
 ___ Pre-supervisory level
 ___ Foremen or other 1st level
 ___ Middle management
 ___ Top management
 ___ Other _____

(Name or title of course or program evaluated)

15. What was the FOCUS or PURPOSE of your evaluation in this case? (No. 13) Did you attempt to find out something about (Check as many as necessary please.)

- ___ The ADMINISTRATIVE ARRANGEMENT under which this training program was given
 ___ The GOALS AND OBJECTIVES of the training program
 ___ The METHOD OF PRESENTATION of the training program (conference techniques, conference leaders, etc.)
 ___ The PARTICIPANTS' PROGRESS during the training program
 ___ The FEELING OF PARTICIPANTS about the training program
 ___ The LEARNING OF PARTICIPANTS as a result of the training program (certain management principles, supervisory knowledge, etc.)
 ___ The BEHAVIOR OF PARTICIPANTS as a result of the training program (different actions back on the job resulting from the program)
 ___ The RESULTS, EFFECT, IMPACT on the group, intergroup relationships or organization as a result of the training program.
 ___ Other _____

16. Your evaluation of this program (No. 13) was based on (Check as many as necessary please)

- | | |
|--|--|
| a. Course material information tests:
___ Before program
___ During program
___ Directly after program
___ Sometime after program | e. ___ Check of consumers' attitude toward service or product rendered by participants' department |
| b. ___ Attendance at program | f. Use of participant questionnaires on:
___ Changed attitudes
___ Feelings about program
___ Benefits from program |
| c. ___ Amount of participation by participants | g. ___ Control and experimental groupings |
| d. Interviews with, or questionnaires to:
___ Participants
___ Participants' supervisors
___ Participants' employees
___ Participants' peers | h. ___ Reports by outside observers |
| | i. ___ Direct observation of participants' actions on job after program |

(No. 16 continued)

- j. ☐ Organizational attitude or communications surveys
- k. ☐ Use of records on absenteeism, material waste, turnover, grievances, etc. in the participant's work group
- l. ☐ Significant increases in "performance review" ratings of the participants by their supervisors
- m. ☐ Others or remarks _____

PART IV - YOUR COMPANY AND YOU

17. Are your responses on this survey generally representative of (Check one please)
- ☐ Your single plant which is a non-affiliate of a corporation
- ☐ Your division which is part of a larger corporation
- ☐ Your corporation as a whole
- Which has: (No. of employees:)
- ☐ Less than 10,000 employees
- ☐ 10,000 - 25,000
- ☐ 25,000 - 50,000
- ☐ 50,000 - 100,000
- ☐ 100,000 - 200,000
- ☐ 200,000 and over
18. Major product or function of your company?
- ☐ Aircraft and missiles
- ☐ Automotive
- ☐ Chemicals, plastics, drugs
- ☐ Electrical and electronics
- ☐ Metals and steel manufacture
- ☐ Paper
- ☐ Petroleum
- ☐ Public Utility
- ☐ Rubber
- ☐ Textiles
- ☐ General manufacturing
- ☐ Other _____

OPTIONAL INFORMATION

I would like a summary copy of the results of this study. Yes ___, No ___.

Your Name _____ Title _____

Company _____

Address _____

City and State _____

Thank you very much for your interest, your time and cooperation. It is indeed appreciated! Please return your questionnaire in the addressed, stamped envelope which is enclosed for your convenience.

WE WOULD APPRECIATE ANY DUPLICATED COPIES OF YOUR EVALUATION EXPERIMENTS OR TECHNIQUES THAT YOU MAY HAVE AND WISH TO SHARE WITH US.

APPENDIX IV

MICHIGAN STATE UNIVERSITY EAST LANSING

COLLEGE OF EDUCATION

You are no doubt well aware of a much bandied-about topic in the management training field today -- that of the evaluation of training. As part of a larger study on training evaluative practices in U.S. industry, we are seeking to find out just WHAT is going on in management training evaluation.

In order to determine the scope, some of the techniques, the interest and effectiveness of training evaluation as used by industry today, we are calling on people like yourself to help provide a composite picture of the evaluation of management training. You are the only person in your company receiving a request for this information.

You (or one of your designated staff well versed in your company's current evaluation practice) can be of great assistance by filling out the enclosed, quickly checked survey-questionnaire and returning it at your earliest convenience. We believe you will find it a relatively simple questionnaire, self-explanatory, requiring very little time and a few check marks to complete.

We hope that the information requested is not considered of confidential nature. In any event, your answers will not be cited by company name. Also the questionnaire may be returned anonymously, or you may omit a question if you so choose. We are primarily interested in totals, relationships and overall analysis of the data returned.

Please feel free to make any additional comments that you wish. We desire as complete a picture of management training evaluation in U.S. industry as possible. If you have duplicated copies of your evaluation experiments or techniques, and wish to share copies, we would very much appreciate that also.

