

DOCUMENT RESUME

ED 195 756

CE 027 383

AUTHOR Olmstead, Joseph A.
 TITLE Leadership Training: The State of the Art. Final Technical Report, September 1, 1979 - October 31, 1980.
 INSTITUTION Human Resources Research Organization, Alexandria, Va.
 SPONS AGENCY Office of Naval Research, Arlington, Va.
 REPORT NO HumRRO-TR-80-2
 PUB DATE Oct 80
 CONTRACT N00014-79-C-0627
 NOTE 104p.

EDRS PRICE MF01/PC05 Plus Postage.
 DESCRIPTORS Adult Education; Armed Forces; Business; *Educational Improvement; Evaluation; Federal Government; Guidelines; Human Relations; *Leadership; *Leadership Training; Program Design; Program Implementation; Research Needs; State of the Art Reviews; *Supervisory Training; *Training Methods

ABSTRACT

This report presents an analysis of the state of the art of leadership training. (Leadership is defined as "the process of influencing the actions of individuals, groups, and organizations in order to obtain desired results," and leadership training includes all courses and programs designed to enhance the abilities of participants to exercise such influence.) Part 1 is concerned with the present state of the field of leadership training. It provides a review and assessment of current leadership training activities in business, government, and the armed services; descriptions and critical analyses of leadership training methods; a critical review of training evaluation and other literature concerned with the effectiveness of leadership training; and a discussion about the present state of the field of leadership training. Part 2 addresses considerations for improvement of leadership training through development of a leadership training technology. It includes a proposed rationale for leadership training, a discussion of conditions needed for effective learning of leadership to occur, basic guidelines for designing and implementing leadership training, a discussion of problems requiring research and methodological issues involved in conducting research on leadership training, and a discussion of conclusions and implications concerning the state of the art of leadership training. (Author/YLB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

HumRRO

Technical
Report
80-2

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

HumRRO-TR-80-2

Leadership Training: The State of the Art

Joseph A. Olmstead

HUMAN RESOURCES RESEARCH ORGANIZATION
300 North Washington Street • Alexandria, Virginia 22314

Approved for public release; distribution unlimited. Reproduction in whole or
in part is permitted for any purpose of the United States Government.

October 1980

Sponsored by:

Organizational Effectiveness Research Programs
Office of Naval Research (Code 452)
Arlington, VA 22217

Under Contract No. N00014-79-C-0627, NR 170-893

ED195756

CE027383

FOREWORD

This report is an analysis of the present state of the art of leadership training. Such an analysis is needed because, at present, there is increasing concern about the quality of leadership within organizations, and training is one of the principal means by which leaders are developed. Because leadership training is a critical activity for most organizations, an examination of the state of the art is warranted.

The work covered by this report was performed during the period of 1 September 1979 - 31 October 1980 under Office of Naval Research Contract No. N00014-79-C-0627. The work was sponsored by the Organizational Effectiveness Research Program of the Office of Naval Research. Dr. Bert T. King is Director of the Organizational Effectiveness Research Program and Dr. David M. Stonner is Assistant Director. The support of both Dr. King and Dr. Stonner in this project is gratefully acknowledged.

The work covered by this report was performed by personnel of HumRRO's Educational and Training Systems Division of which Dr. Robert J. Seidel is Director. Dr. Joseph A. Olmstead was the HumRRO Project Director. Devah R. Galloway, B. Leon Elder, and Peter Ramsberger conducted the literature surveys for the project.

CONTENTS

Chapter		Page
1	Introduction	3
	Leadership in Organizations	3
	Purpose of This Report	5
	Focus of the Report	6
	Plan of This Report	7
 PART I THE PRESENT STATE OF LEADERSHIP TRAINING		
2	Training for Leadership	11
	The Armed Services	11
	Navy Department	12
	Department of the Army	12
	Department of the Air Force	13
	Business and Industry	13
	Nonmilitary Federal Government	15
	Summary	16
3	Cognitive and Group Methods	17
	Cognitive Methods	17
	Lecture	17
	Case Methods	18
	Group Methods	22
	Conference Method	22
	T-Group	24
4	Experiential and Mixed Methods	29
	Experiential Methods	29
	Role Playing	29
	Games and Simulations	33
	Multi-method Approaches	38
	Laboratory Method	38
	Behavior Modeling	38
	Mixed Methods	39
	Summary	39

Chapter	Page
5 Effectiveness of Leadership Training	40
Increase of Knowledge, Awareness, and Sensitivity	40
Change of Attitudes and Self-Insight	43
Improvement in Problem-Solving Skills	47
Development of Interpersonal and Leadership Skills	48
Improvement in On-the-Job Performance	51
Summary	52
6 The State of the Art	53
A Field in Disarray	53
Diverse Approaches to Leadership	53
Misuse of Training Methods	57
Requirements for Improvement	59
A Technology of Leadership Training	60
A Systematic Program of Research	60
Summary	61

PART II TOWARD IMPROVED LEADERSHIP TRAINING

7 A Rationale for Effective Training	65
A Proposed Rationale	65
Fundamental Concepts of Leadership	65
Practical Learning	66
Motivation to Learn	66
Conditions for Learning	67
Implications for Training	69
Systematic Formal Instruction	69
Realistic Leadership Laboratories	69
Intensive Training Programs	70
Summary	70
8 Guidelines for Designing and Implementing Training	72
Instructional Objectives	72
Terminal Objectives	73
Selecting Training Methods	73
Considerations in Selecting Methods	74
General Considerations	74
Planning	77
Summary	78



Chapter	Page
9 Issues in Leadership Training Research	79
Related Research Issues	82
The Nature of Change	82
Training in Content Versus Method	83
Cognition Versus Experience	84
Degree of Student Involvement	84
Time Requirements	85
Distribution of Training Sessions	85
Summary	85
10 Perspective on Leadership Training	87
Future Leadership Requirements	87
The State of Leadership Training	87
Implications	89
Training	89
Training Technology	89
Research on Training Methodology	90
Research on Training Management Issues	90
Conclusion	91
Figure	
1 General Instructional Goals Accomplished by Training Methods	76
2 A Comparison of Three Research Strategies	80
References	95

Leadership Training: The State of the Art

Chapter 1

INTRODUCTION

Although many factors may influence the performance of an organization, there can be little doubt that the quality of leadership that is available to it will be one of the most critical determinants of ultimate success. In recognition of this fact, training intended to help leaders and potential leaders to perform their jobs more effectively has commanded considerable attention in the armed forces, business, and government for many years. Tremendous effort and resources have been expended, with varying degrees of success, to develop personnel who will occupy the positions of leadership needed to meet present and future organizational requirements.

Current and future conditions make the effective training of leaders and potential leaders more critical than ever before. Requirements for leadership have their bases in the kinds of performance demanded of organizations. The kinds of performance required of many of our organizations appear to be changing and, with these shifting demands, the problems of leadership and the process of leading are becoming more complex and more difficult. Indeed, changes in technology, society, and organizations are presenting numerous new challenges which will require more sophisticated and more skillful leaders for the future.

These changes are placing new demands upon leaders in business and governmental organizations. In addition to increasingly complex technology, changed social values and increased economic expectations make traditional organizational constraints less effective in obtaining needed performance from personnel. High-quality leadership is becoming increasingly important as a means for stimulating effective performance.

The armed services in particular are faced with requirements which will place new demands upon leaders. For example, the necessity for continuous readiness and quick reaction in the turbulent and unpredictable environments of the present and future places a premium upon the capability of a military organization to respond flexibly to a more or less continuous flow of uncertainty situations. Yet, the responsiveness must be accomplished in the face of technological advances in equipment, communications, and logistics that complicate both decision processes and the execution of required operations. These requirements raise significant questions about the most effective methods for training leaders to stimulate their personnel to perform effectively under conditions of rapid change and complex technology.

LEADERSHIP IN ORGANIZATIONS

In a broad sense, it can be argued that the principal purpose of organizational activities is the making of favorable conditions for the achievement of certain goals. Efforts are made to increase, as much as conditions will permit, the probabilities of succeeding in accomplishing the organization's objectives, mission, or purpose. The making of decisions, the improvement of procedures and the specification of methods, the designation of responsibilities and the assignment of duties, the direction of work, and the execution of tasks—all these processes have one organizationally legitimate purpose: to increase the chances of successfully accomplishing the organization's objectives. Upon this point rest all of the criteria by which the effectiveness of organizational activities are evaluated.

However, probabilities of success are increased only by taking relevant and appropriate actions. For organizations, whose very survival may depend upon the successful accomplishment of goals, the actions require high levels of competence by number of people working together. The effectiveness of such an action system requires the coordinated efforts of individuals performing parts of a total task so that the activities of each person contribute, in some fashion, to accomplishment of the overall goal.

Under these conditions, effective organizations demonstrate characteristics that have direct relevance for goal achievement (Likert, 1961). For example, leaders are able to arrive at valid decisions speedily and efficiently. Energy is not expended in interminable haggling or overconcentration on minutiae, but, instead, is used to develop constructive solutions to problems.

Effective organizations usually have open and efficient communication channels. Members exchange information and work at clearing up misunderstandings. They pass on information which others need, and, because of efficient communication, members are able to achieve the common understanding of problems necessary for well-coordinated actions.

Organizations that are effective are skillful in using the potential of their members for contributing to the accomplishment of objectives. This means that talent is not wasted; the organization knows how to locate and use member abilities to the best advantage.

The organizational structure is sufficiently flexible that efficient shifting of responsibilities with changes in task requirements is possible. Accordingly, the organization is able to adapt to unanticipated consequences. Procedures are not so rigid that adjustments to new situations become extremely laborious, thus leading to failure. Furthermore, over-formalism and strong reliance upon a few nominal leaders do not exist to the extent that responsibility cannot be shifted when demands change or leaders are lost.

Finally, effective organizations are skillful in evaluating success and failure of actions; members know how to profit from mistakes. This makes possible continued development and improvement.

It is not surprising, in these terms, that the effectiveness of an organization with respect to the achievement of its goals should be so closely related to the effectiveness of its leaders. Regardless of the type or size of a unit, department, or organization, the individual who occupies the position of leadership must make sure that objectives are established and communicated, plans are made, policies are developed, and personnel are obtained, assigned, and trained. He must establish levels of responsibility, set up mechanisms of coordination, delegate authority, direct subordinates, provide stimulation and inspiration to everyone, exercise control, develop high levels of motivation and morale, and adjust the plans and activities to broader changes in the larger organization, government, society, or the community. If these activities are not performed well, the organization will not function effectively.

This raises a series of questions about the abilities needed to function effectively as a leader. For example, how aware is a leader of the emotional and motivational conditions of the various groups and individuals within his organization—conditions he must take into account in making his decisions? Is he able to gather relevant and accurate information about the internal functioning of this organization? How competent is he in observing, talking with, and listening to the people with, and through whom, he must work? Is he able to translate his ideas for leading his organization into actions consistent with these ideas? How sensitive is he in determining whether to intervene in activities of his organization? Is he skillful in providing the necessary guidance to subordinates in such a manner that motivation and performance are not impaired? How well can he pick out the essential elements in leadership problems and then supply actions appropriate to the demands of the situation?

Answers to questions such as these have important bearing upon leader performance. Leaders become effective by understanding what is required of them, and how, in their organizations, the human forces may be combined, balanced, and directed toward ultimate goals.

When the changing and increasingly complex conditions discussed earlier are superimposed upon these requirements for leadership in any organization, it becomes apparent that leadership in either civilian or military organizations can no longer be a matter of hunch or native ability, backed by a few elementary concepts and reinforced through the trial and error of experience. Instead, it must rest upon systematic knowledge and a rational and conscious application of sound principles and practices. The needed knowledge and associated skills of application can be acquired best through training. For this reason, the provision of high-quality leadership training is a critical task for any organization.

PURPOSE OF THIS REPORT

The purpose of this report is to present an assessment of the present state of the art of leadership training. Such an assessment is needed because the requirements discussed in the preceding section make high-quality training increasingly important. Yet, despite the enormous expenditure of resources, the field of leadership training is in considerable disarray, and there is not available any organized knowledge base concerning the pedagogy of leadership instruction. Accordingly, an assessment of the present state of the art should be useful to trainers and training designers, as well as to individuals charged with program evaluation or research responsibilities.

A number of books and publications which have addressed leadership (Stogdill, 1974) and managerial effectiveness and development (Campbell, Dunnette, Lawler, and Weick, 1970; Miner, 1965) have included brief reviews of the training literature. However, few have focused directly on the issues involved in leadership training, and, certainly, none have provided guidance to trainers. Under these conditions, the individual required to design a program intended to develop leaders is forced to resort to tradition, hunch, and, perhaps, a few educated guesses. The difficulty is compounded when, as is frequently the case, the trainer may be almost completely naive concerning both learning principles and leadership training methodology.

Because leader behavior has its source in the values and attitudes of the leader, as well as some fairly complex interpersonal skills, serious training for leadership is probably one of the most difficult educational processes there is. Indeed, the individual charged with responsibility for designing a leadership training program finds himself faced squarely with the necessity for solving some exceedingly difficult problems. As he makes decisions about the proper training methods to use, he encounters the question of the objectives toward which training should be directed. As he goes about selecting objectives, he must resolve the deeper problems of his concept of leadership and, more specifically, his notion of the kinds of behavior necessary in order for an individual to perform effectively as a leader. The concept embraced by the program designer has important implications for the decisions he must make relative to program content, methods, etc. Yet, in attempting to select a concept, he must become familiar with and evaluate the many competing theories of leadership that are currently in vogue.

One attractive way of avoiding the necessity for choosing from among the many theories of leadership is to develop program objectives based upon empirical analysis of the specific behaviors and roles of leaders, for example, through use of Instructional System Development procedures. Even here, however, the program designer cannot escape some very difficult decisions.

The kinds of assumptions made about both leadership and the learning process at various decision points in the course of program development determine the path training will take. However, program designers frequently have formulated their concepts of the leadership learning process rather casually, or they have uncritically adopted ideas that prevail in their particular organization or culture.

Anyone who attempts to design or develop leadership training, evaluate it, or conduct research on it must address, either explicitly or tacitly, the issues addressed in this section, as well as others. However, at present, there is no place to turn for guidance or assistance in making such judgments. Although a few publications have provided some guidance on the use of specific training methods, the central issues to be considered in the development of leadership training have rarely been systematically analyzed and discussed, and nowhere does there exist comparative analysis and guidance concerning the potentials and limitations of the instructional methods commonly used for developing leaders. The plain fact is that despite the large amount of resources, effort, and time that is devoted to activities which fall under the rubric of "leadership training," astonishingly little attention has been paid to the pedagogy of such training.

It is hoped that this report will contribute toward alleviation of that condition by bringing the field into perspective, providing some guidance to trainers, and, most important, highlighting issues that appear to have important relevance for both program design and research to improve leadership instruction.

