Old Dominion University ODU Digital Commons

OTS Master's Level Projects & Papers

STEM Education & Professional Studies

1993

A Study to Determine the Training Methods Being Utilized in Southeastern Virginia Organizations

J. Carol Gardner Old Dominion University

Follow this and additional works at: https://digitalcommons.odu.edu/ots_masters_projects

Part of the Education Commons

Recommended Citation

Gardner, J. Carol, "A Study to Determine the Training Methods Being Utilized in Southeastern Virginia Organizations" (1993). *OTS Master's Level Projects & Papers*. 375. https://digitalcommons.odu.edu/ots_masters_projects/375

This Master's Project is brought to you for free and open access by the STEM Education & Professional Studies at ODU Digital Commons. It has been accepted for inclusion in OTS Master's Level Projects & Papers by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.

A STUDY TO DETERMINE THE TRAINING METHODS BEING UTILIZED IN SOUTHEASTERN VIRGINIA ORGANIZATIONS

A Research Paper Presented to the Graduate Faculty of the Department of Occupational and Technical Studies at Old Dominion University

> In Partial Fulfillment of the Requirements for the Master of Science in Education Program

> > By

J. Carol Gardner July 1993

APPROVAL PAGE

This research paper was prepared by J. Carol Gardner under the direction of Dr. John M. Ritz in OTED 636, Problems in Education. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the Degree of Master of Science in Education.

APPROVAL BY:

John M. Ritz

7-13-93 Date

Dr John M. Ritz Advisor and Graduate Program Director

ACKNOWLEDGEMENTS

The author would like to thank Dr. John M. Ritz for his patience and guidance in writing this research paper. In addition, the willing participation of the training deparments from the various organizations was greatly appreciated. Last, but not least, the author would like to recognize the support received from her family and friends during the past year.

TABLE OF CONTENTS

ACKNOWLEDG	EMENTS	ii
TABLE OF F	IGURES	v
CHAPTER		
Ι.	INTRODUCTION	
	Statement of the Problem	1
	Research Goals	2
	Background and Significance	2
	Limitations	3
	Assumptions	4
	Procedures	4
	Definition of Terms	5
	Overview of Chapters	6
II.	REVIEW OF THE LITERATURE	
	The Evaluation Model	8
	Evaluation Methodology	9
	Instrument Selection	9
	Instrument Effectiveness	10
	Types of Instruments	10
	Purposes and Uses of Evaluations	12
	Summary	15

III. METHODS AND PROCEDURES

	Population	16
	Methods of Data Collection	16
	Instrument Design	17
	Statistical Analysis	17
	Summary	18
IV.	FINDINGS	
	Background Information	19
	Interview Questions	20
	Summary	24
۷.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
	Summary	30
	Conclusions	31
	Recommendations	33
BIBL IOGRAPH	Υ	35
APPENDICES		
	APPENDIX A. Organizations Included in the Sample	. 37

AFFLIDIA A,	or gamization	5 Included In	unc	Jumpic	•	•	,
APPENDIX B,	Sample of In	terview Surve	у.				38

TABLE OF FIGURES

.

FIGURE 1.	Types of Training	21
FIGURE 2.	Evaluation Methods Used	23
FIGURE 3.	Number of Methods Used in Evaluating Training	24
FIGURE 4.	Kirkpatrick's Evaluation Model	26
FIGURE 5.	How are Evaluations Used?	27

CHAPTER I

INTRODUCTION

It is becoming increasingly important for management to evaluate all departments within their organizations. Due to restrictive budgets and the high demand for a return on investment, training departments are being required to provide justification and value for program offerings now more than ever.

Training is gaining significant support with the Clinton Administration. There is no doubt that expectations for high quality and customer satisfaction with training will continue. In order to verify training, training departments will continue to use evaluation methods that vary from organization to organization.

There is a need to educate training departments on effective evaluation methods. Effective training evaluations will provide the training department with the necessary information to justify programs and staff that can meet the company's objectives. As well as justification, effective evaluations will provide the training department with concrete data to be used in structuring programs and training offerings.

Statement of the Problem

The problem of this study was to determine evaluation methods utilized by Southeast Virginia organizations to measure the effectiveness and efficiency in training departments.

Research Goals

The completion of this study will answer the following goals:

- 1. Do training departments use evaluation techniques?
- 2. What types of evaluation methods are utilized?
- 3. Should training managers receive formal training in program evaluation?

Background and Significance

According to the Research Department of the American Society of Training and Development (personal communication, January 28, 1993), there are many books and articles published on the importance of training evaluation. Most of these deal with course and trainer effectiveness. With the quality movement in the United States, evaluation has started to include training department effectiveness and its impact on meeting the organization's goals and objectives - the bottom line for economic gain.

Traditionally, high level executives have been the main requesters of departmental justification. However, front line managers and supervisors are becoming more involved and prefer to have their employees working on the daily tasks rather than in a training class. Therefore, it is critical to be able to evaluate and justify a course's impact on the bottom line (Hassett, 1992, p. 53). There are many methods of evaluation available and they range from the simplest and inexpensive to the difficult and costly.