Enclosed is an extra copy of the survey for your files. And should you desire a summary of our larger study on management training evaluation which will include the results of this survey, please check in that space provided on your returned questionnaire.

Thank you for your help in this matter. Your prompt consideration, time and contribution is truly appreciated!

Cordially yours,

Carl Shafer
Industrial Evaluation Project
305 College of Education

APPENDIX V

MICHIGAN STATE UNIVERSITY EAST LANSING

COLLEGE OF EDUCATION

As part of a study on evaluation practices of management training activities, a questionnaire as enclosed was sent to you recently. A similar request was sent to 150 of the country's largest firms.

Many companies have responded but we would also like to have your firm represented in our study. Since you are the only person we have contacted in your company, may we emphasize our dependence upon your response.

We believe you will find our questionnaire can be completed rather quickly with a few check marks. Yet at the same time you will be helping us with the data needed for the completion of our study. Information revealed will not be cited by corporate or individual names in any publications resulting from this study.

We do appreciate your prompt consideration of this matter. It is our desire to send you a final copy of the report if you will so indicate on page four of the questionnaire. We believe this report will prove to be an interesting document.

If your return questionnaire is already on the way to us, may this letter be another thank you.

Cordially yours,

Carl Shafer
Industrial Evaluation Project
305 College of Education

Enclosures

APPENDIX VI

NAMES OF FORMAL MANAGEMENT EDUCATION AND
DEVELOPMENT PROGRAMS CITED BY THE COMPANIES AS
THEIR BEST EXAMPLE OF USE OF EVALUATION METHODS

MANAGEMENT IN TITLE	SUPERVISOR IN TITLE
Basic Management Course P-F	Responsibilities of a Super-
Basic Management Orientation	visor F-M
F-M	Supervisory Training Program
Basic Management for New	F-M
Supervisors F	Supervisory Training Program
Management Institute M	F
Management Trainee Program	Supervisory Practices F-M
P	Supervisory Development
New Manager Training F	Course
The Job of Managing F-M	Supervisory Development
Fundamentals of Management M	Course F-M
Basics of Job Management F-M	Engineering Supervisory De-
Management Study Program	velopment Program M
P-F-M	Supervisor Orientation Pro-
Notre Dame Middle Management	gram F
Course M	Supervisory Indoctrination
Advanced Management Training	P-M
T	
Advanced Management Program M	
One Week Management Institute	
M-T	FOREMEN
Pittsburg University Manage-	Foremen Conference Program F
ment Program	Basic Foreman Training F
Management Development Pro-	Foreman Refresher Program
gram M	F-M
Management Development Pro-	
gram F-M-T	
Advanced Management Program	HUMAN RELATIONS
M	
Works Management Control	Human Relations in Manage-
Training Course F-M	ment F
Management Information	Human Relations F-M
Meeting F-M	Understanding Human Rela-
Business Management Seminar	tions F-M
M-T	
Professional Business	
Management F-M-T	ECONOMICS
LEADERSHIP	Basic Economics F-M
	Company Basic Economics F-M
Leadership Training F	AMA - Atlantic Profit
Leadership Training F-M-T	Planned Management M-T
	Operation Bootstrap F-M-T

CONFERENCE LEADERSHIP

Advanced Conference Leadership M
Discussion Leading F-M-T

COUNSELING

Counseling F-M
Conducting the Job Performance Interview M-T

METHODS

Job Methods Improvement F
Work Simplification
Work Simplification F-M
Work Simplification
Methods Improvement F-M-T

COLLEGE GRADUATE

College Graduate Program
Basic Orientation for College Trainee
College Graduate Management Training

SAFETY

Your Safety Responsibilities P-F-M
Safety and Accident Prevention F-M-T

COMMUNICATION

Reading Improvement F-M-T
Public Speaking F-M-T
Communications: Principles and Methods P-F-M-T

OTHERS

Job Training F
New Engineering Section Head Development Program F
Personnel Placement and Development P-F-M-T
Board and Pulp Mill Start-Up F-M
Organization Development in a Headquarters M-T
"Sky Top" (Annual Operating Meeting) M
Incentive Administration F-M
Interdepartmental Indoctrination Course M

Imagination and Your Job M
Quality Control F
Cost Control F
What're We Doing M
How Our Labor Management Agreement Works F-M-T
Attitude Survey Feedback F-M-T
National Training Laboratories Sensitivity Training M-T
Standard Practices P-F-M-T
Production Assistant Program P

Applied Accounting F-M
The Human Enterprise M

P - given at Pre-SUPERVISORY LEVEL
F - given at FOREMAN OR OTHER FIRST LEVEL
M - given at MIDDLE MANAGEMENT LEVEL
T - given at TOP MANAGEMENT LEVEL

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