FOCUS OF THE REPORT

Training for leadership may occur in many different contexts and for a number of diverse purposes. In some instances, the term "leadership" is used quite loosely, and programs or courses whose titles include the term may actually consist of content which purists would contend is only remotely related to the exercise of leadership, for example, technical decision making and problem solving. In other cases, especially within business and government, one can find programs in which "leadership" is never mentioned but which contain much content that is directed toward improving the ability of trainees to influence the activities of their personnel. Thus, training for leadership can include a wide spectrum of programs which may carry a variety of labels.

For this report, it is neither desirable nor necessary to be concerned with the many competing theories of leadership, with their sometimes subtle implications for training. Furthermore, training for leadership of informal groups is deemed not relevant for this report.

Most leadership training occurs within and for formal organizations. Trainees are individuals who either occupy or will be prompted to positions which require them to influence the actions of other people in order to obtain results desired by their organizations. The broad purpose of most such training is to enhance, in some way, the abilities of trainees to exercise such influences.

Accordingly, for the purposes of this report, leadership is "the process of influencing the actions of individuals, groups, and organizations in order to obtain desired results," and leadership training includes all courses and programs designed to enhance the abilities of participants to exercise such influence. This definition of leadership training encompasses instruction in all people-related aspects of work and performance. Thus, programs concerned with military leadership, as traditionally defined, are included, but instruction devoted to military tactical or technical decision making and problem solving, as well as other tactical or technical activities, is not considered to be leadership training. In a similar vein, programs in business and government concerned with human relations, supervision, and people-related aspects of management are deemed to be training for leadership;

however, training for supervisors and managers that addresses the technical or administrative aspects of work is not considered to be instruction in leadership. Most Organizational Development (OD) activities are not considered to be leadership training because they are devoted to analysis of the particular organizations to which participants belong and to improvement of the functioning of these organizations. However, where organizational diagnosis leads to provision of instruction in any aspects discussed here, this instruction is judged to be leadership training.

PLAN OF THIS REPORT

This report consists of two parts. Following this introductory chapter, Part I will be devoted to an analysis of the present state of leadership training. In Chapter 2, a survey of the history and current status of leadership training in America will be presented. Chapters 3 and 4 will be devoted to an analysis of the various instructional methods commonly used in leadership training programs, and Chapter 5 will consist of a review of literature concerned with the effectiveness of training programs and the various methods. In Chapter 6, the present state of the art will be summarized and potential directions for further improvement will be indicated.

Part II will be directed toward the improvement of leadership training, both through the design of individual programs and through research on issues related to the pedagogy of training. In Chapter 7, a proposed rationale for leadership training will be presented, together with a discussion of general implications for training design. Chapter 8 will provide specific guidance for selecting and using training methods to accomplish particular instructional objectives. Chapter 9 will be devoted to a discussion of potential research problems related to leadership training and of strategic issues involved in conducting research on leadership training methods. Finally, Chapter 10 will consist of an overview and conclusions.

PART I

THE PRESENT STATE OF LEADERSHIP TRAINING

Chapter 2

TRAINING FOR LEADERSHIP

It is certain that the published literature is not representative of current leadership training. Many competent trainers have neither the time nor inclination to publish descriptions of their activities. The field is much more active, viable, and varied than might be concluded solely from perusal of the literature.

The military services have long been aware of the necessity for training leaders. Almost since the beginning, the service schools have provided instruction in leadership and, periodically throughout their careers, officers and noncommissioned officers are required to participate in leadership training appropriate for their rank and level of experience. Recently, renewed concern for the quality of military leadership has resulted in even greater emphasis upon training. Yet, descriptions or discussions of such programs rarely appear in the literature.

In business and government, the situation is little different. Ever since the revelations coming from the now famous Hawthorne studies (Mayo 1946), it has generally been accepted that emphasis by managers upon the human variable in organizations is a good thing. Accordingly, training devoted to leadership has received increasing attention. There are now vast numbers of training programs with titles such as "Principles of Leadership," "Fundamentals of Human Relations," "Supervisory Practices," and "Management Development Seminars." Many such programs have never been documented and, certainly, most have not been represented in the published literature.

Training for leadership is conducted in all branches of the armed forces, vast numbers of business and industrial firms, most agencies of the Federal and state governments, many city governments, and colleges and universities. In addition, private consulting firms and a number of nonprofit institutions conduct periodic programs and seminars concerned with various aspects of leadership.

THE ARMED SERVICES

Data are not available concerning the number of leadership training programs conducted by the armed services, or of the number of trainees who pass through such programs. The military services have been engaged in the training of leaders for a long time, however, and, at present, such training is quite extensive.

Leadership takes its purest conceptual form in the armed forces. Although there have been occasional controversies within each of the services over the relationships between command, leadership, and management, and the relative emphasis that should be placed upon leadership and management, all services instruct in leadership to some extent. The services differ somewhat, however, in the relative weights given to leadership and management in their training activities.

In the armed services, leadership training is most frequently conducted as identifiable blocks of instruction, treated separately from other functional areas such as tactics, management, and technical activities. Surprisingly, however, in view of the strong emphasis placed upon leadership, blocks of instruction devoted to it are commonly quite brief in comparison

to the amount of time allocated to other topics. For example, until quite recently, a 9-month career qualification course at one of the major service schools included only a 20-hour block addressed to formal instruction in leadership. At local installations, some services offer training programs devoted to leadership for noncommissioned officers.

Navy Department

Apparently because of decentralization of training responsibilities, the U.S. Navy has not until recently taken any single integrated approach to leadership training. Each command had responsibility for developing and conducting training for its own personnel. Therefore, programs were, for the most part, designed according to the perceived, or assessed, needs of the separate commands and, as might be expected, included a variety of formats and training methods.

Recently, the Navy has undergone a reexamination of its leadership training practices (Scanlund and Pepper, 1978). Following McClelland's (1973) "competency-based" approach to the identification of job-related leadership skills, five major leadership and management functions or factors were identified as performed by "superior" officers and noncommissioned officers. These functions, comprised of 27 competency categories, are the bases for the development of a comprehensive Leadership and Management Education and Training (LMET) program (Campus, 1980).

To achieve standardized implementation of this program throughout the Navy, the Chief of Naval Education and Training has been designated training agent. Instructors are deemed to be the key to success of the program. Accordingly, instructors have been selected against rigorous criteria and trained in LMET concepts and methods by the program designers. No one will be allowed to teach leadership and management who is not a graduate of the LMET instructor course conducted by the Navy's Human Resources Management School.

Courses for officers and noncommissioned officers concentrate on the five common functions identified as performed by "superior" personnel. Case studies and problem analysis at students' levels of responsibility are the principal training methods. The ultimate goal is "job specific" leadership and management training for all Navy leaders. Initially, training has been provided to leading petty officers, leading chief petty officers, division officers and department heads, prospective executive officers and prospective commanding officers scheduled for Fleet billets. Courses are now being expanded to other eligible personnel. Eventually, all personnel in leadership positions will receive LMET training.

Leadership training within the U.S. Marine Corps follows more conventional military training lines. Leadership instruction is continuously under scrutiny, however, and, as new concepts or trends are identified, they are integrated into ongoing programs.

Department of the Army

In the U.S. Army, decentralization of training is still supreme. Leadership instruction is provided by each of the several service schools, the U.S. Army Command and General Staff College, the U.S. Military Academy, and Noncommissioned Officer Academies conducted by local units and installations. Army Field Manual 22-100 addresses the topic of leadership; however, the material contained in it actually constitutes guidance more than doctrine. Accordingly, designers of the many Army leadership courses are pretty much left to their own training, experience, and ingenuity as to what content goes into a program and which methods are used to teach it.

The result is a melange of leadership training programs, each somewhat different from the other in terms of content and taught by almost every conceivable method, with greatest methodological weight given to lecture and "conference" (class discussion). Programs

which include provision for skill development directly within the leadership block of instruction are quite rare. Thus, formal leadership instruction in the Army follows an almost exclusively cognitive orientation. Considerable reliance is placed upon leader development on the job; experience in handling real leadership problems, together with guidance, coaching, counseling, and critiques by organizational superiors is supposed to result in maturation of neophyte leaders. Such experience and guidance, however, is unsystematic and unmonitored.

Recently an attempt has been made to systematize leader development in the Army (U.S. Army Administration Center, 1975). A model for leader development throughout the career cycles of officers and noncommissioned officers has been proposed. The model recognizes the importance of both knowledge and skills to effective leadership and envisions a developmental cycle in which formal training is interspersed throughout the cycle, with changing relative focus upon personal, interpersonal, organizational, and task skills respectively, depending upon anticipated job requirements at various stages in the career cycle. Training would be focussed upon development of skills needed in the several stages.

At this writing, the proposed plan is under review and, if approved, will be implemented throughout the Army.

Department of the Air Force

Probably because of its complex technology, much greater relative emphasis appears to be placed upon management in the U.S. Air Force than in the other services. Although much that can be construed as leadership is taught, separate blocks of instruction or programs devoted solely to leadership are rare. More commonly, topics taught as "leadership" in the Army appear under the general rubric of "Human Resource Development" in the Air Force. As in all the services, greater stress is placed upon leadership in training lower-level leaders than in programs for higher-level officers.

Leadership blocks and programs are more similar to civilian programs in content than either the Army or the Navy. Again, however, training is mainly cognitive.

BUSINESS AND INDUSTRY¹

Within business and industry, programs that fall under the rubric of leadership are concentrated most heavily in training for first-line supervisors. Leadership topics are less prominent in programs for middle managers, and only rarely do they appear in those for higher-level managers, except in offerings of institutions specializing in this type of training (Center for Creative Leadership; National Training Laboratories).

Harwood (1978) reports a broad-ranging survey of supervisory training in 125 industrial firms in the United States employing more than 155,000 workers. The firms were representative of both large and small industry nationwide, and the data produced by Harwood can be taken as representative of supervisory training in this country. He summarizes the broad objectives of the surveyed programs as follows:

- (1) To teach and apply/develop/improve leadership/management/supervisory attitudes, knowledge, skills, and techniques essential to get results through people.

¹ Much of this section is based upon the findings of a survey directed by R. Frank Harwood (1978) under the sponsorship of the Bureau of Occupational and Adult Education, Office of Education, DHEW. However, the conclusions and opinions appearing in this section are those of the author of this report, unless otherwise indicated.

- (2) To get the supervisor oriented to his leadership role and identified as a team member.
- (3) To meet specific needs identified by managers and supervisors.
- (4) To cross-pollinate thinking.

To accomplish these objectives, the surveyed programs covered topics with a variety of labels. Harwood summarized the topics as follows:

- (1) The Supervisor's Leadership, Authority, and Responsibility
- (2) Functional Communication
- (3) Effective Motivation
- (4) Understanding and Improving Human Relations
- (5) Planning, Organizing, and Controlling Meetings
- (6) How to Solve Problems
- (7) How to Train
- (8) How to Reduce Cost to Improve Profit
- (9) Developing Skills to Handle Grievances and Reduce Conflicts
- (10) Performance Appraisals and Growth Opportunities
- (11) Consistent Administration of Discipline
- (12) Safety Practices, Policies, Procedures
- (13) Labor Relations and Labor Laws

It is apparent that the topics covered often reflect the concerns of company management as much as those of supervisors. It is also apparent that much of the training is devoted to supervisory role behaviors. Companies usually want their supervisors to act like supervisors.

Harwood found that instruction was provided by local company staff (61 percent), college/university consultants (24 percent), and national company staff (15 percent). Thus, leadership training is conducted predominantly by company personnel at the local level. Most instructors possessed college degrees.

The programs were analyzed in terms of time allocated to various training approaches. Harwood reports the following breakdown:

	<u>Percent of Total Time</u>
New Concepts (presented by lectures, films, games, home-work, discussions)	25
Insights (conveyed by surveys/inventories/questionnaires, lectures, discussions)	25
Skills (introduced by lectures, games, films, discussions)	25
Practice (gained through training exercises, i.e., role playing, games, buzz groups, discussions)	25

It can be seen that time in the program is divided more or less evenly between knowledge transmission (new concepts) and development of insight and awareness, with approximately one-half of the time devoted to skill development and practical exercises of some sort.

Methods used in training were also reported by Harwood:

<u>Method</u>	<u>Percent of Total Time</u>
Presentation (lectures, films, games)	25
Reaction Response (structured group discussion and/or completion)	25
Games and Experience	20
Open Discussion	10
Homework	10
Film and Tape Recording	5
Survey/Inventory/Questionnaire	5

It appears that only about 20 percent of the time is devoted to experiential methods ("Games and Experience"). The remainder of the time appears to be devoted to some sort of cognitive methods.

Harwood concludes that the programs surveyed "are effectively teaching criterion referenced attitudes, knowledge, skills, and techniques essential in productive human relations which motivate employees." However, he also concludes that the programs "have very limited success in developing communicative, planning, organizing, controlling, and other allied skills/knowledge, and understanding." Harwood's conclusions are based upon the reported judgments of supervisor-trainees and managerial personnel about the caliber of the programs. Unfortunately, such judgmental data do not provide much valid information about the actual effectiveness of the training.

Although Harwood's conclusions about program effectiveness can be questioned, his data concerning objectives, topics, approaches, and methods contribute considerably to understanding of the general state of leadership training in business and industry. It appears that training that can be placed under the rubric "leadership" is quite wide spread and popular, includes a variety of approaches, concepts, and methods. The instruction is mainly cognitive, even when practical exercises are used, heavily discussion oriented, with some programs providing relatively small time segments to experiential training of various types.

NONMILITARY FEDERAL GOVERNMENT

Training within nonmilitary Federal government agencies is very extensive. Current data concerning the extent of leadership training within Federal agencies could not be obtained; however, Tracey (1974) states that, 199,964 Federal employees participated in administrative, management, and supervisory training programs in Fiscal Year 1971. From examination of the training catalogues issued by the Office of Personnel Management (OPM), it is apparent that a large proportion of such programs fall under the rubric of leadership. Non-technical training programs for supervisors and managers are strongly weighted toward the "people" aspects of work.

The OPM Catalogue and course outlines of typical supervisory and management programs, indicate that most lean heavily toward cognitive and group methods of training

(conference method, small-group discussion, role playing). Some experiential methods are used in workshop programs, especially for middle managers. Most trainers are government employees; but, occasionally, college instructors or consultants are employed to conduct courses.

SUMMARY

Although accurate data are not available concerning the amount of leadership training that is conducted in the United States, there can be little doubt that such training is quite widespread. It occurs in a variety of contexts and takes many different forms. A wide range of instructional methods are used.

One of the main obstacles to understanding the present state of leadership training is the variety of contexts in which it occurs. This diversity of contexts and programs makes it difficult to assess the state of the field and, indeed, may be a principal determinant of its current level of development.