In the August edition of <u>Training and Development</u>, Eric Davidore

and Peggy Schroeder (1992, p. 70) explain that too many training professionals do not even understand how their department relates to their businesses' objectives. This creates difficult strategic business decisions for upper management. Effective training evaluations could provide the best training investment option for the business. Davidore and Schroeder further state that with effective evaluations the training department could be viewed as an equal partner in the business and not as overhead.

Limitations

The limitations of this study were as follows:

 Only organizations with a main office or headquarters located in Southeast Virginia were surveyed.

1

- 2. Only trainers and/or training managers were surveyed.
- 3. Trainers and training managers may not be comfortable with their knowledge and therefore not be completely honest when completing the survey on the evaluation methods used within their department.
- 4. Only trainers who are defined as someone affiliated with the training department and whose job description provides for at least 50 percent of their time to be dedicated to training were surveyed.

Assumptions

The following assumptions were theorized to be true:

- 1. Some type of training department evaluation is being completed.
- There are a variety of evaluation methods being utilized in the training departments.
- Most training professionals are not comfortable with their evaluation knowledge and how to relate training to the organization's objectives.
- 4. Trainers feel that completing course and program evaluations provide the necessary assessment information needed by upper level management.
- 5. Different types of training evaluation methodologies are utilized depending upon the type of training provided, e.g., technical or non-technical.

Procedures

This training evaluation study was completed in four general steps. First, a thorough review of current literature was completed to determine the data available and the types of evaluation methods being used in organizations today. Secondly, a limited sample of trainers were surveyed to verify the validity and reliability of the survey instruments (pilot test). Surveys were then completed with members of training departments in Southeast Virginia organizations. The surveys included six major areas of focus: background information about the organization and trainers, types of evaluation used, types of training being evaluated, how the evaluation is used in the organization, evaluator's role in the organization, and their opinion on the need for formal training on evaluation methods.

The third step for completing the study was to tabulate the results of the surveys and interpret the data. The fourth and final step was to determine if there was a need for formal training on evaluation methods for training professionals.

Definitions of Terms

The following definitions should be applied when reading this research paper.

ASTD	American Society of Training and
	Development, National and Local
	Organizations.
EVALUATION	Synonymous with feedback. Will be used
	when speaking of course, program and
	departmental evaluations.
EVALUATION METHODS	Can refer to statistical or subjective
	data gathering instruments.
EVALUATOR	Anyone responsible for completing
	evaluations in the organization as it
	relates to the impact of the training
	department's ability to meet the
	organization's goals and objectives.
NON-TECHNICAL TRAINING	Also known as soft-skills training. This
	training typically refers to management

development, interpersonal skills, customer service skills and personal development. TECHNICAL TRAINING Any type of training that prepares a participant for a technical skill. TRAINER Someone affiliated with the training department and whose job description provides for at least 50 percent of their time to be dedicated to training. TRAINING COURSE A single specific course, workshop or seminar. TRAINING DEPARTMENT...... The trainers, training manager and the courses/programs provided. TRAINING MANAGER The person responsible for management of the training department. This person may have additional responsibilities elsewhere in the organization.

Overview of Chapters

Chapter I provided an explanation for the need of research to be completed in the area of training and training department evaluation. The problem was stated with research goals, and limitations and assumptions being noted. The procedures for the research were briefly explained with related terms being defined. An in-depth review of literature will be provided in Chapter II. Chapter III will provide an explanation of the methods and procedures used to obtain the research data, with Chapter IV stating the findings. Finally, Chapter V will provide a summary with conclusions and recommendations.

•

CHAPTER II

REVIEW OF LITERATURE

The review of literature considered the types of evaluation instruments being used in training organizations. In order to understand training evaluation, it is helpful to be familiar with the most widely accepted evaluation model. The first part of this review will discuss the model. The problem itself has been divided into two sections that will follow the model discussion. These two sections are: evaluation methodology and purposes and uses of training evaluation.

The Evaluation Model

The most widely accepted evaluation model is the one developed by Donald Kirkpatrick (Carnevale and Shulz, 1990, p. 16). The Kirkpatrick Model provides four levels for evaluation. The first level is reaction. This is the measurement of how well the participants liked the program. The second level is learning, and it refers to the degree to which the participants gained knowledge from the program. The third level is behavior. This level measures positive changes in the participant's behavior (job performance) that can be tied to the actual training program. The last level, results, measures the training program's organizational effects in terms of reduced costs, improved quality, and increased quantity. Judith Pine and Judith Tingley state that the purpose of evaluation is to measure all four levels of Kirkpatrick's

classic evaluation model (1993, p. 56). A training professional must consider the type of training instrument and its purpose when selecting evaluation measures for each of these four levels. Both technical and non-technical training can be applied to this model.

Evaluation Methodology

Evaluation methodology is sub-divided into three areas: instrument selection, instrument effectiveness and types of instruments. Types of instruments will deal with four main areas of training. These are management development, sales skills, technical skills and executive development.