It is clear that leadership training is flourishing. Expenditures for such training run into the millions of dollars annually and the manhours spent by trainers and students is astronomical. Yet, most programs are unmonitored and uncontrolled by managements who have authorized such efforts. What is more, as will be shown in later chapters, most programs have never been seriously evaluated and there is reason to believe that many are ineffective.

Leadership training is popular because managements, military and civilian, recognize the serious needs that exist in most organizations for good leaders at all levels. Trainers have the job of meeting these needs through provision of instructional and developmental opportunities. Their problem is to find the most effective ways for providing such opportunities. This is basically a pedagogical question—a matter of methodology.

Chapter 3

COGNITIVE AND GROUP METHODS

The methods used in leadership training programs differ greatly in their approaches and procedures. However, when trainer-imposed variations are taken into account, the discrete training methods that are used for leadership instruction reduce to a relatively small number.

The importance of training methods lies not in themselves but in how well they change people's behavior, and in what direction. In the discussion to follow, the principal methods will be examined from that perspective. Examination of each method will focus upon such aspects as the operations involved, the underlying rationale, and learnings the method appears to accomplish. Statements of specific learnings a method will accomplish should be considered informal hypotheses which are lacked by some evidence but which should be substantiated by systematic research.

COGNITIVE METHODS

Some methods rely almost completely upon cognition for their effects. They involve the communication of information or ideas and the use of logical thought processes. Most are concerned with imparting information or developing problem-solving and decision-making abilities.

Lecture

Lecturing is the traditional method by which one person who has information or is an expert in some field passes on his knowledge to others. The lecture usually involves an instructor who orally presents information to a group of trainees. The lecture may be supplemented by having students read textbooks or other material outside of class. During the lecture, the instructor may use diagrams, slides, or other visual aids to help communicate his material more meaningfully.

Characteristically, students sit quietly, listening, and they usually exhibit a minimum of overt activity. In some instances, the lecture may be interrupted for discussion, or it may be followed by a question-and-answer period. Generally, there is only a little interaction between the lecturer and individual students and virtually none between students.

For certain purposes, particularly for communicating facts, rules, doctrine, and so forth, lectures appear to be useful. In leadership training, however, the lecture is used alone infrequently. More usually, it is used in conjunction with some other method, where it serves the function of furnishing a conceptual framework with which to approach the problems that may be present.

Learning from lectures appears to be almost completely cognitive. Little evidence exists for attitude change resulting from lectures alone, and of course, the nature of the method implies no attempt at skill development.

Therefore, the lecture appears to be useful for supplying a conceptual framework, a way of approaching leadership problems (Bennett, 1956). Also, it affords the possibility of developing in students an appreciation for human relationships in work and increasing awareness of important leadership issues.

This leads to the two major criticisms of the lecture when it is used alone or when it is relied upon as the principal method. The first criticism is related to the passive nature of the learning situation. The lecture provides for an active trainer and a passive student. Accordingly, a trainee may, if he desires, close his ears or his mind to the material presented. Involvement is minimal. Thus, motivation to learn rests almost entirely with the student. Leaving motivation to the student may be desirable in academic situations; in leadership training, however, it can be disastrous. Too frequently, leadership training may threaten a student's self-image, thus giving rise to resistance to both the trainer and the learning situation. More active participation increases involvement and tends to lessen resistance.

The second criticism involves the nature of the learning that results from lectures. Because of the purely cognitive aspect of the lecture, there is no possibility either for learning and practicing skills or for actually experiencing the kinds of situations with which a leader will be faced. Accordingly, the lecture appears to have limited value as a training method when used alone.

Case Methods

Case methods of training are not restricted to human relations material; however, they have achieved their greatest popularity in this field. In general, case methods involve the exposure of students to concrete interpersonal and organizational situations with some temporal and developmental span in which a complex of variables is at work. The cases are descriptions of actual situations from real life, and students discuss them with the objective of discovering underlying principles, if any, and applying them to the diagnosis and solution of the problems.

Several approaches to the study of cases have been developed. In fact, some practitioners consider role playing and even sensitivity training to be derivations of the case method (Benne, 1961). For the purposes of this paper, however, the distinction will be retained. Here, the case method will be limited to the classical Harvard case study, a modification which Pigore calls the Incident-Process Method, and the Abbreviated Case (Nicholson, 1956).

The Harvard Method. The case method of teaching originated in law schools where students learn by analysis of actual court cases. Later, the method was adopted by the Harvard Business School, where much of the curriculum is now oriented to a case approach. It is this orientation which governs most case studies for leader development today. The approach rests upon a carefully disciplined rationale encompassing case preparation, discussion leading, and method of analysis (Andrews, 1960).

A case typically is a record of an organizational issue which actually has been faced by leaders. Surrounding facts, opinions, and prejudices upon which leaders' decisions had to be made are included. These cases are presented to students for considered analysis, open discussion, and final decision as to the type of action which should be taken. Most frequently, cases are assigned in advance of the discussion so that students will have opportunity for careful analysis. The case is then discussed in class, with the instructor serving as moderator. Students may also be required to submit written analyses.

Usually, a course is limited to case analysis and discussion. Occasionally, supplemental readings may be assigned. In the classical Harvard method, no theory or principles are presented. However, some training programs have used lectures to provide a frame of reference for thinking about the problems.

Under the case system, the trainer's role is to assign the cases for discussion, to act as a responsible member of the group, delegated to provoke argumentative thinking, and

to guide discussion by his own contributions and questions toward points of major importance. He may, if he chooses, take a final position on the viewpoints which have been threshed out before him.

According to the Harvard method, it is axiomatic that the instructor will adopt a nondirective role, withholding own opinions and attempting at all times to establish a permissive atmosphere. He is concerned solely with the quality of student thinking and with stimulating deeper and more mature problem analysis. A basic premise is that the individual will learn and remember better those things which he discovers for himself. Accordingly, the function of the trainer is not to give answers but to help the student to develop his analytical ability.

Practitioners of the method contend that preparation of case material is extremely important. In order for proper analysis and discussion to occur, the case must contain appropriate background, facts, conflict, and sequence of events. One characteristic of case writing is strict adherence to a constant point of view. The writer supplies only events and facts; feelings and thoughts of the characters are not reported. Furthermore, he looks not only at the active instrumental elements of the situation but at the processes by which the action takes place—processes in terms of (1) interactions among people, (2) the behaved or verbalized expressions of these people.

At this point, a distinction should be made between a training case written for case study and a case history. A training case is a carefully designed description of a problem situation, written specifically for the purpose of provoking systematic analysis and discussion. As such, it does not necessarily represent a complete description of all facts and events. A skillful writer composes his case with the objective of creating a challenging problem. What is more, the outcome is never revealed. The case is brought to a point requiring decision and action; then, it stops. In contrast, a case history usually involves the historical description of a person, a situation, or an event. It is intended to illustrate some type of behavior, a phenomenon, how a problem was resolved, etc.

This is the primary distinction. A training case is intended to pose a problem; a case history illustrates something. Proponents of the case method would contend that a case history is a poor vehicle for training in leadership.

It should be noted that cases can be written to highlight the particular orientation of the program. For example, cases for courses dealing with leadership might emphasize interpersonal aspects of a situation. On the other hand, a case intended for a course in technical administration could highlight the formal organizational aspects of the same situation.

Accordingly, composition of the case is extremely important and requires a high degree of skill. If cases are not structured so as to challenge mature analysis and stimulate discussion, failure is likely (Lawrence, 1960).

The case method rests upon a two-pronged rationale concerned with: (1) the knowledge and skills required to function effectively as a leader, and (2) ways of best teaching students the requisite skills.

Under this approach, it is believed that, so far as responsible activity in the real world is concerned, a fund of ready-made answers can be of little avail (Gragg, 1960). Each situation is a new situation, requiring imaginative understanding as a prelude to sound judgment and action. Usually, an individual will not have all of the facts and viewpoints, and, thus, there is no one best answer. Accordingly, what is most needed is the ability to take all available information, sift out relevant facts, see the relationships between them, and make sound judgments and decisions relative to them.

Corollary with this view is a position on the best way to equip students to solve real-life problems. This position attacks the assumption of traditional academic teaching

that it is possible by a simple process of telling (lecture) to pass on knowledge in a useful form. If the learning process is to be effective, "something dynamic must take place in the learner" (Gragg, 1960). No amount of information, whether of theory or fact, in itself improves insight and judgment or increases ability to act wisely under conditions of responsibility. Thus, advocates of the case method contend that students must be initiated into the ways of independent thought and responsible judgment by being confronted with "real" situations which must be analyzed and by submitting their analyses to the criticism of contemporaries.

The case method attempts to put the burden of independent thinking upon students by forcing them to use their own knowledge and insight. This is accomplished by inculcating a fact-finding approach to problems, which is expected to become a characteristic way of thinking.

Thus, the case method rests upon a carefully developed rationale. Since the logic of the approach is reasonable, it has attracted many advocates. However, for the purposes of this paper, an important question remains. What precisely can the case method be expected to do?

The case method appears to train students in the skills of conceptual diagnosis. Over a long period of exposure to case analysis, a student comes to develop a characteristic fact-finding approach to problems. As Benne (1961) puts it, "If the case discussions are well conducted, he may, over time, broaden his repertoire of diagnostic schemes and acquire some of the attitudes required for dependable and accurate diagnosis—suspension of judgment, acceptance of variety in people and situations, and humility before the complexities of organizational, group, and individual behavior."

Training time appears to be a critical determinant of the effectiveness of the method. Case study attempts to develop a characteristic way of approaching problems. This is not usually accomplished by a two-week program or by exposure to only a few cases. Students at the Harvard Business School deal with little but cases for their two academic years, and instructors state that really mature analyses do not begin to appear until well into the second year (Gragg, 1960). In view of such statements, it would be worthwhile to know precisely what, if anything, can be learned in a brief exposure to Harvard case study. This would appear to be a fruitful area for some factual research.

In summary, it appears that the Harvard method is useful in training students to diagnose broad human and organizational problems. It provides little opportunity for learning skills of behaving in interpersonal situations.

The Incident-Process Method. According to Pigors and Pigors (1954, 1961), the Harvard case method has serious limitations. For one thing, classically written cases present most of the available facts in the situation. Pigors contends that, when given all information, the student has no opportunity for developing skills in evaluating problems, in determining what facts are needed, and in digging them out. It is his belief that the Harvard method trains only in problem analysis and not in fact finding.

Furthermore, Pigors maintains that, since students using the classical method never know the real outcome of a case, they miss the benefit of comparing and analyzing the differences between their decisions and those made by experienced leaders.

Finally, Pigors contends that the nondirective leadership required in the traditional method prevents students from getting closure on the problems and that this inhibits learning.

In order to combat these inadequacies, Pigors has developed a modification which he calls the Incident-Process method of case study. In Pigors' method, a brief incident requiring adjudication and decision is presented to students. The class must decide what additional information is required. The discussion leader is provided with background and factual material which he furnishes only upon specific request from the group. Thus,

students may finally be required to decide a case on the basis of only partial information, because they failed to ferret out everything needed to make a valid judgment. Over time, trainees learn to analyze brief incidents in terms of relevant facts and also become skillful in obtaining these facts. Pigors believes this process develops the fact-finding ability required by effective leaders.

After obtaining the desired information, each trainee writes his decision and the supporting reasons. The decisions are presented publicly and debated with pressure toward arriving at a common conclusion. The students then hear the real decision and analyze the adequacy or inadequacy of their fact finding and decision making in contrast with it.

In this way, Pigors hopes to overcome some of the limitations of the Harvard method. But, here also, learnings appear to be restricted to development of diagnostic skills (Marshall, 1954). Although students interact more realistically in trying to reach group decisions, there is no opportunity for studying and trying skills of acting in situations similar to those studied.

One final comment is important. Both the Harvard case study and the Incident-Process method appear to rest on the assumption that the principal function of leaders is decision making. Under both approaches, the major effort is directed toward developing ability to make better decisions. Therefore, training tends to underemphasize the interpersonal dynamics involved in leadership.

The Abbreviated Case. When the Harvard method is strictly followed, lengthy advance preparation by students is inevitable. The requirement for full access to all facts and information in the case usually results in a fairly comprehensive printed document. Accordingly, mastery of the case requires students to engage in extensive preparation for in-class discussions. In some instances, such preparations may be desirable, and, certainly, intensive analysis of a complex case should be conducive to learning. However, there may be situations when caliber of students or other demands upon student time preclude extensive preparation. One way to provide students with full access to essential information and still avoid the long preparation required by the Harvard method's extensive documentation is the abbreviated case (Nicholson, 1956).

The most important advantage of the abbreviated case is its brevity. Reading seldom requires more than 15 minutes. If desired, cases can be assigned at the beginning of each class period, to assure that all participants are adequately prepared. Furthermore, since the abbreviated case presents only major points in the reported situation, it becomes easier to keep discussions focused on central issues. This also simplifies the task of discussion leaders.

The principal disadvantage of the abbreviated case is that unimportant facts are eliminated and the minimal information that is provided is presented in such a straightforward manner that students have no opportunity to practice sifting out essential elements from those that are not important. Thus, analysis may become oversimplified as compared with real situations where an individual may have to weigh and discard a number of secondary factors before arriving at a diagnosis of the central problem.

One modification of the abbreviated case which should be mentioned is the dramatized case. In this form, a short case is presented through the medium of either tape recordings (Jacobs, 1963) or film (Lange, et al., 1956). The cases are usually open-ended; that is, they reach a critical point of conflict and end without resolution of the problem. The class then discusses possible issues and solutions.

The principal advantage of the dramatized case is that it communicates important facts without preliminary reading and with heightened dramatic effect. On the other hand, their effectiveness is usually confined to the presentation of dialogue situations.

Thus, the oral form of presentation restricts cases mainly to human relations problems. Cases dealing with nonhuman aspects such as planning, organization, and technical problems are difficult to portray.

Contributions of Case Methods. Maier, Solem, and Maier (1957) summarize the intended contribution of the case method as follows:

1. It discourages the making of snap judgments about people and behavior.
2. It discourages believing in, or looking for, the "correct" answer.
3. It graphically illustrates how the same set of events can be perceived differently.
4. It destroys any smug generalizations one might have about right vs. wrong answers, management prerogatives, the attitude of labor, best methods of discipline, the younger generation, the place of women in management, and many other issues.
5. It trains one to discuss with others, and experience the broadening value of interacting with one's equals.
6. It keeps the thinking in a practical setting, so that such considerations as costs, convenience, deadlines, attitudes of top management, and the morale of other persons involved prevent solutions from taking on an idealistic character.
7. It causes doubt as to whether there really are basic human relations principles.

It appears that the main accomplishment of the case method is to develop a diagnostic orientation—at the cognitive level. Furthermore, through the experience of testing of his ideas against the opinions of others, a student may learn a greater tolerance for the ambiguities of organizational life.