Instrument selection.

When an evaluation instrument is developed or selected for use by a training department, there are four areas that need to be considered (Phillips, 1991, p. 81). The first is to determine how the data will be used. Instrument selection must vary depending upon the purpose for the data. Some of the uses of measurement are return on investment, trainer effectiveness, and increasing enrollment. Once the purpose of the data is determined, the trainer must examine who will use the information. In some cases, raw data may be acceptable, in other cases a formal summary may be necessary. The third step in the selection process is to determine what specific facts need to be gathered. Will the data be used to determine costs or to verify input/output ratio? Or, will it be used to measure quality, attitudes, trainee reactions, or observations. Again, the intended use of the data helps determine the type of

instrument needed. The last step is to find out if there is a standard instrument already in existence or if it is necessary to develop one. If there is a standard instrument available, the first three steps must be compared to the selected instrument.

Instrument effectiveness.

Two key concepts that are crucial to the successful implementation of an evaluation are validity and reliability. Validity refers to the degree in which the instrument performs its function (Phillips, 1992, p. 82). Part of measuring validity deals with content validity (the program itself) and construct validity (does it represent what it is supposed to).

Reliability deals with the consistency of the instrument. This can be measured by applying the instrument to the same group a few days later. The results of the instrument should be consistent to prove reliability.

Types of instruments.

There are many different types of instruments that can be utilized. The most widely accepted methods are listed below. Questionnaires: Most commonly used method. Can be used to measure subjective information and document measurable results. These can be administered to the participant and/or supervisor. Attitude Surveys: Used most often to measure the results of a program. Most valuable when before-and-after results are compared.

Tests: A learning measurement that is usually administered in the pre-test and post-test format.

Interviews:	Used when written responses are difficult to obtain. Best method for gathering feelings and emotions.
Focus Groups:	Most valuable for obtaining very in-depth feedback on training evaluation.
Observations:	This method involves observing the individual before, during and after the implementation of a program.
Performance Records:	These can provide the same information as tests and attitude surveys. By examining the performance records, the output, quality, costs and time can be determined.

In a recent survey completed by ASTD (American Society for Training and Development), the responses indicated that participant feedback is the most frequently used method for evaluating training (ASTD, 1992). Participant feedback may take the form of a questionnaire, attitude survey, test, interview or focus group. In the subject area of management development, the three most common methods selected are participant feedback (92%), supervisor feedback (47%) and observations (40%). For the area of executive development, the top three responses were participant feedback (58%), observations (25%) and supervisor feedback (23%). In the area of sales skills, participant feedback (58%), observations (37%), and supervisor feedback (33%) are the top three. The last subject area, technical skills, provides for a little variation. The top method is again participant feedback (57%), pre/post testing (45%), and finally observations (42%).

Within each of the above methods, there are several ways of recording the responses. Some of the most common are checklist and rating scales. Checklists measure the degree of agreement with a statement. Rating scales can measure frequency and intensity of responses. Additionally, rating scales can also force choices of the participant (Jones, 1990, p. 7). Each of these methods provides beneficial information when used in the correct environment.

Purposes and Uses of Evaluations

There are five basic purposes and uses for training evaluations in organizations. These are: evaluation of trainer effectiveness, measurement of trainee behavior and attitude changes, measurement of trainee knowledge (skill, principles), program and course improvement, and documentation of the value of training as a return on investment.

The majority of evaluation related material dealt with evaluating the entire program and the other areas mentioned in the previous paragraph. There is not a great deal of information on trainer effectiveness evaluation. The few evaluated areas found in the literature are knowledge of instructional content and the use of training materials and audio-visual equipment. One additional area that is evaluated by training staff is the design or flow of the training program. This is generally gathered through the use of observation and a checklist with open questions for the evaluator to write more in-depth responses.

Behavioral and attitudinal evaluations can be completed in a variety of evaluation formats. The type of training, technical or nontechnical, determines the measurement instrument. For technical training, the areas of evaluation are output, quality, costs, and time (Info-line #9110, 1991, p.5). This can be gathered through observation,

interviews and performance records. The non-technical training skills that are evaluated are work habits, developmental abilities, feelings, initiatives, new skills (such as decision-making) and work climate (Info-line #9110, 1991, p.5). These are generally evaluated through observations, interviews, and attitude surveys.

Skills and knowledge evaluations do not differ much from behavior and attitude methods. The type of training, technical and nontechnical, determines the type of evaluation format. However, both types of training should be evaluated as to how well the training achieved five goals. The first area measured should be the degree to which the trainees retained the necessary information to be successful. Next, a measurement of the course objectives is evaluated. Along with the first goal, a measurement of the amount of increased knowledge that a trainee obtained needs to be measured. The last two areas commonly evaluated in skills and knowledge are whether or not the trainee rate of retention varies depending upon the instructor and the emphasis that is placed on the learning of the most important concepts (Erickson, 1990, p. 7). The methods generally used to evaluate these above goals are competency tests, pre-tests/post-tests, and observation.

Martin Broadwell states that there are two main purposes for completing course and program evaluations: to determine if the time and effort were worth it in terms of return for an organization and to see if there is a way of improving the training in the future (1986, p. 79). An additional part of this evaluation area is one that is most commonly left out. This can be referred to as the management attitude survey. The training department should be administering this type of survey to

all levels of management to determine the degree of support for the training department and also for specific courses within the program (Info-line #9110, 1991, p.5). These types of evaluations can be measured through the use of surveys and personal interviews. The method that yields the most information, but is used the least, is a focus group. Focus groups can be time consuming and difficult to arrange, therefore, they are not used very often by internal training staff.

There is a great deal of information being written on the steps to evaluate training in terms of the bottom line for the organization. This is a result of the changing economy and the need for program justification. ASTD's publication of Info-line provides four suggested areas to measure in terms of training's return on investment (1991, pp. 3-7). The training must be linked to the organizational goals. The second measurement area is cost avoidance. Variables that can be considered in this area are time, materials and equipment downtime. Training should provide a positive impact on the measurement of these three variables. If training can provide an increase in the organization's income by increasing productivity and/or decreasing costs, then the return on investment can be rather obvious.

The last area to measure is the cost of not investing in training. This would include repetition of poor procedures, lack of information to perform job tasks and expenses with materials and equipment. Evaluations should ensure that training is meeting its objectives which should aid the organization in its ability to achieve its goals and objectives (Carnevale and Shultz, 1990, p. 16). The return on investment (ROI) should be stated in the form of a numeric analysis. In

order to prepare an accurate ROI, training departments should determine a savings forecast prior to the training session and then complete a numeric post-training evaluation. The comparison of these two numbers will provide an actual savings amount. The gathering of this information can take the form of any of the instruments previously discussed in this chapter.

Summary

Chapter II provided a review of current literature on evaluation methodology and the uses and purposes of training evaluation. The review started with an explanation of the Kirkpatrick Model. The most commonly used evaluation methods were defined. Applications of these instruments were examined for the five specific purposes of training evaluation. Chapter III will provide a clear explanation of the methods and procedures utilized during the research.

CHAPTER III

METHODS AND PROCEDURES

This chapter will state the specific methods and procedures used to collect the research data for this study. Descriptions concerning the population, methods of data collection, instrument design, and statistical analysis are included. This information served as the foundation for the research study.

POPULATION

The population for this study was all training departments in Southeast Virginia organizations. The selected sample within this population was major employers that have a main office or headquarters located in Southeast Virginia. This information was obtained through the Hampton Roads Chamber of Commerce located in Norfolk, Virginia. Only those companies that were defined by the Chamber of Commerce as a main office or headquarters were a part of the sample. The total sample size was seventeen. The companies included in the study are found in Appendix A.

METHODS OF DATA COLLECTION

The method selected as the data gathering instrument was a questionnaire that was used in an interview format with the researcher recording the participant's responses. The eighteen training departments that were selected to participate as part of the sample were contacted by telephone. The first purpose of this initial telephone conversation was to explain the reason for the study and to enlist support and cooperation. Once the participants agreed to be a part of the study, the next step was to arrange an appointment at their convenience which was also within the researcher's timeframe. In most instances, the survey was completed during this first contact.

The telephone interviews began the week of May 10, 1993 and commenced June 28, 1993. An explanation about the instrument design follows.

INSTRUMENT DESIGN

The questionnaire was designed to be used as part of an interview process between the researcher and the participant. A sample of the questionnaire that was used is located in Appendix B. The basic format of the questionnaire is open form. Open form was chosen to allow the respondent to provide as much information as necessary in explaining the responses. The questions on the questionnaire were limited to the problem of this study which was to determine the types of evaluation methods used as well as the use of the results. The researcher attempted to determine the answers that would be generated and listed those under each question for tabulation purposes only. The respondent did not see or hear those items as the interviewer read only the questions and recorded the participant's responses. Due to the relatively small sample size, the researcher chose to employ the interview method to ensure complete and accurate information from all respondents.

STATISTICAL ANALYSIS

Each question on the instrument was analyzed separately. The analysis consisted of reporting frequencies of responses in percentiles for each question. The background information gathered from each participant was analyzed in terms of the mean. The scope of this study was to determine what was currently being executed in the area of training evaluation, therefore there was no correlation study to be completed. The analysis consisted of the similarity of the responses within each question.

SUMMARY

This chapter provided a description of the methods and procedures used to collect the research data. It provided information about the population, method of data collection, instrument design and statistical analysis. The next chapter will provide the findings from the interviews with the final chapter providing an interpretation of the data.

CHAPTER IV

FINDINGS

As stated earlier in this research study, it is becoming increasingly important for training departments to validate training by measuring results. The purpose of this research study was to determine if training departments in Southeast Virginia are completing evaluations and, if so, the methodology being used. The organizational background data are discussed in terms of mean and the eleven survey items are discussed in terms of frequency of response in a percentile basis. The open ended questions were stated without any options listed as they appear on the survey instrument.