Certain limitations also are inherent in the case method. For example, it cannot readily reproduce the unfolding quality of actual events. Realism in the cases is thus reduced.

A more critical problem concerns the fact that the material under scrutiny is the behavior of someone else. Accordingly, a trainee engages in a rather safe, impersonal analysis of a situation in which he is not actually a participant. Diagnosis thus becomes merely an intellectual exercise. The case method does not provide for bringing the behavior of the trainee to the point of testing it in action and of subsequently analyzing the behavioral consequences both for himself and for others. Equally important, the case method makes no provision for learning and practicing the skills of acting.

GROUP METHODS

For this discussion, "group methods" are specific techniques which are designed to use group processes to stimulate learning. Thus, merely reducing class size to a small number of students so that more discussion can occur or the implementation of periodic special discussion sessions does not constitute the use of group methods of instruction. Rather, group methods are training procedures which are designed specifically to use the social-psychological forces in small groups to enhance and maximize the conditions under which learning occurs.

Conference Method

The conference technique is by far the most popular method currently used in leadership and human relations training (Campbell, Dunnette, Lawler, and Weick, 1970).

Reasons for its popularity are not difficult to find. For one thing, a rationale has been developed that gives the conference method a measure of respectability. An even more important reason is that, in theory, the method does not require a subject-matter expert. Accordingly, it is possible to train a content-naive person in a reasonably short time so that he can do a creditable job as a conference leader. For these reasons, the conference technique has become the method of choice in many organizations where trainers who are not content experts are used.

The conference method involves a series of carefully planned meetings with specific goals, in which leader and participants discuss topics or problems relevant to the over-all purpose of the program. The method relies squarely upon group discussion for learning; but, in contrast to unstructured situations used in some methods, the conference technique has specific topics and is dependent upon the trainer's manipulation of the discussion process such that it is always directed toward achieving the program goals. Usually, the trainer does not present principles, theory, or ways of handling situations. Rather the group is confronted with a problem and members speculate about possible improvements. Solutions may be suggested by members and then evaluated by the group through a free exchange of experiences and opinions. The group may evolve ideas which become the accepted solutions, or the trainer may guide the discussion along some particular line toward a predetermined solution of his own.

It can readily be seen that, in its purest form, the conference method takes a highly "practical" approach to leader development. Trainees are not exposed to theory, principles, readings, or expertise. Rather, discussions and problem solutions derive from students' own experiences on the job.

It is important to distinguish between the "free" conference and the "directed" conference. The free conference involves a completely unguided discussion and is usually problem centered. The agenda is developed by taking a problem-census in which participants suggest potential topics. Solutions are those freely evolved through discussion.

The directed conference is more frequently used for training purposes. Here, the trainer has a predeveloped agenda, and each topic is discussed. The discussion may be relatively free; more frequently, it is guided by the trainer, who has certain points which he makes sure are covered by raising them if participants do not. In some cases, the discussion is "directed" to the extent that the trainer actually manipulates it to reach a predetermined conclusion.

Some trainers also use lectures, case study, or role playing as auxiliary to group discussion. This is to be distinguished from the case method or role playing where these techniques are primary and discussion is secondary to them.

The conference method centers upon the conviction that frequent participation in discussion is essential. Accordingly, each session is limited to a small enough number to permit free interaction. Some attempts to overcome this limitation have involved the use of subgroups, panels, and so forth.

In the conference method, the role of the leader is fundamentally that of moderator rather than expert. Ideally, he serves as a neutral person, who coordinates the discussion, raises issues, and so forth. In the directed conference, this is in fact a false neutrality which can lead the inexperienced trainer into rather deep water.

Training through group discussion is not new. For many years, teachers have used discussion on the assumption that hearing others' viewpoints would result in cross-fertilization and the evolution of new ideas. After World War II, however, the conference method received new legitimacy based upon a scientific rationale.

When Lewin (1947) and his associates (Radke and Klisurich, 1947; Coch and French, 1948) developed the concepts of resistance to change and levels of behavior, with the

accompanying method of unfreezing, changing levels, and refreezing through group discussion and decision, the conference method received an impetus. When previously it had been concerned only with cognitive reorientation through a kind of consensual validation process, discussion was now seen as getting at something deeper.

In this new view, leadership behavior is held to be partially a function of attitudes, and training is a matter of overcoming resistance to change. This is accomplished by discussing problems and arriving at decisions about how they may be handled. Because the group resolves the problem itself with each trainee participating and because group standards endorse the new behaviors, members are committed to the solution. According to this rationale, the conference method is supposed to accomplish two purposes:

(1) trainees get new insight into problems by hearing the expression of many different viewpoints, and (2) they learn new problem-handling methods to which they are committed because of group discussion and decision.

The conference method has much to recommend it, particularly from the standpoint of training administration. For example, relatively naive personnel can be trained to lead conferences. Subject-matter experts are not required, although such specialists will certainly be able to improve the quality of a program. Conference leaders' guides can be prepared by experts to provide complete instructions with regard to steering a discussion. If required, a step-by-step outline can be developed to include all points to be covered, the words to use in opening and closing the sessions, conclusions to be reached, and so forth. The method thus permits conduct of training with whatever personnel may be at hand within an organization. Furthermore, if the leader is skillful, he can control the discussion, thus insuring that "school-solutions" are developed by the group.

Learning appears to be devoted mainly to the acquisition and understanding of conceptual material. Genuine change in attitudes is questionable. For example, Fleishman (1953) found no carry-over of newly learned attitudes when trainees returned to their jobs.

Perhaps more relevant to the conference method is the fact that the rationale is based on the concept of group decision freely determined by the participants. Guidance toward trainer-desired goals does not permit free group decisions. It can be questioned whether the rationale remains valid under these conditions.

A further problem involves the fact that the conference method usually provides no opportunity for skill practice. Because the method rests almost completely upon discussion, actual leadership practices are rarely tried. Thus, trainees get no experience with real behavior under either experimental or practice conditions. Some trainers attempt to overcome this limitation through the auxiliary use of role playing.

Finally, lack of a content expert can encourage superficiality. Because of the inexperience of trainees, discussions tend to skirt issues unless the conference leader can skillfully probe relevant points and raise questions which will cause participants to gain insight into underlying problems. In order to do this competently, the trainer needs to be knowledgeable enough to identify both critical issues and superficial diagnoses so that the group can be guided into more meaningful discussions.

In summary, it appears that the conference method provides for acquisition and understanding of conceptual material and for gaining insight into practical leadership problems through the exchange of viewpoints. Its alleged potentiality for changing attitudes is questionable, and it provides no opportunity for the development and practice of action skills.

T-Group

The T-Group is the most intensive method yet devised for developing interpersonal skills. It is a high-involvement technique based upon direct, personal experience and is

devoted to the development of diagnostic and action skills at a fairly complex level. For this discussion, the T-Group could have been classed validly as an "experiential" method. In fact, most adherents consider this type of training to be "experiential." However, because of its strong reliance upon group processes, the T-Group is discussed here as a group method.

The concept of the T-Group was evolved by a number of social scientists of the Research Center for Group Dynamics working under the sponsorship of the National Training Laboratories, then a division of the Adult Education Service of the National Education Association. The National Training Laboratories held its first summer laboratory in 1946 at Bethel, Maine, and, since that time, interest in this type of training has spread until laboratories are currently in operation throughout the country. Alumni of these sessions are now quite numerous and their activities have been felt extensively in business and government as well as in universities.

The T-Group is a specific technique of training based upon a carefully derived rationale (Bradford, Gibb, and Benne, 1964). Unfortunately, many ardent advocates, their opinions colored by the approaches taken in the particular programs they attended, have confused the training method with an orientation to leadership and human relations. For example, many so-called "sensitivity training" programs use the T-Group method but appear to espouse only one aspect of leader effectiveness, namely, personal insight.

The distinction needs to be clear. The T-Group is a method which uses the group as a vehicle for learning (Bradford, Gibb, and Benne, 1964). Within the group context, emphasis can be placed upon personal insight, group functioning, group decision making, interpersonal dynamics, and so forth. Which aspect will be stressed is determined by the inclination and ethical or theoretical persuasion of the training staff and even of individual trainers within it.

The T-Group method starts from the position that training aimed at behavioral change is not well suited to conventional methods of teaching. People do not learn by exhortation or by being told how they should behave in hypothetical situations. Instead, learning occurs through experiencing real events and then consciously analyzing what occurred. Thus, training must be process oriented.

Laboratory training has two aspects (Bradford, Gibb, and Benne, 1964). One emphasizes sensitivity to what happens in groups. Much of our daily life, particularly in organizations, is spent as participants of formal or informal groups. Therefore, it is important to acquire a knowledge of group processes and their causes, and also the ability to recognize symptoms of what is happening in the group and to move from symptoms to causal factors and relationships.

However, improved interpersonal relations can occur only after the individual is able to recognize the effects of his behavior upon other people and of others' actions upon him. Another aspect of T-Group training, therefore, involves a better understanding of self in relation to other individuals and groups.

The T-Group, for "training group" is a group (10 to 20 members) with relatively little predetermined structure with respect to goals, rules, or standards. The underlying rationale of training involves creating a group which, at the outset, has no framework for decision or action. Then, by members observing and studying how their group develops the procedures required for effective problem solving, it is possible to learn something about the psychological difficulties that any group may have. The goal, in brief, is to study how the training group develops the structures, procedures, relationships, controls, and so on, through which it becomes an efficient working unit. Members have their own group as a living example of an organization in process of development. They learn to participate while continuously observing the phenomena created by their own interaction.

In the training group, members share no common work problems which they can discuss to avoid facing the real psychological difficulties arising within the group. There is a trainer; but, he acts differently from an ordinary leader of a problem-solving group. The training group does not have a recording secretary, a chairman, or a parliamentarian. It has none of the ordinary work procedures that have been formalized in our culture. It has no explicit discussion structure or procedure for identifying a discussion topic. There is no agenda, because no one has told members what to discuss. With no prescribed agenda and no previously established rules for creating one, the group can study the way it solves the problem of deciding what it will do.

Learning about the difficulties involved in group functioning is also facilitated by the fact that the training group begins with no agreed-upon control system. It has no explicit basis for regulating action, for dealing with deviant members, for guiding reactions to the outspoken or destructive person, or for stimulating less active members to participate more freely. There are no rules or standards by which automatic decisions can easily be made about what is or is not the "proper" way of behaving. Since members have different histories, the implicit rules that any of them use on the outside may not apply equally well for others present. As a consequence, prior implicit rules of conduct may not be appropriate in the present situation. Members can, therefore, study how controls, regulations, and standards develop.

In short, this collection of individuals finds itself in a completely unstructured situation, where action is slowed down to such an extent that the phenomena which usually occur in groups only very slightly or under the surface are brought out into high relief. In the training groups, without output and time pressures, and with the opportunity for trying and analyzing consequences of various procedures and actions, it is possible for members to investigate and develop skills for preventing these things from happening in future work situations.

The distinguishing characteristic of such training is that, in the T-Group, members work on genuine problems. Before the group can progress, it must resolve questions of leadership, objectives, ways of working, and so forth, as they apply directly to that particular group at that specific point in time. Thus, members work on and study real problems as distinguished from the hypothetical situations offered by other methods.

The trainer does not act as chairman, does not give the group an agenda, nor does he limit participation. He does not indicate a procedure through which to coordinate interactions of members nor does he reward or punish types of behavior which from his point of view may be helpful or obstructive to the solution of the task at hand. His primary role is that of calling attention to certain critical events that have significance for understanding the psychological properties of interpersonal relations (Blake, 1957).

The observations and interventions of the trainer have several objectives. They include identifying the behavior that occurs among members, examining the subjective feelings produced from interaction, evaluating procedural assumptions on which the group approaches its task, and pointing out the manner in which membership functions are being exercised. His role, as ordinarily conceived, is not that of giving authoritative interpretations, or even of reflecting the emotional climate of the situation or the personal feelings of the members. Instead, he aims toward creating the conditions under which members become participant-observers, themselves learning to interrupt the action now and then to evaluate the meaning of the discussion from the points of view just mentioned. His objectives are to help members to acquire a diagnostic orientation which, when employed in real work groups, can improve understanding of difficulties faced by the group.

Feedback is the mechanism which allows group members to observe and analyze their own participation. Member interactions may be interrupted at key points by the

trainer or noted by a process observer who may report them back to the group in a later feedback period. These interactions are interpreted by the trainer in terms of motivations, procedural assumptions, membership functions, and consequences for effective group action. Members are able to check the accuracy of their own analyses and understandings about what is happening against the perceptions of other members, the observer, and the trainer. It is from members testing the accuracy of their own perceptions and evaluating the quality of their own skills that learning is assumed to occur.

This, then, is the T-Group. The primary objective is to create a group that converts its continuing experiences into information for discussion and analysis; the curriculum is basically the phenomena of its own group life. Within the basic method, emphasis may vary according to the orientation of the trainer. Thus, stress may be placed upon personal insight and empathy (Tannenbaum, Wechsler, and Massarik, 1961), group functioning (Blake, 1957), leadership in organizations (Schein and Bennis, 1965), or variations and combinations of any of these (Golembiewski and Blumbers, 1970).

Progress of this technique has been watched closely by numerous sophisticated observers. Accordingly, opinions concerning the learnings achieved are very definite.

After an extensive survey of the literature, Campbell and Dunnette (1968) summarized the most common objectives of T-Group training as follows:

- (1) Increased self-insight or self awareness concerning ones' own behavior and its meaning in a social context.
- (2) Increased sensitivity to the behavior of others.
- (3) Increased awareness and understanding of the types of processes that facilitate or inhibit group functioning and the interactions between different groups.
- (4) Heightened diagnostic skill in social, interpersonal, and intergroup situations.
- (5) Increased skills of acting in interpersonal situations.
- (6) Increased ability to learn from interpersonal experiences.

In general, the major learning to come from T-Group appears to be heightened skill in diagnosis and action. In addition, this skill seems to be transferable to the work situation. Benne believes that a trainee develops some basic methods of behaving that help him to continue learning after leaving the training situation. According to Benne (1961), "What is transferred seems to be not alone the particular substantive skills of diagnosis-action actually practiced and learned in the training group. A method of learning through participant-observation is also transferred to the work situation so that on-the-job growth by the administrator can continue with some measure of commitment and discipline achieved to support this continuation of growth."

Use of the T-Group method also presents certain difficulties. First, traditional T-Group training is expensive. A training group, for example, can accommodate only a limited number of members (10-20). This means either that a large training staff is required so that several groups can be operated simultaneously or that student classes must be exceedingly small. Blake and Mouton (1962) describe a modification which appears to overcome this problem. Blake's "instrumented groups" have no trainers. Training staff is required only for general sessions, where larger groups can be handled, and for administration. Thus, a two- or three-man training and administrative staff can teach a 120-member session. Instrumented groups become an integral part of Blake and Mouton's Grid training.