BACKGROUND INFORMATION

The sample size was seventeen organizations. Eighty-eight percent (15) participated in the research. Based on the survey of participants, the number of employees that the training departments were responsible for training ranges from one- hundred to one-thousand, with the mean being three-hundred-fifty employees. The number of training hours per employee on an annual basis had a wide range from ten to twohundred forty-five hours, with the mean being 96 hours. When asked about the percentage of total budget dollars spent for training and development, the answer was consistent. No one knew this number. The number of trainers within each headquarter office ranged from one to twenty-three, with the mean being five trainers per office.

INTERVIEW QUESTIONS

Each survey item is discussed in this section. The most significant items, where noted, have figures referenced. Participants had more than one response for most items, therefore, the number of responses were not equal to the sample size.

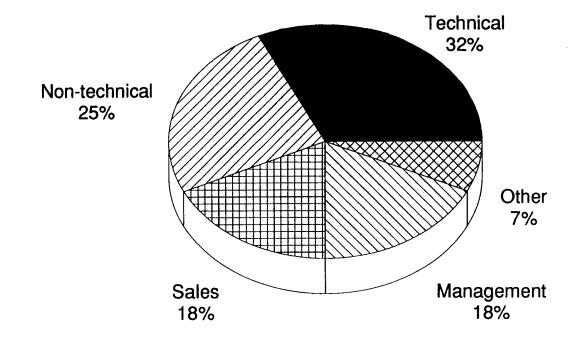
Item 1: What types of training take place?

Thirty-two percent (9) provided technical training which consisted of product specific information and computer courses. Twenty-five percent (7) provided non-technical training courses such as customer service skills. The next two types of training, sales and management development, each made up eighteen percent (5) of training. The final type of training, "other", which consisted of quality and professional image, received seven percent (2) of total training being offered at the headquarter offices. See Figure 1 for a graphic illustration of the types of training.

Item 2: What types of evaluation methods do you use?

Thirty-one percent (10) of the training methods used were attitude surveys and twenty-five percent (8) used were tests and quizzes. Nineteen percent of respondents (6) used questionnaires to measure training. Observations of new behaviors were used by employers thirteen percent (4) of the time. Performance records and interviews were used six percent (2) and three percent (1) of the time, respectively. The remaining three percent (1) used coaching and counseling as a method for evaluating training. Focus groups were not used as a method. One hundred percent of those interviewed used a combination of methods to

Types of Training Percentages



evaluate training. Figure 2 provides a graphic illustration of the types of evaluation being used. In addition to the specific methods used, fifty-five percent (8) used three or more evaluations methods on a regular basis. Eighteen percent (3) used only one form of evaluation. Four methods were used eighteen percent (3) of the time and nine percent (1) utilized five evaluation methods. See Figure 3.

Item 3: Who selects the evaluation instrument to be used?

Trainers selected the instrument thirty-four percent (5) of the time. The corporate headquarters, located elsewhere, selected the method twenty-seven percent (4). Managers, external consultants, and those instruments that come with "canned" programs were each selected thirteen percent (2) of the time.

Item 4: Who assumes the role of evaluator?

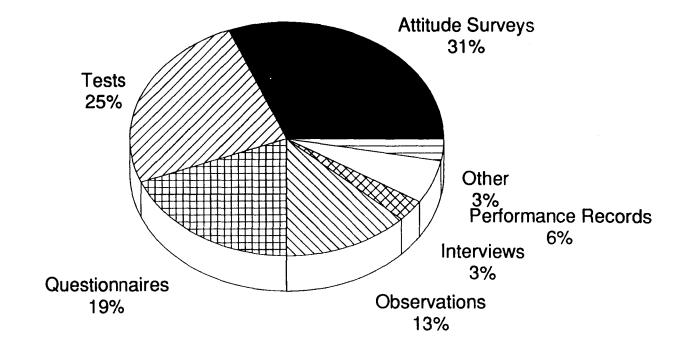
Thirty-five percent (7) of the time the evaluator was the trainer of the workshop or course. Trainees, training managers, and employee supervisors each evaluated the training twenty percent (4) of the time. The remaining five percent (1) were evaluated by the corporate headquarters or home office.

Item 5: What are you trying to find out with these evaluations?

It should be noted at this point that respondents explained the purposes of the evaluation based upon the open-ended question posed. The researcher assigned these responses to one of the four levels of evaluation from Kirpatrick's Model.

Forty-nine percent (15) of the responses were attempting to evaluate reaction to the training program. Learning was being evaluated twenty-six percent (8) of the time with behavior being evaluated

Evaluation Methods Used Percentages



Number of Methods Used In Evaluating Training

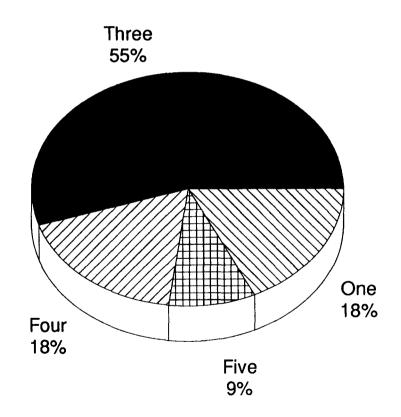


Figure 3

nineteen percent (6) of the time. The final level, results, is being evaluated six percent (2) of the time. The two organizations that were "just starting" to evaluate results were combining it with the introduction of quality principles into the organization. See Figure 4 for an analysis of this data.