A further limitation is that the classical T-Group method requires highly skilled instructors. Background, experience, and skill of the trainer is the principal determinant of training group success and, although many successful trainers do not meet the rather stringent doctoral and apprenticeship requirements advocated by Bennis, Benne, and Chin (1961), it is essential that they have an understanding of fairly complex group and individual dynamics, experience as participants in training groups, and instruction and practice in T-Group training procedures.

A somewhat different limitation is the fact that, unless special provision is made, T-Group training tends to slight the organizational relationships in leadership. This limitation can be overcome. Blake's Grid Training (Blake and Mouton, 1964), places primary emphasis upon organizational relationships while retaining the basic rationale of T-Group training.

In the opinion of many, laboratory training is the best technique yet devised for developing human relations effectiveness. However, as will be shown in Chapter 5, this view has yet to receive complete verification through research.

Chapter 4

EXPERIENTIAL AND MIXED METHODS

EXPERIENTIAL METHODS

More and more trainers are becoming convinced that any kind of applied learning requires that trainees actually experience the phenomena which are the content of training. The result of these convictions is a recent rapid increase in the use of "experiential" training methods. These methods are designed to provide trainees with actual experience and practice, permitting them to see and feel the effects of their actions upon others as well as themselves.

Experiential training rests upon one fundamental premise: that learning of some sort will occur if students' experience relevant and meaningful activities, problems, and situations, and the consequences of their actions. In experiential training, provision is made for students to experience the dynamic interaction between their decisions and actions on the one hand and an actively reacting environment on the other. Thus, trainees "discover" the implications both of their actions and of numerous complex variables upon effectiveness. Learning achieved in this way is considered to be more meaningful, more lasting, and more relevant than that accomplished solely through conventional classroom instruction.

Although the rationale of experiential training is not often clearly formulated, the fundamentals can be identified. Basic to the rationale is the contention that the purpose of most instruction is not solely to transmit facts, concepts, or doctrine. An additional purpose is to help students to translate knowledge so that it becomes meaningful to them within the contexts of their own life experiences. Thus, the primary objectives of experiential training are (1) to make a student consciously aware of the implications of his decisions, his actions, and situational factors for the outcomes of events and activities in which he participates and (2) to help the student to become skillful in assessing ongoing situations and acting effectively within them.

It should be apparent that experiential training has a very similar rationale to the "performance-based instruction" which became the foundation of military training in recent years and is increasingly used by some of the more progressive trainers in civilian organizations. In fact, experiential training can be construed as performance-based instruction of a complex type.

Role Playing

The case method has one limitation which has special significance for leadership training. Although cases often describe relationships between people, they are not capable of portraying the more dynamic aspects of interaction. Because the printed word is inadequate to communicate the many behavioral cues available in the face-to-face situation, much of the actual flavor is lost. In an effort to overcome this limitation, many trainers have turned to role playing.

According to Corsini, Shaw, and Blake (1961), role playing may be defined as "a method of human interaction that involves realistic behavior in imaginary situations." This rather general definition implies that role playing can be used for many purposes,

and, indeed, such is the case. Developed originally as a therapeutic technique, role playing has also been successfully used for training evaluation, problem illustration, and problem diagnosis. However, its greatest popularity has been achieved in training.

For training purposes, a situation is presented to a class, and some members are asked to assume roles and enact the situation toward some resolution. Other students observe the behavior of the actors. Following the scene, observations as well as thoughts and feelings of the actors are reported and discussed by the class. In this way, faulty diagnoses, alternative actions, and discrepancies between diagnoses and action can be identified. Alternative ways of handling the situation may be tried by replaying the scene. Role playing thus provides trainees with the opportunity to observe, experience, and practice actual behavior in contexts somewhat similar to the real thing.

Of particular importance is the fact that the full significance of training is related to the elegance of the problem solution only in a minor way. Focus is upon the relationships and interpersonal impacts of the actors in the process of interaction. Therefore, analysis is concerned with behavior rather than concepts.

This emphasis upon experienced behavior is the main characteristic which distinguishes role playing from the cognitive methods discussed earlier. Because most leadership problems occur when two or more people interact, the basic approach is to create effective interpersonal situations, use various methods of collecting information about behavior and feelings, analyze the information, and endeavor to draw generalizations from the analysis. Generalizations and hypotheses, in turn, are tested in action as learners try out new skills. Thus, learning is more than verbal. Because the learning grows out of experience, because it deals publicly with the nature and behavior of the individual and groups, role playing is very different from training situations in which behavior is talked about but never examined and in which students never experience what is discussed. Role playing has the fundamental objective of making a trainee consciously aware of the implications his behavior has for others and their activities have for him, and of helping him to become skillful in diagnosing and acting in ongoing interpersonal situations as they occur.

It is not the purpose of this discussion to present a manual for role playing. For this reason, the numerous modifications of the basic method will not be described. Several books concerned with role playing have been published (Corsini, Shaw, and Blake, 1961; Klein, 1956; Maier, Salem, and Maier, 1957), and each contains excellent descriptions of the operations involved in the various modifications. Of more importance here are the rationale and benefits of role playing as a training method.

The rationale for role playing starts from a conviction that the problem of training is not solely to transmit facts or viewpoints but to help the student translate knowledge so that it becomes meaningful in his experience. Seen in this way, learning occurs when the entire personality is involved, when the individual is affected by the knowledge he acquires. As Argyris (1956) puts it, "Although a man may be taught about self-insight and human skills of living, these can be acquired only through living in and learning from a stream of life events we call experience." Thus, one requirement for learning is an opportunity for the student actually to experience himself functioning in realistic interpersonal situations. Role playing provides this opportunity.

However, if experience alone were a good teacher, the "school of hard knocks" would be the best university in the world. Something more is required. Argyris (1957) also points out that, "Experience, per se, never teaches anyone anything; the operative factor is the use the individual makes of it." Trainees, therefore, also need an opportunity to consciously test behavior in action, feedback about its effectiveness, and analyze its consequences both for themselves and others. Where provisions are made for obtaining feedback, role playing also fulfills this requirement.

It has already been stated that advocates of role playing consider that the ability to skillfully diagnose ongoing events and their causes is important. They contend that this ability can be developed only through observing systematically; merely watching an occurrence is not sufficient. Corsini, Shaw, and Blake (1961) summarize the problem as follows:

Role playing, in order to be effective, must produce a successful marriage of the acting and observing functions. A person's ability to respond more adequately to the situation in which he finds himself is somewhat dependent upon his ability to become more skillful in observing the effect of his behavior on others.

What appear to be required are calculated, purposive observations made under controlled conditions so that the learner is actively and consciously involved in practicing a diagnostic attitude. When properly managed, role playing provides this opportunity.

Finally, the rationale maintains that learning behavioral skills does not come easily. This implies the need for freedom to make mistakes during the learning process. Consequently, another requirement is the opportunity to experiment and practice under conditions where mistakes do not have serious consequences. Role playing also provides this opportunity.

Parallel with this view of learning is the conviction that many of the problems in leadership and interpersonal relations arise because of misunderstandings, failures of communication, lack of insight into what is really happening during interaction, and erroneous diagnoses of interpersonal situations or inappropriate assumptions about what is or should be taking place. According to this position, a major requirement is training that will help an individual to better handle the above kinds of problems. The effectiveness of this training is dependent upon learning through experience under controlled conditions.

A key concept in role playing is "spontaneity." Moreno (1953), the originator of role playing, defines spontaneity as, "An adequate response to a new situation or a new and adequate response to an old situation." Thus, spontaneity means the ability to respond to a variety of changing situations without being constricted by rigid patterns of behavior. From the standpoint of training, this implies that the objective is not to teach the individual some predetermined set of behaviors. Rather, the goal is to develop diagnostic and action flexibility so that the student is equipped to cope with new and changing situations as they occur.

In summary, role playing offers opportunity for trainees to learn to be sensitive to the social factors in an interpersonal situation by seeing and feeling their own behavior against new social backgrounds, by observing others' behavior in a conscious, systematic way, and by exploring and trying alternative techniques for handling difficult interpersonal problems.

Degrees of effectiveness and the specific outcomes of role playing vary according to the objectives of the trainer. Three main categories of objectives are customarily identified. The first approach involves training students in specific methods and techniques. For example, role playing is useful for teaching techniques of conference leading, interviewing, selling, teaching, and so forth. In such training, emphasis is mainly upon illustration, drill, practice, and critique. Here, learning centers around methods and procedures rather than relationships; but, spontaneity remains the keynote.

A second category involves skill training. Under this approach, stress is put upon developing skill in diagnosing and acting in a variety of situations. Although specific problems may be used as vehicles, the goal is to develop diagnostic sensitivity and action flexibility across a wide spectrum of conditions.

The third objective is concerned with the development of personal insight, or self-understanding. Through participation in action situations, the individual is able to observe

the effects of his behavior on others and their actions on him. By testing the consequences of his behavior, the student gains data for evaluating his characteristic ways of handling interpersonal situations.

It can be seen that role playing is an exceptionally flexible method, which can be used for a variety of purposes under many different conditions. The numerous modifications that can be derived from the basic method make it possible to explore most kinds of problems and situations. Only one restriction is mandatory—the situation must deal with face-to-face interaction. When the interpersonal aspect is absent, the method becomes simulation rather than role playing. Within the boundaries set by this restriction, however, role playing is adaptable to most training purposes.

In view of this fact, the trainer becomes a critical element. The way he adapts method to purpose, how he structures the scenes, the way role playing is introduced to students, the things he instructs observers to look for, the skill with which he leads discussions and analyses—all go to determine effectiveness of the method.

Professional training in the social sciences and education appears to be desirable, but not essential, for trainers. More important than subject-matter expertise is understanding of the rationale and purposes of role playing as a training method. A tolerance for ambiguity and some insight into human behavior is also helpful; but the major requirement is that the trainer know what he is doing.

The rationale, purposes, and procedures of role playing can be communicated to novice trainers. Ideally, first-hand experience in role playing and training in its uses should be a requirement. It is possible, however, to communicate the necessary information through the printed word. Klein (1956), for example, has published an excellent book which describes how spontaneous role playing is used. Maier, Solem, and Maier (1957) have written what is, in effect, a manual for role playing using industrial problems. This book presents a rationale, detailed instructions, case materials, and even trainers' guides which point out the important issues in each case and the directions the discussions are likely to take. The trainer is thus furnished with a ready-made course in supervisory relations. Similar manuals could easily be devised for other leadership courses, or trainers could be furnished with rationale and instructions plus materials covering a variety of problems and situations to be used discriminately as needed.

The instructor is a critical determinant of effectiveness; but, under proper guidance, role playing does not require a professional trained instructor. More important requisites are a high level of competence as a teacher and understanding of precisely what the course is attempting to accomplish.

The emphasis upon spontaneity and the critical nature of the instructor's role make external control of training difficult. While it is easy to achieve uniform presentation of problems across classes, it is virtually impossible to insure that discussions will be identical or that similar points will be covered. From the viewpoint of spontaneity theory, such uniformity is undesirable for learning. However, regardless of the validity of this view, responsibility for quality and content must rest more with the instructor than with training administration.

The fact that role playing is usually limited to close interpersonal behavior is something of a handicap, especially in courses for higher-level leaders, where organizational dynamics are an important topic for study. Some trainers have overcome this problem by designing large role-playing situations so as to enact key members of an entire organization in the process of arriving at some important decision. Under these conditions, students fill all of the key roles in the organization. They usually stay in role for longer periods, as much as a day or more at a time. Observers are used to provide trainees data relative to their behavior as well as the processes occurring between organizational components. Thus, the opportunity is provided for trainees to learn about individual, group,

and organizational relationships simultaneously. The large-scale role-playing situations have come to be viewed as "simulations" in recent years.

Another limitation involves the fact that traditional role playing mainly emphasizes behavior. As a result, practical considerations beyond those involved in interpersonal relationship can easily be slighted. For example, Maier, Solem, and Maier (1957) cite the problem of whether a superior can take time from his work to listen to a subordinate, under a given set of conditions. This involves not only the matter of how to deal with a subordinate's request, but also other demands that the situation makes on the superior. This is a matter both of behavior and of other practical decision-making considerations. Many problems faced by leaders contain both elements. Role playing traditionally centers on behavior and is weak in teaching about other elements of the leader's job.

Maier, Solem, and Maier have compensated for this limitation by combining case study with role playing so that the most desirable elements of both are available. The student thus has an opportunity to learn both the interpersonal and the decision-making aspects of leadership.

Finally, the most obvious limitation of role playing is that the situation is still not completely real. As Benne (1961) puts it,

The players are acting, but they are enacting a character which is at least in part someone else in a situation which is in a measure projected beyond or outside the actual training situation. Many of their personal projections into the role played are revealed in the action and analyzed in the analysis of the action. But the situation is still a make-believe one.

Games and Simulations

One of the most recent and promising innovations in training methodology is the use of games and simulations for providing trainees with realistic experiences similar to those likely to be encountered on the job. Games and simulations for teaching tactics have been in use within the American military services for over a hundred years and, in one form or another, war games were used in Europe as early as the 18th century (Young, 1959). On the other hand, the use of games and simulations outside of the military services, or within the services for other than tactical training, is quite recent.

In the last decade, games and simulations have become quite popular in education, business, government, and the armed services. Zuckerman and Horn (1973) have published a guide to "simulation games" which reviews 613 games and simulations available to the public. A recent survey of the American Association of Collegiate Schools of Business found that 91 percent of the respondents reported using games in the classroom. We add to these figures the large unreported number of games and simulations used within business, government, and the armed services, the total actually in use may be as much as four or five times greater than the Zuckerman and Horn guide reports.

Widespread use has been accompanied by an expansive body of literature. The best and most complete bibliography (Beich, 1974) contains 2,375 entries. Unfortunately, much of the literature, especially that concerned with business and educational games, is anecdotal or designed to sell the reader on the merits of gaming. As Chapter 5 will demonstrate, substantive research is in short supply.

As a result of this widespread activity, a body of knowledge and a technology of game and simulation development is rapidly evolving. Both knowledge and technology are in their early stages; however, terminology has become somewhat standardized, and techniques for design and construction have been refined to the point that concrete guidance is now available.

According to current generally accepted terminology (Barton, 1970), a "game" must involve competition and have rules for determining a winner and loser. On the

other hand, a game does not necessarily possess the property of portraying, to any degree, the real world. In contrast, the principal property of a "simulation" is a deliberate physical, procedural, or symbolic representation of a real-world system. Although simulations may model real-world systems at widely differing levels of abstraction, the only necessary property is a model of some sort. Of course, competition is not a necessary property of a simulation. Thus, not all games model the real world and not all simulations possess the property of competition. However, many training vehicles possess the essential properties of both games and simulations. These are properly called "gaming simulations."

Games. Most true games are relatively simple in concept and are used mainly in the field of education as motivating devices and to illustrate social-science course content. They are not used often for training purposes, because they are context free (i.e., they do not model any aspect of the real world), and, accordingly, they are not considered for programs that are supposed to deal with real-world problems. However, context-free games can serve a useful function in leadership training, because they can permit illustration and examination of some human interaction processes, without contamination by the technical content considerations that are characteristic of most gaming simulations and simulations. The very fact that games are not bound to any particular context removes the inclinations of players and instructors to emphasize the concrete technical aspects of problems rather than the more ambiguous human phenomena, which must be the focus of leadership training.

Gaming Simulations. By far the largest number of "games" and "simulations" in use for training purposes are actually gaming simulations. By combining the competitive and modeling aspects, gaming simulations have evolved into an extensive family of training vehicles which, when properly used, possess both strong motivational properties and considerable potential for effective experiential learning.

Most so-called "business games" are gaming simulations—they model the world of business, there is competition between players or teams, and there are rules for determining winners and losers. Within this broad category, business gaming simulations may be classified in a number of different ways. Two in particular have relevance for this discussion.

One basis for classification is whether the vehicle is "interpersonal ascendant" or "media ascendant" (Twelker, 1969). Interpersonal games and simulations are those characterized most prominently by role playing and heavy player interaction. The instructional burden is carried largely by interaction between players. Thus, the learning is predominantly concerned with human interaction and group or organizational dynamics. Although some technical content may be used to provide a stimulus for interaction, it plays a relatively minor role. Design and development of interpersonal-ascendant gaming simulations require consideration of a number of issues, some which are characteristic of all simulation design and others which are unique to the interpersonal domain (Zelditch and Evan, 1962).

Media-ascendant gaming simulations are characterized by the instructional burden being carried largely by media (e.g., technical content, computer output, films, slide-tapes, etc.). Although human interaction processes are examined sometimes as a part of media-ascendant training, they are usually overshadowed by the greater emphasis upon technical content.

The distinction between interpersonal-ascendant and media-ascendant gaming simulations is important, because the type of training vehicle determines, in large part, the nature of the processes it evokes. Media-ascendant simulations are predominantly limited to technical decision-making and problem-solving processes; whereas the greater potential

for evoking human interaction processes makes interpersonal-ascendant simulations more favorable vehicles for leadership training.

Another way of classifying business gaming simulations is whether they are computer assisted or manual. The distinguishing difference is whether the effects of player actions and of ensuing outcomes are computed manually or by a computer. The relative merits of the two types are hotly argued. However, for the most part, differences between them are merely the complexity of the models used and, accordingly, the number and complexity of calculations required to determine results, the amount of time available for production of results, and the extent to which formulas for scoring use random or probabilistic factors.

When random or probabilistic factors are introduced, computers are more frequently used; however, some well-known games that use random or probabilistic computations remain completely manual. The McKinsey-Howard Business Review Game (Andlinger, 1958) was completely manual and used a random number table to allocate sales and determine the results of expenditures for advertising, research and development, and so forth. Like many military gaming simulations, the McKinsey-HBR Game used a game board and counters, which are rarely used among business games. Although computer-assisted gaming simulations are quite popular, manual ones are much more prevalent, because they are less expensive to develop and administer.

In recent years, business gaming simulations have been widely used for training purposes. As a result, claims concerning their efficacy abound and some attempts have been made to systematize these claims. After reviewing over 300 published articles on gaming and simulation, Schriesheim (1973) identified the 10 most commonly made claims about what business games will teach or foster. They are: decision-making skills, planning and forecasting, recognition of interrelationships, high motivation and interest, use of specific techniques, interpersonal skills, accepting decision consequences, organizing ability, communications skills, and acceptance of the computer. Schriesheim was careful to point out that many claims are unsubstantiated, and he called for systematic research on the teaching efficacy of business games. At present, such research is nonexistent.

Within the military services, the largest user of simulations is the U.S. Army, where one important element in the training of leaders is participation in "battle simulations." Most battle simulations in use by the Army are gaming simulations. They involve free play between two competing forces, there are rules for determining winners and losers, and they model genuine combat environments.

All Army gaming simulations use map-boards or three-dimensional terrain boards, designed to scale, upon which players on controllers maneuver cardboard or plastic counters or three dimensional miniatures representing individual personnel, units, or weapons systems. Highly complex rules govern movement rates, weapon effects, and outcomes of engagements between opposing forces. Thus, the game boards and associated game rules mediate and determine the results of orders or actions taken by players.

In some battle simulations (e.g., DUNN-KEMPF, FIREFIGHT, and BATTLE), individual players or teams of players actually stand at the game boards and move the pieces representing their units or personnel. In such cases, focus of the experience and the learning derived from it is almost completely upon the technical and tactical aspects of combat leadership (i.e., information processing, problem solving, decision making, and tactical execution). There is little, if any, opportunity to practice the interpersonal aspects of leadership.

In other battle simulations, game boards are used solely to generate realistic combat information. Trainee-players are isolated from the board in rooms that simulate battalion

or brigade command posts. Controllers, simulating lower level leaders, maneuver their units on the boards, following orders from and transmitting information to players by actual or simulated radio. These battle simulations include the Computer Assisted Map Maneuver System (CAMMS) and PEGASUS. Although primary emphasis is upon tactical performance, it is possible to examine certain aspects of interpersonal and group leadership.

Obviously, battle simulations are media-ascendant, and the focus of training is upon "combat leadership," predominantly information processing, problem solving, decision making, and tactical execution. For the most part, leadership as an influence process receives very little attention from trainers.

Simulations. True simulations model the real world to some degree but are not competitive. They may range from large-scale role playing based on very simple models to extremely complex battle simulations, such as the Army's computer-driven Combined Arms Tactical Training Simulator (CATTs).

Probably the best current example of a simulation used for research and training on leadership is Looking Glass, Inc., developed and conducted by the Center for Creative Leadership. Looking Glass is an interpersonal-ascendant business simulation which poses a set of interlocking problems to the management group of a hypothetical company through in-basket, and other types of inputs. Work on these problems stimulates individual, group, and organizational interaction, which becomes the content for later feedback, analysis, and discussion by the trainees.

For nontechnical leadership training (focus upon influence processes), interpersonal-ascendant simulations appear to be a better choice than either games or gaming simulations. Such simulations can provide environments which permits interpersonal, group, and organizational dynamics to be examined without significant interference from technical content. Furthermore, simulations permit instructors to more closely control whether trainees experience the problems and phenomena required by training designs. Games and gaming simulations are less effective in this respect because the two-sided free-play characteristic of these vehicles limits the amount of control that can be exercised by trainers.

Training Potential. Despite widespread claims, solid evidence concerning the instructional effectiveness of games and simulations is at best, inconclusive (Greenblatt, 1975; Twelker and Layden, 1972; Schriessham, 1973). The large and almost uniformly positive body of anecdotal and case history reports seems to fly in the face of this lack of empirical support. Games and simulations have a large amount of face validity, which makes them quite attractive to trainers despite their lack of solid empirical evaluation.

After an extensive literature survey (Olmstead and Elder, 1977), the present author and an associate concluded that games, simulations, and gaming simulations serve some training functions better than others. A brief summary follows:

(1) **Acquisition of Knowledge.** Although some educational games may be useful for transmitting simple knowledges (e.g., definitions, taxonomies, etc.), games and simulations are not very useful for transmitting complex knowledge. Other methods are better.

(2) **Reinforcement of Knowledge.** Some games and simulations can be useful for reinforcing knowledge acquired in other contexts. However, most do not have this characteristic.

(3) **Application of Knowledge.** Many gaming simulations and simulations are valuable for providing practice in the application of previously learned knowledge to practical problems. The value of any particular vehicle for this purpose depends on the validity of its model (the degree to which the real world is modeled accurately), its design, and the presence of an associated effective instructional component.

(4) **Application of Principles.** Well-designed and valid simulations and gaming simulations permit students to test previously learned principles by applying them to a variety of problems and situations. This helps students develop skill in adapting principles to the variability and ambiguity of the real world.

(5) Development of Skills. When appropriately designed, games, simulations, and gaming simulations are quite effective in developing both cognitive and behavioral skills. Skills that can be developed may be in technical, administrative, or interpersonal areas.

(6) In certain performance areas (e.g., leadership, interpersonal behavior, and group interaction), effectiveness requires both conceptual understanding and positive attitudes. Participation in simulations and gaming simulations under positively reinforcing conditions can help integrate attitudinal with conceptual content. Such participation in simulations and gaming simulations may also promote positive attitudes toward use of procedures or techniques advocated by instructors or official doctrine.

In a more general vein, it appears that games, simulations, and gaming simulations have a number of identifiable advantages and a few disadvantages. Following are some advantages:

(1) They stimulate sustained learner activity and learner motivation during training sessions.

(2) They provide opportunities for progressively increasing the number and complexity of problems to which trainees must respond. This is especially valuable for making complex material meaningful to students.

(3) They make instructional content more relevant to the student's experience.

(4) They can help the student understand the relationships between complex factors that are difficult to treat in an integrated fashion in conventional classroom instruction.

(5) They make it possible for every student in class to participate actively rather than merely observe.

(6) They can provide an opportunity to learn interpersonal and other skills not readily acquired through conventional instruction.

Some of the most relevant disadvantages are:

(1) They may cost more to develop than conventional types of instruction.

(2) Learning through games and simulations may be more variable than learning through conventional instruction, because there is less control over what is learned.

(3) Trainer control of student activities is more difficult with games and simulations than with conventional instruction.

(4) There is some risk that trainees will overgeneralize from simulation experience to the real world.

(5) Games and simulations can be so attractive to instructors and training managers that they may be inappropriately substituted for conventional modes of instruction. Games and simulations should complement proven conventional modes and not supplant them.

(6) Games and simulations take time to play.

(7) There is a risk that erroneous learning will occur—if behavior that is appropriate to the game or simulation is not appropriate to real life or if effects of player actions on the outcomes of games and simulations do not correspond to those likely to occur in real life.

Like all instruction, training that uses games or simulations should be designed to accomplish particular objectives. Such training requires systematically planned experiences for which the vehicles are specifically selected or designed. Simulation models, scenarios, and instructional components (assessment and feedback procedures) should be designed or selected to accomplish the objectives selected by the trainer.

When designed properly and used thoughtfully and systematically, with full recognition of their advantages and disadvantages, games and simulations appear to be cost-effective

means for accomplishing certain types of instructional objectives. They are not a panacea for difficult instructional problems, however, and they cannot be used effectively unless both their potentials and their limitations are fully recognized.

MULTI-METHOD APPROACHES :

Several of the better known approaches to leader development actually use two or more of the basic training methods. The eclecticism of these multi-method approaches takes into account the fact that instructional methods differ in terms of outcomes, requisite instructor skills, and expected student reactions. Where several methods have been integrated on the basis of carefully derived objectives and a systematic rationale, the result usually has been a more powerful technique than most methods used alone.

Laboratory Method

The laboratory method uses the T-Group as the central vehicle for learning. However, in laboratory training, the T-Group is augmented by other methods, such as lectures, role playing, case study, simulations, and so forth. There are many variations in training designs, depending upon the theoretical persuasions of trainers, characteristics of trainees, and objectives of the programs. The T-Group coupled with other relevant techniques in the full laboratory method attempts to equip leaders to cope with some of the wide-ranging but more subtle aspects of interpersonal, group, and organizational behavior.

The rationale for the laboratory method is essentially the same as that for the T-Group, with the additional belief that learning will be stronger and more lasting when the experiences of the T-Group are reinforced by other methods. Furthermore, benefits claimed for the laboratory method are the same as for the T-Group, with the addition of conceptual frameworks for approaching and understanding the phenomena of interpersonal, group, and organizational life.

Behavior Modeling

Behavior modeling is a generic method in which trainees observe a "model" individual perform (role playing, films) in a typical problem situation. The model's behavior is supposed to depict ideal or recommended ways of handling the problem. After observing the modeled behavior, trainees practice it, with critique and feedback. Because they use both cognitive and experiential methods, behavior modeling programs are actually multi-method.

Programs based upon behavior modeling techniques have been reported by Shaw and Rutledge (1976) for assertiveness training and both Goldstein and Sorcher (1974) and Byham and Robinson (1976) for training in supervisory practices. Although all of these authors report success in skill improvement, detailed data on the studies has not been published.

Advocates of behavior modeling who have engaged in supervisory training (Goldstein and Sorcher, 1974; Byham and Robinson, 1976) have developed a clear rationale for the training.

In brief, the rationale seems to be that (1) people need appropriate models of behavior, (2) people need training in skills that are directly related to their current jobs, not in general supervisory or leadership skills, (3) skills must be practiced to become incorporated into an individual's repertoire of behavior. Behavior modeling programs purport to meet these requirements.

It appears that behavior modeling may be an effective method for training in situation-specific skills (e.g., "handling problem employees," "conducting performance counseling," etc.); however, the extent to which learning will generalize to contexts other than those portrayed in the modeled situations is questionable. Programs which use behavior modeling can be classified as "technique training," and feasibility of the method for developing generalizable interpersonal skills remains unknown.

Mixed Methods

Most leadership training programs use various combinations of several methods. Thus, a program may include lectures, discussion, role playing, case study, and games or simulations. In contrast to programs in which one method is central, (e.g., laboratory training or conference, augmented by occasional role playing), these mixed programs are designed to use whichever methods are appropriate for particular objectives, topics, or content.

No particular rationale governs mixed methods except that particular methods are best suited for particular purposes and that training can be most effective when appropriate methods are used, whatever they may be.

SUMMARY

These, then, are the principal methods used in leadership training. To be sure, the popular training literature contains numerous descriptions of what at first glance appear to be different methods from those described in this chapter. Closer examination will generally reveal, however, that most apparent innovations are merely variations on the old themes. Behavior modeling was the last real innovation in leadership training, and it has now been in use for almost a decade.

Leadership and management training is more prone to fads than most other fields. It appears that trainers are constantly seeking that one method which will solve all of their training problems. However, the main point of this chapter should be clear. Leadership training methods differ in terms of goals, rationales, prerequisite trainer skills, and student reactions. Accordingly, no one method can be used as a panacea. Furthermore, to use the methods effectively, instructors must know precisely what they are trying to accomplish.

Chapter 5

EFFECTIVENESS OF LEADERSHIP TRAINING

Early in any effort to understand the field of leadership training, two important questions must be examined. The first concerns the effectiveness of leadership training. Any training program is an attempt to change the behavior of trainees. Therefore, one significant question is, "How effective is leadership training in changing behavior?"