Item 6. How are these evaluations results used?

Evaluations were used twenty-five percent (9) of the time for each of the following: to improve program offerings and to improve training. Twenty-two percent (8) used evaluations to measure the trainee knowledge and skills at the end of the program with twenty-two percent (8) also evaluating how much the trainees liked the course. Six percent (2) of those interviewed sent the evaluations to home offices or the corporate headquarters and had no idea what was done with the results. Return on investment was offered as a use for the evaluations zero percent (0) of the time. Figure 5 illustrates this item.

Item 7: Is return on investment (ROI) calculated?

One-hundred percent (15) were not calculating return on investment at this time. Thirteen percent (2) were just beginning to measure the return on investment of training which was tied in to their quality introduction. While others felt sure that this was done by someone in the company, no one had any concrete examples of ROI being calculated.

Item 8: Do you measure the effectiveness of the instrument?

Thirteen percent (2) measured for validity and reliability of the evaluation instruments. Effectiveness was measured by corporate headquarters or by an external consultant. Trainers or their departments were not involved with validity or reliability studies.

Kirkpatrick's Evaluation Model Percentage Measured

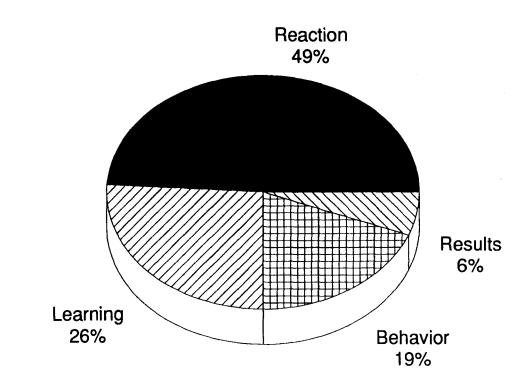
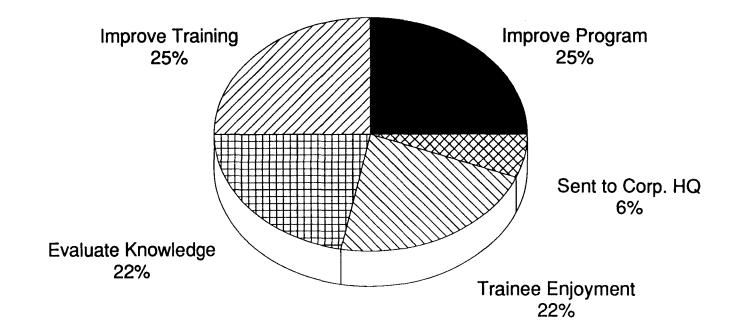


Figure 4

How Are Evaluations Used? Percentages



Eighty percent (12) were not aware of any instrument effectiveness studies being completed.

Item 9: Who sees the results of these evaluations?

Twenty-eight percent (5) of these evaluations were viewed by the trainees' managers. An additional twenty-eight percent (5) were seen by the home office or corporate headquarters management staff. Twenty-two percent (4) were seen by the trainers with seventeen percent (3) being seen by the training department manager. Only five percent (1) of respondents showed the evaluation to the trainee.

Item 10: What formal training would you like for you and/or your trainers to attend next (within the next year)?

Thirty-seven percent (7) did not anticipate any training for the training department. Twenty-one percent (4) wanted to or would be trained on product specific courses next. Sixteen percent (3) would attend the entire or part of Dr. Ed Jones' Train the Trainer workshop in Richmond. Eleven percent (2 educational organizations) would like for their department to be trained in MBTI - the Myers-Briggs Type Indicator. The remaining suggested training workshops each received five percent: stress management (1), professional management skills (1), and developing training philosophies (1).

Item 11: In your opinion, is there a need for evaluation training for trainers? If yes, what would the course curriculum consist of? If no, why not?

Sixty percent (9) responded yes to this item. The topics that were offered to be part of the curriculum were test construction, measurement of non-technical skills, quality, and how to get honest

feedback from the training participants. One respondent offered that trainers needed to see the numbers because it would make them feel good about their job but had no suggestions for topics in the course.

Forty percent (6) responded negatively to this item and provided four reasons for not having trainers involved in the evaluation of training. First, trainers did not need to know this, only management needed this information. Second, external consultants were professionals at this, not trainers. Third, educational facilities did not need to justify or quantify training as they had not been required to do so yet. The final statement, educators did not like to evaluate as it was too nebulous.