A second, closely related question is, "What kinds of change are accomplished by the various programs and methods?" As discussed in Chapters 3 and 4, programs to improve leader performance take many forms and use a variety of methods. It is important to know what evidence exists on the kinds of change that each method may produce.

This chapter will review the research literature concerned with leadership training. Two caveats are in order. First, it is certain that the published literature is not fully representative of current leadership training efforts. Many competent individuals engaged in training leaders do not have the time or inclination to publish evaluations of their work. The field is much more active than might be concluded from the research literature.

Second, many descriptions of leadership training appear in the popular training and management journals. Most such articles are descriptive; few are backed by solid evidence. The popular journals abound with unsupported claims relative to the efficacy of the various approaches. Articles of this sort will not be cited here unless they contain concrete data and, at least, use a semblance of sound research methodology.

The studies discussed in this chapter are drawn mainly from the professional psychological and educational literature and a few government-sponsored technical reports. Even among these studies, most are concerned principally with evaluation, and efforts have usually been limited to measurement of one training program or method against one criterion. Most studies have been more concerned with demonstrating the utility of a single, uniquely designed program than with comparing the relative merits of several methods or with studying the nature of the learning processes involved. Thus, sound comparative research on leadership training methods is in short supply.

The analysis of the literature was conducted within the framework of several questions which are central to an understanding of the approaches taken to leadership training. Handyside (1956), and Maier, Hoffman, and Lansky (1960) raised similar questions, and these questions continue to be as relevant for the present as they were in the past. They are:

1. Does the training increase knowledge, awareness, and sensitivity to the problems and issues involved in leadership?
2. Are participants' attitudes and self-insight influenced by the training?
3. Does training improve problem-solving skills?
4. Are participants' skills in leadership and interpersonal relations improved by the training?
5. Is performance on the job improved through the training?

INCREASE OF KNOWLEDGE, AWARENESS, AND SENSITIVITY

Not all programs purport to communicate knowledge about leadership problems and behavior; however, in those instances where increased knowledge is an objective, evaluation is relatively simple.

The usual practice is to give trainees achievement tests before and after training. These tests have included both true-false examinations of knowledge about general facts and principles, and multiple-choice tests that give trainees problem situations and require them to indicate the best course of action from several alternatives.

Canter (1951), in a much cited study, reports conducting supervisory training in a large insurance organization. The course used the lecture-discussion method and "technique training" in 10 2-hour sessions. Trainees were all supervisors in one department. A comparable group served as control. A variety of tests were administered before and after training. According to Canter, the trained supervisors became more similar in the abilities measured; they were more able to estimate the opinions of department employees; they agreed more closely with experts on what kinds of supervisory and company employee relations principles and practices are valuable; and they appeared to be more able to apply logical reasoning. Those with the highest initial scores gained the most on a majority of the measures. Canter concluded that such a course could be considered valuable for supervisors in these companies.

Di Vesta (1954) evaluated the effects of a 20-hour block of instruction in "human relations" taught to airmen in a Medical Administrative Supervisor's Course. He also compared a control group that received only technical instruction with one experimental group that received "instructor-centered" training (lecture) and another that received "student-centered" training (discussion). Using four different tests, he found significant gains in achievement for both groups of experimental students. Knowledge tests showed no difference between the two experimental groups. Both methods produced equally good results on these tests.

Di Vesta found, however, that students starting the course at a "low leadership level" showed a strong tendency to improve through the discussion method. Students at the upper levels of starting leadership scores were not much affected by either method. Di Vesta points out that only a tendency, rather than a clear-cut change, was found.

One of the tests used by Di Vesta, How Supervise?, was also used by Canter, and Di Vesta showed comparative scores. He found that, taken as a body, the airmen made gains as great as the insurance company supervisors studied by Canter. Katzell (1948) also used alternative forms of How Supervise? to evaluate the training of 60 railroad second-level foremen and middle managers. The test was administered before and after training that used Katzell's "determinate discussion method," which is essentially a directed conference method. Scores were significantly better after training. How Supervise? appears to measure awareness of and sensitivity to supervisory problems.

Mosel and Tsacnaris (1954) also reported a study that used How Supervise? as the evaluative instrument. After a 40-hour supervisory course using several training methods (lecture, discussion, films) and extending over 6 weeks, the scores of 83 supervisors showed significantly more gain, in terms of group mean scores, than did a matched control group.

Mayo and DuBois (1963) evaluated a 5-week leadership school conducted by the Naval Air Training Command for chief petty officers. The course appears to have consisted mainly of lecture and discussion. One of the measures these authors used was a test on the content of the course and the application of leadership principles. It was administered at the beginning and at the end of the course, and showed significant gains for the group as a whole.

An interesting recent development in management training involves the use of self-instructional methods. For example, Showel, Taylor, and Hood (1966) compared prospective Army noncommissioned officers who received either "automated" or conventional lecture-discussion leadership training with a matched control group that received no training. The automated method consisted of tape recordings of lectures and questions,

integrated with programmed text material. Learning was measured by a 30-item achievement test. After-training test scores for both trained groups were superior to those for the control group; no difference was found between the trained groups, however, until scores for high-ability and average-ability students were segregated. The automated method was found to be superior to the conventional lecture-discussion for average-ability students. No difference was found for high-ability learners.

Bunker (1965) cites an unpublished study by Boyd and Ellis which evaluates an in-company laboratory (T-Group, lectorettes, role playing) conducted for a Canadian utility. This study compares the effects of laboratory training with the effects of a more conventional program, of the same length, consisting of case discussions and lectures. It found that both groups increased in "learning about other people in general." The fact that both methods included lectures may account for the increased knowledge about people that was credited to them.

Harrison (1966) evaluated a summer Laboratory for Group Development conducted by the National Training Laboratories. He found that exposure to laboratory training (T-Groups, lectorettes, role playing) caused participants to use more concepts that dealt with feelings, attitudes, emotions, and perceptions than they used before training. Harrison attributes this increased use of inferential-expressive concepts to improved awareness and sensitivity to other people.

It is important to note that, in the above studies, students were trained by professional instructors. On the other hand, Mahoney, Jerdee, and Korman (1959) report an example in which second-level managers were exposed to "the principles of management" by case analysis and group discussions led by selected second-level managers who had taken the course earlier and were specially trained in techniques used in it. No significant improvements in knowledge of management principles or in the intensity of case analysis were found. Because other studies show that the case method produces improvement in knowledge, the failure of this program can be attributed to the use of inexperienced instructors. The ability and training of instructors seems to be an important factor, even in the communication of knowledge.

Lawshe, Bolde, and Brune (1959) conducted a series of studies to investigate the effects of single and repeated exposure to the skit-completion method of role playing. Evaluation criteria were scaled responses to a standard human relations training case in two dimensions: Sensitivity and Employee-Oriented. The Sensitivity dimension appears to measure awareness of the human aspects of managerial problems; whereas Employee-Oriented measures tendencies to consider subordinates, their feelings, and their welfare in arriving at solutions to these problems.

The authors found that changes in criterion case responses were achieved only where "impact" occurred in connection with the training experience. They defined impact as "a characteristic of a training experience which (a) allows the trainee to criticize his own performance in human relations tasks, (b) provides an adequate type of feedback to trainee regarding his performance, and (c) serves to emphasize a particular human relations factor in a strong emotional manner." Impact was accomplished by (a) role playing of case materials and (b) the type of discussion held after role playing. In those cases where the impact factor was evident, the effects of this experience could be generalized to performance on a second training case.

It was also found that Sensitivity and Employee-Oriented improvements are differentially affected. Improved Sensitivity responses were not necessarily accompanied by better Employee-Oriented responses.

It should be noted, however, that, even here, skill measurement was based only on verbal responses to human relations cases. Once again, no evidence is reported on whether more skillful behavior in actual situations resulted.

This study has important implications. The concept of "impact" has a sound basis in principles of learning related to knowledge of results, feedback, and task involvement. It can be questioned whether very many training programs provide sufficient impact to cause for genuine change.

A further important finding involves the differential effects relative to Sensitivity and Employee-Orientation. These findings indicate that an individual can develop greater awareness of the human element in situations, without concurrently developing a more favorable orientation toward the personnel involved. When this finding is coupled with the fact that skill in actual interpersonal behavior is probably a third independent factor in performance, the problem of developing effective training for leaders becomes very complex indeed.

The results of these studies suggest that trainees who attend leadership or human relations programs may acquire new knowledge and develop increased awareness and sensitivity to the human element in work situations. It also appears that—with the proper conditions and experienced instructors—lecture-discussion, conference method, and case analysis may all be effective in improving knowledge and increasing awareness and sensitivity, as measured by paper-and-pencil tests.

However, while it is clear that training enables students to make better scores on tests, it has yet to be shown that individuals who have demonstrated increased knowledge and awareness on tests make wiser judgments when faced with actual situations than they would have without the training. In fact, Mayo and DuBois (1963) actually investigated, among other things, the relationship between scores on knowledge tests and superiors' evaluations of job performance back on the job. No significant correlation was found.

Thus, there is considerable reason to doubt whether programs which use only methods designed to disseminate knowledge or generate awareness and appreciation of the human element in work can seriously be expected to exert any lasting influence upon actual job performance.

CHANGE OF ATTITUDES AND SELF-INSIGHT

A number of training programs attempt to change the attitudes of participants. Although not always explicit in program descriptions, this approach seems to be based upon the view that attitudes give direction to leadership and interpersonal behavior and that improved performance can occur only after attitudes have been modified.

Most studies have attempted to measure attitudes only immediately after training. Only a few have tried to relate measured attitude change to performance.

Canter (1951), in the study described previously, also measured attitude changes that resulted from training by lecture-discussion. A Social Judgment Test for Supervisors, and a Supervisory Questionnaire were used to obtain pre- and post-training measures of attitudes toward several aspects of supervision. As he did with knowledge tests, Canter found that trained personnel showed significant improvement in mean attitude scores in comparison with an untrained control group.

Miner (1960) conducted a lecture course specifically designed to foster more favorable attitudes toward the supervisory role. The course consisted of 10 1½-hour sessions at weekly intervals. Discussion was limited mainly to questions directed to the instructor. Subjects were 72 supervisors in the Research and Development department of a large corporation. A control group consisted of 30 supervisors in the same department who did not take the course.

Subjects completed pre-course attitude questionnaires and completed them again 2-6 weeks after finishing the course. Pre- and post-training comparisons showed a

significant rise in attitude scores for the experimental group and a significant decline for the control group. Miner explains the decline in the control group as due to a company reorganization which occurred during the experiment. Miner concluded that "there is considerable evidence that positive attitudes toward the supervisory job were aroused." In a review of human relations training studies; Mosvick (1971) has criticized Miner's research design and, accordingly, has questioned the validity of his results.

In contrast to Canter and Miner who found that positive attitude changes could be attributed to lecture-discussion, Stephenson (1966) found the impact of lecture-discussion upon attitudes to be negligible. Fleishman's Leadership Opinion Questionnaire (LOQ) was used to test for attitudes of management trainees at a U.S. Navy installation. Stephenson found no effect of attitudes as measured by LOQ.

Finally, Lefkowitz (1972) evaluated a 3-day supervisory training program for police sergeants and found no change in attitudes as measured by the LOQ, Dogmatism Scale, and an Anti-Negro Scale. The program was predominantly lecture-discussion, with a few films and case studies. Lefkowitz concluded that there were no marked attitude changes as the result of training and he attributed these results to the following: (1) insufficient time was devoted to training (i.e., the program was too short); (2) evaluative measures were not isomorphic to program content; and (3) participants didn't know if training content would be used on their jobs. He also concluded that more work on methods for evaluating training programs is necessary.

Thus, with respect to capability for changing attitudes, findings on lecture-discussion are mixed. Some programs seem to have been successful in changing attitudes; others have not. Reasons for these mixed results are not clear; it seems reasonable, however, that some of the causes attributed by Lefkowitz may be operant in the evaluations discussed above, (i.e., variations in training time, evaluative measures of differing validity, and other uncontrolled determinants of training effects).

In addition to measuring increased knowledge, Di Vesta (1954) also attempted, in the study described earlier, to evaluate attitude change. He found that group mean scores changed significantly in the desired direction on several attitude measures administered immediately after training. Gains were obtained for both instructor-centered (lecture) and student-centered (discussion) methods of teaching.

The test How Supervise? contains a section concerned with supervisory attitudes. Barthol and Zeigler (1956) tested a group of supervisors with alternate forms of How Supervise? before and after training using the conference method. All groups improved significantly, but the greatest gains were made by supervisors who had attended college. Barthol and Zeigler recommended more work on the meaning of the score changes that followed training.

Many mixed programs have among their stated objectives some sort of change in attitudes or other personal attributes. Thus, Biggs, Huneryager, and Delaney (1966) trained 32 supervisors of youth opportunity centers in a 2-week program comprised of practical discussions of major behavioral science principles, as well as human relations and sensitivity training. The LOQ and the Firo-B Scale were administered at the onset and at the conclusion of the conference. Firo-B yields a description of the interpersonal needs of respondents. Significant changes in group mean scores after training, were found. For the LOQ, changes were described as being in the direction of "more considerate" and less "task-oriented." Firo-B mean scores indicated less need for affiliation and interpersonal closeness.

Spector (1958) developed an "Attitude Test in Human Relations" and used a preliminary form to evaluate the amount of cadet attitude change that resulted from a seminar offered in the senior year of the AFROTC program. The seminar used lectures, role playing, and discussion. Cadets' responses changed significantly on 26 of the 161 test items.

Spector took these results to indicate that there were sufficient changes in the direction of a criterion group of Air Force officers to warrant confidence in the seminar's effectiveness for changing human relations attitudes.

In contrast to those studies that assess attitudes immediately after training is a study by Hazeltine and Berra (1953), which checked attitudes a year later. These researchers conducted an attitude survey of 200 members of a supervisory group. The results were analyzed into 10 major training areas such as: supervisory techniques, better communications, and so forth. Training programs and meetings were then held on these various areas. One year later, the survey was repeated, and some improvement was noted on 25 of the 64 items.

Carron (1964) reports an attempt to change the attitudes of supervisors who were in the research, development, and engineering units of a chemical company. The objective was "to change authoritarian attitudes to group-centered, democratic attitudes." The training program consisted of 2-hour meetings spread over a period of 6 months, and included case discussions, concepts, role playing, and "laboratory demonstrations." Change was measured by the Leadership Opinion Questionnaire and the Adorno F-Scale. The questionnaires were administered at the beginning of training, at its completion, and in a follow-up 17 months later. Carron found statistically significant changes toward more "democratic" attitudes during training. This change persisted over the 17-month follow-up period.