SUMMARY

This concluded the presentation of the findings from this research study. The next chapter will provide a summary, conclusions and recommendations based upon the findings from the survey items.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem of this research study was to determine the evaluation methods being used by Southeast Virginia organizations to measure the effectiveness and efficiency in training departments. The three goals that this study answered were: 1) do training departments use evaluation techniques?, 2) what kind of evaluation methods are utilized?, and 3) should training managers receive formal training in program evaluation? The scope of this study was limited to organizations with headquarters located in Southeast Virginia (seventeen organizations).

A review of literature provided insight into evaluation methodology and the purposes and uses of training evaluation. The most widely accepted evaluation model, the Kirkpatrick Model, was used as the framework for this research. This model provided four levels of evaluation: reaction, learning, behavior, and results. Research supported the belief that all four levels should be evaluated whenever possible. The seven most widely accepted evaluation instruments used to measure these four levels were questionnaires, attitude surveys, tests, interviews, focus groups, observations, and performance records. These instruments were used for five basic measurement purposes. These were: trainer effectivenes, trainee behavior and attitude changes, trainee knowledge, program and course improvement, and return on investment.

The methods and procedures used to collect the research data for this study was an interview questionnaire with eleven questions. A

sample of seventeen organizations was selected from the population of training departments in Southeast Virginia. Each participant was contacted by telephone. The researcher recorded the participant's responses during each interview.

The data was analyzed by frequency of response and mean. Each question was examined individually based upon the participants' responses. The next section of this chapter will offer conclusions and respond to the research goals stated in Chapter I based upon the data analysis. The last section of the chapter will provide recommendations by the researcher for further study and the development of training programs.

CONCLUSIONS

The researcher determined three research goals when the study began. The first goal was to determine if training departments used evaluation techniques. The second goal was to determine what types of evaluation methods were used, if any. Last, the researcher attempted to determine if training managers should receive formal training in program evaluation.

1. Do Training Departments Use Evaluation Techniques?

In response to the first goal, it is clear that one hundred percent of those interviewed used some form of evaluation instrument in training. The methodology varied from using only one method of reviewing performance records to using five instruments. A conclusion can be made from this information that training departments believe it to be important to measure some aspect of the training program.

2. What Types of Evaluation Are Being Used?

Of the seven most commonly used evaluation methods, all were used except for focus groups which provides the most information. Seventythree percent (11) of the respondents used three or fewer evaluation methods in their training program. The three most commonly used forms were surveys, questionnaires, and tests. This indicated that training departments were not familiar with the variety of tools available or they did not know how to use them. These three routinely used methods were also indicative of evaluating reaction and learning, the lower levels of Kirkpatrick's Evaluation Model. The higher levels, behavior and results, were not being evaluated as often as they should be. The two organizations that stated that they were attempting to start evaluating results are tying this to quality. Being that quality was being voiced in industry today, it appeared that more organizations would begin measuring training results. However, according to this study, this was not occurring.

3. Should Training Managers Receive Evaluation Training?

Sixty percent (9) agree that training managers and/or trainers should receive formal training in evaluation methods. Based on the analysis, it was clear that training departments were not evaluating all four levels. The variety of suggestions for course topics provided support for the need of a course in training evaluation. It is clear that training departments did not see how they tied in with the overall organizational objectives or made an impact on the company as a whole.

The forty percent (6) who felt that there was no need for an evaluation course believed that it was the responsibility of upper level

management to determine the value of the department. Or in the case of educational organizations, it was not required of them to justify or verify training. While forty percent was less than half, the researcher found it disheartening that they were willing and comfortable with "passing the responsibility on" to someone else. If trainers were knowledgable about evaluation methods, then this way of thinking would change. As a result of this analysis, there was a need for evaluation education for training departments.

RECOMMENDATIONS

This study has shown that training evaluation was an important function of the training department. A variety of training methods should be used to evaluate the four levels of evaluation. Based upon the data received from the participants, the researcher proposes three recommendations.

First, more emphasis needs to be placed on training evaluation within training departments. Educational programs need to support this and provide evaluation courses as part of the training curriculum so that trainers can receive the necessary skills in evaluation. Trainers need to become more assertive and take the initiative to learn these methods and how to use them. This will become more prevalent as quality becomes more important in the business world.

The second recommendation would be for a needs analysis to be completed to determine what topics should be included in an evaluation course or program. Most evaluation courses focus on test construction, which is important, but is only one of the methods available. Two areas that need to be a part of this course are the use of the seven accepted

methods and Kirkpatrick's Evaluation Model.

The final recommendation involves further research to be completed. This study was taken from the viewpoint of trainers and training managers. A similar study of the same organizations but from the viewpoint of upper management could prove a valuable comparative study. This researcher is assuming that upper management expects measurable results from its training department.

A second study that could prove valid would be to challenge this researcher's third assumption on page four of this study. This assumption stated that most training professionals were not comfortable with their evaluation knowledge and how to relate training to the organization's objectives. It could prove very beneficial to determine if this statement is, indeed, true.

BIBLIOGRAPHY

- American Society for Training and Development. (1992). <u>Evaluating</u> the Results of Training. Alexandria, VA:Author.
- Amercian Society for Training and Development. (1991). <u>Tracking</u> <u>Operational Results</u>. Info-line #9112. Alexandria, VA:Author.
- Amercian Society for Training and Development. (1992). <u>Survey #11</u> <u>Report</u>. Training Evaluation. Alexandria, VA:Author.
- Amercian Society for Training and Development. (1991). <u>Measuring</u> <u>Attitudinal and Behavioral Change.</u> Infor-line #9110. Alexandria, VA:Author.
- Amercian Society for Training and Development. (1986). <u>Essentials for</u> <u>Evaluation</u>. Info-line #601. Alexandria, VA:Author.
- Broadwell, Martin M. (1973, October). Why Trainees Should Not Evaluate Trainers. <u>Training Magazine</u>, 79-84.
- Carnevale, Anthony P. & Eric R. Shulz. (1990, July). Return on Investment: Accounting for Training. <u>Training and Development</u> <u>Journal</u>. 2-30.
- Chernick, Jan. (1992, April). Keeping Your Pilots On Course. <u>Training</u> <u>and Development Journal</u>. 69-73.
- Craig, Robert L. (1987). <u>Training and Development Handbook</u>. New York:McGraw Hill Book Company.
- Davidore, Eric A. & Peggy A. Schroeder. (1992, August). Demonstrating ROI of Training. <u>Training and Development Journal.</u> 70-71.
- Delahaye, Brian L. & Smith, Barry J. (1987). <u>How To Be An Effective</u> <u>Trainer</u> (2nd edition). New York: John Wiley & Sons, Inc.
- Erickson, Paul R. (1990, January). Evaluating Training Results. <u>Training</u> <u>and Development Journal</u>. 7-9.
- Hassett, James. (1992, September). Simplifying ROI. <u>Training magazine</u>. 53-57.
- Hawthorne, Elizabeth M. (1987). <u>Evaluating Employee Training Programs</u>. New York:Quorum Books.
- Jones, Edward E. (1990). <u>Planning, Designing, and Evaluating Effective</u> <u>Training.</u> Rhode Island:Management Training Consultants.

Kearsley, Greg. (1982). <u>Costs, Benefits, & Productivity in Training</u> <u>Systems.</u> London: Addison-Wesley Publishing Company.

- Phillips, Jack J. (1991). <u>Handbook of Training Evaluation and</u> <u>Measurement Methods.</u>(2nd edition). Houson:Gulf Publishing Company.
- Salinger, Ruth D. (1975, February). Six Reasons Why Training Fails. <u>Training Magazine</u>. 195-198.
- Smith, Jack E. & Sharon Merchant. (1990, August). Using Competency Exams for Evaluating Training. <u>Training and Development Journal</u>. 31-36.
- Sullivan, Richard L. & Mary Jo Elenburg. (1991, April). Writing Knowledge-Based Tests. <u>Technical and Skills Training.</u> 54-58.

.

APPENDICES

-

APPENDIX A - Organizations Included in the Sample APPENDIX B - Sample of Interview Survey Instrument APPENDIX

Α

Organizations Included in the Sample

RESEARCH STUDY SAMPLE

Canon Virginia, Inc Central Fidelity Commerce Bank Commonwealth College Crestar Dominion Bank First Virginia Bank of Tidewater Leggett Department Stores Metro Machine Corporation McDonald's Corporation NationsBank Old Dominion University Sentara Signet Bank The Southland Corporation Tidewater Community College USAA

APPENDIX

В

Interview Survey Instrument

Name:	Date:
Title	: Organization:
	ROUND rganization employees in area of training responsibility:
No. o	f training hours per employee:
% of	budget alloted to training and development:
No. c	f trainers in main office/headquarters:
1.	What types of training take place?
	Technical Sales
	Non-technical Management Development
	Other:
2.	What types of evaluation methods do you use?
	Tests Interviews
	Questionaires Focus groups
	Attitude Surveys Performance Records
	Observations Other:
3.	Who selects the evaluation instrument to be used?
	Trainers came with "canned" programs
	Managers Other:
4.	Who assumes the role of evaluator? (Have these evaluators been trained to evaluate?)
	Trainer Trainees/Peers
	Managers Other:
	Supervisors

- 5. What are you trying to find out with these evaluations?
 - ____ Reaction
 - ____ Learning
 - ____ Behavior
 - ____ Results
 - ____ Other:
- 6. How are these evaluation results used?
 - ____ Improve program offerings ____ Do trainees like the course?
 - ____ Improve training
 - _____ Measure trainee knowledge, skills
 - ____ ROI
 - ____ Other:
- 7. Is ROI calculated? Yes No
- 8. Do you measure the effectiveness of the instrument? (if yes, how?)
 - ____ Validity (content, criterion, construct)
 - ____ Reliability
 - ____ Other:
- 9. Who sees the results of these evaluations?
 - ____ Trainers ____ Organization
 - ____ Managers ____ Other:
- 10. What formal training would you like for you and/or your trainers to attend next?
- 11. In your opinion, is there a need for evaluation training for trainers? If yes, what would you like the course curriculum to consist of? If no, why not?