It should be noted that all the studies cited so far in this discussion of attitudes have used gains in group mean scores as indicators of change. Harris and Fleishman (1955) raise a question concerning the use of group means as indicators of course effectiveness. In this study, the Ohio State Leadership Opinion Questionnaire was used to evaluate changes in "Consideration" and "Initiating Structure." Little difference was found between mean scores before and after training. However, wide individual differences were found in leadership attitudes foremen held after training. Moreover, large individual shifts in scores occurred in both directions. From these findings, Harris and Fleishman concluded that:

One cannot assume that insignificant changes in group means among trained foremen are indicative of no training effects. The problem appears to be more complicated than that. It raises the possibility of differential effects according to the individual and the situation in which he finds himself.

The same precaution can be applied to the use of group mean scores in any evaluation of training. It will always be useful to know the number of individuals who have changed and the direction and amount each is supposed to have changed.

The studies reported so far in this section indicate that changes in responses to written attitude tests or questionnaires can be obtained by exposing participants to certain types of training. However, none of the above studies examined the impact of such changed attitudes upon actual behavior.

Only a few studies have attempted to evaluate the effects of training upon both attitudes and performance, and the results have been mixed. Canter (1951), in the study described earlier, measured morale in departments of trained supervisors and found an improvement; but because morale also improved in departments of his control group, the improved morale could not be attributed to the training.

In contrast, Hand and Slocum (1972) trained 42 middle level line and staff managers from a specialty steel plant. Training addressed practical application of human relations principles through a variety of problem-solving methods. The LOQ and the Supervisory Behavior Description questionnaire were administered before training and 18 months after its completion. Significant positive changes in LOQ scores were obtained for trainees while changes in the opposite direction were found for a control group. In addition, trainees reported on the Supervisory Behavior Description that their behavior on the job had changed in positive directions. The fallacy of self-reports as performance indicators, however, is obvious.

Finally, there is the well-known study reported by Fleishman (1953) to evaluate a 2-week human relations program for foremen given by the International Harvester Company. The course was intended to change the attitudes and behavior of people in supervisory positions—to make them more “human relations conscious.” Lectures, role playing, and discussions were used throughout the course. The Supervisory Behavior Description and the Leadership Opinion Questionnaire were administered before the course, immediately following training, and after return to the job. The questionnaires were designed to measure two dimensions developed by factor analysis: Consideration and Initiating Structure. Generally, reduction in Initiating Structure and increase in Consideration were taken as indication of change in desired direction. The results showed opinion changes in the desired direction immediately after training, but gains disappeared after a short period back on the job. Furthermore, subordinates of the trainees reported no gains in actual behavior as they saw it.

Fleishman's study has been widely used as an argument for the futility of training leaders without making concurrent changes in the organizational atmosphere to support the new learning when trainees report back to the job. However, it might also be interpreted to demonstrate that constructive attitudes alone are not sufficient to produce effective supervisory performance.

T-Groups and laboratory training have probably been studied more intensively than any other leadership training method. Since several excellent reviews of such research have been published (Stock, 1964; Buchanan, 1965; House, 1967; and Campbell and Dunnington, 1968), the extensive literature will not be further reviewed here.

Although somewhat limited, the evidence seems to tend toward the conclusion that laboratory training can induce some sort of behavioral change commensurate with the objectives summarized in Chapter 3. The training does seem to result in increased self-insight and sensitivity to the behavior of others, as well as increased awareness and understanding of group and inter-group processes. However, the research contains little evidence that such changes actually affect performance on the job—mainly because the effects of laboratory training on performance on the job has rarely been studied, and, where it has been studied, the research designs have been flawed to the extent that clear conclusions cannot be drawn.

Findings on the effects of laboratory training experiences upon attitudes are mixed. In some studies, no changes in attitude were found. In others, significant changes in attitude, measured before and after training, were found. The results seem to have been determined, in part, by the attitudes measured and the instruments used.

Laboratory human relations training provides the most intensive experiences of any training method yet devised. Certainly, it has the potential for providing the “impact” Lawshe, Bolde, and Brune (1959) found to be essential for causing changes in trainees. It appears that properly conducted laboratory training may be effective for accomplishing the objectives listed earlier. However, it has yet to be demonstrated that changes in the behavioral areas represented by the objectives result in improved performance on the job.

As stated earlier, the studies reported in this section indicate that training can produce changes in responses to written attitude tests. “Mixed” methods (i.e., programs that couple lectures with heavy group discussion, role playing, case analysis, etc.), have proved to be the most effective methods for achieving such changes. On the other hand, there is little evidence that behavior was actually modified by such training, and Fleishman specifically found no change in on-the-job performance connected with the changed attitudes of his trainees.

Assuming that attitudes can actually be changed through training, this raises the question of whether “good” attitudes alone are sufficient to improve performance. Conceivably,

an individual with favorable attitudes could still be inept in his relationships with subordinates. It is possible that the proper attitude is a necessary prerequisite for effective performance, but that, skills for behaving in managerial situations may also be required. Skill does not automatically result from knowledge, awareness, self-insight, or constructive attitudes. To improve performance, training may have to focus upon both skills and attitudes.

IMPROVEMENT IN PROBLEM-SOLVING SKILLS

Many programs address problem solving in a conceptual fashion (e.g., teaching the steps to use in solving a problem); in only a few programs, however, has it been recognized that problem solving involves skill and that training and evaluation should be designed to develop and measure the ability to solve problems. Where skill development has been the objective, methods have ranged from case study to practical exercises specifically designed to enhance problem-solving proficiency.

In the study described earlier, Mahoney, Jerdee, and Korman (1959) found that exposing second-level managers to "principles of management" through case analysis and group discussion led by other managers did not produce improved solutions to criterion cases. The findings raise some doubts about the usefulness of case analysis and group discussion for improving problem-solving ability; the results cannot be considered conclusive, however, because use of inexperienced instructors (second-level managers trained by the authors) may have been the reason for the outcomes of the training.

Lange, Rittenhouse, and Atkinson (1956) report the use of abbreviated cases to train U.S. Army officer candidates. Army instructors in the Artillery School at Fort Sill, Oklahoma, used the experimental leadership training course with two Officer Candidate School (OCS) classes and one Officer Basic Course (OBC) class. Candidates were in training to serve as second lieutenants. Two OCS classes and one OBC class were designated control classes and received conventional Army leadership instruction (mainly lecture and class discussion). Instructors were the same for each condition.

For the experimental group, 10 films depicting officer problem situations were presented and an additional eight problems were presented in printed form. Small-group discussions followed each film viewing or reading of cases. After these discussions, representatives of each small group conducted a panel discussion of the various solutions proposed by the groups.

A battery of tests and questionnaires was administered before and after training to both experimental and control groups. Students in the experimental program showed significant improvement over conventionally trained students in their ability to (1) analyze leadership problems and present solutions and (2) select the ideal leader from descriptions of attributes of various leaders with different leadership styles.

The authors conclude that, in view of the results and student comments, the training method was effective. They also conclude that one of the most important results of the training, according to students' statements, is that students learned to recognize existing or ongoing problems. Students felt that, without the training, they might fail to become aware of problems, which would then accumulate and develop into major sources of tension and unrest. The authors recommended that from 10 to 12 hours should be devoted to teaching leadership principles and the remaining time, to leadership problems presented by sound films. It should be noted that no measures of actual leader performance were obtained.

Moffie, Calhoun, and O'Brien (1964) reported a 20-hour course in problem solving and decision making given to three levels of management at a large southeastern paper

mill. The course was conducted by a firm specializing in management development, and it heavily emphasized the use of practical work exercises to increase speed and accuracy of participants' problem solving and decision making.

Participants in the course indicated they thought it was worthwhile and applicable to their work, and that they would recommend it to other potential participants. Comparison of before and after measures using the Watson-Glaser Critical Thinking Appraisal, however, revealed no significant gains or losses for either the experimental or the control group. In short, the training had no discernible effects as measured in the study.

In a study of 139 university business administration seniors, Raia (1966) compared the effects of two types of management games. The students were divided into two experimental groups and one control group. One experimental group participated in a "simple" management game, while the second experimental group played a more complex game. Both experimental groups also participated in a series of case analyses, which was the method conventionally used in the course. The control group participated only in the case analyses. For criteria, Raia used a standardized test based on a case problem, the final examination for the course, and a questionnaire on attitudes toward the course. Only the standardized test was given both before and after training. No differences between groups were found for the attitude measure; both of the groups that used business games improved their scores on the case problem, however. No differences were found between the experimental groups. Raia concluded that participating in business games may improve the ability to solve business problems.

Thus, the few studies of problem solving, in its various forms, have produced mixed results. Once again, it appears that the training method used and the care with which the program and associated materials are designed may be the principal determinants of whether problem-solving skills can be improved.

DEVELOPMENT OF INTERPERSONAL AND LEADERSHIP SKILLS

Many training programs make no claims to the development of specific interpersonal or leadership skills. These programs appear to rest on the assumption that new knowledge or changed attitudes will automatically result in improved performance. On the other hand, a number of programs make the development of new skills their principal purpose.

Maier (1953) trained 176 industrial supervisors in group decision-making procedures and processes. Participants were exposed to 8 hours of lecture on group decision-making methods and 4 hours of discussion. No practice was provided. Another 144 supervisors received lectures on attitudes instead of decision-making training. This group served as the control in the study. Following training, the two groups were divided into smaller groups of four persons each. A role-playing problem in which one member served as foreman and the other three played the parts of his subordinates was administered to all groups, as a criterion test. The group's task was to reach a decision concerning a change in work methods. Results of training were evaluated in terms of types of solution reached by the groups. Maier found that trained supervisors used group-leading techniques that were more effective than those used in the untrained groups.

In his review of human relations training for scientists, technicians, and engineers, Mosvick (1971) describes an evaluation of a 14-hour human relations course for engineering supervisors in a large aerospace firm. Trainees received instruction in four theories of motivation by lecture-discussion methods over a 7-week period. Mosvick found no differences in attitude change scores between trained and control groups. However, he found that trainees displayed significantly better abilities when analyzing a simulated communication-conflict situation and that they also reported more critical incidents concerning

application of motive analysis concepts and techniques on the job. Mosvick concludes that the training was effective in developing diagnostic skills. He suggests also that attitude shifts may not be a necessary condition nor concomitant effect of behavioral changes.

In the study by Di Vesta (1954) described earlier, airmen were trained by the conference method and, then, were required to act as discussion leaders and chairmen of small groups, with the objective of solving administrative problems. Using performance in this situation as a criterion, Di Vesta claimed that the training produced significant improvements in group leadership skills.

As one moves along the continuum of training methodology from the solely cognitive methods (lecture, conference) discussed so far in this section toward more experiential procedures, the potential for interpersonal skill development may be expected to increase, and this appears to be the case. Thus, Moon and Hariton (1958) augmented lecture and discussion with intensive role playing followed by feedback sessions to train engineering supervisors in the skills of conducting performance counseling sessions with subordinates. Thirty hours of instruction were spread over 2 weeks of half-day sessions. The main evaluation procedure was a questionnaire given to randomly selected subordinates of trainees after completion of the training. The questionnaire addressed 10 areas of supervisor behavior and emphasized person-to-person relationships between the subordinate and his supervisor. In the results, the trained group showed a more positive change than did a control group of supervisors who did not receive the training. Moon and Hariton conclude that the training had a positive effect upon the interpersonal behavior of the trainees.

Programs using behavior modeling techniques for assertiveness training (Shaw and Rutledge, 1976) and for training in supervisory practices (Goldstein and Sorcher, 1974); have been reported. Although all of these authors report success in improving skills, detailed data on the studies have not been published. Behavior modeling appears to be an effective method for training in situation-specific skills, (e.g., "handling problem employees," "conducting performance counseling," etc.); the feasibility of using the method to develop generalizable interpersonal skills, however, remains unknown.

Despite the extensive research conducted on T-Groups and laboratory human relations training, relatively few studies (Bunker, 1965; Miles, 1965; Valiquet, 1968) have directly addressed the questions of whether skills are actually improved by exposure to such training and, if so, what skills are improved. The scarcity of such studies appears to be due, in part, to the fact that program designers are reluctant to specify the particular skills the training is likely to produce and, in part, to the extreme difficulty of isolating and measuring specific interpersonal skills.

Several surveys (Campbell and Dunnette, 1968; Cooper and Mangham, 1971; Mosvick, 1971) have examined the issue of whether interpersonal skills are improved by T-Groups and laboratory training. The most common conclusions are that the training can result in (1) improved skills for diagnosing individual and group behavior, (2) improved communication and listening skills, and (3) greater skill and flexibility in acting in interpersonal and group situations. What is more, the changed behavior seems to be retained for some time after training, although there have been reports of fade-out after 10-12 months.

Only one study that used mixed methods to develop interpersonal skills could be identified. This study by Maier, Hoffman, and Lansky (1960) is especially noteworthy, because it aptly illustrates the problems involved in developing interpersonal skills.

Maier, Hoffman, and Lansky were concerned with improving skill in conducting a rather difficult interview. Three separate groups of undergraduate students served as subjects. The three groups received different treatments and were then observed during their role-playing performance of a difficult interview between the personnel manager and the office manager of an industrial firm. The role-playing performance served as the criterion of effectiveness.

One group received lectures on causation and attitudes, before the role playing during the second week of the semester. A second group received the same lectures on attitudes and causation, plus additional lectures on motivation, learning, individual differences, and "democratic leadership." This group also participated in weekly role-playing sessions until the eleventh week, when the criterion case was administered. The third group received the same treatment as Group 2, but, in addition, received a lecture and some practice in nondirective interviewing. Furthermore, the criterion problem was not administered until the thirteenth week of exposure to human relations principles and practices.

The authors judge the training to have been only partly successful. The trained students, particularly those in Group 3, displayed more skill in "listening" and accepting negative feelings, but showed no improvement in the more active skills of contributing positively to resolution of the problem.

Maier, Hoffman, and Lansky point out some distinctions of this study that bear importantly on training in a practical situation. They note that the training received by Groups 2 and 3 was quite different and substantially more than that received by trainees in the typical course in industry or government. In such courses, the trainees usually attend classes for one or two weeks, listening to lectures and discussing various aspects of leadership or supervision. Rarely do the trainees receive any skill training. By contrast, the students in Groups 2 and 3 attended two 2-hour lectures per week and participated in a 2-hour role-playing case and discussion each week for 11 and 13 weeks respectively. Each subject had two and occasionally three opportunities to lead a group discussion or to interview one of the other members of the class, and all subjects participated in practically every case as either a group member or an interviewee.

The authors draw some conclusions worth quoting:

The implication of these results, however, for the amount and type of training received by supervisors and executives in the typical . . . training course in human relations is obvious. Training is a slow process of reorientation and of the acquisition of new concepts, attitudes, and skills . . .

From these results we can conclude that where management is seriously interested in training supervisory personnel in effective human relations practices, they must expect to invest considerably more time than is presently customary. They must give the trainees the opportunity to discard their old ideas about human behavior and to acquire new ones, to discard their old prejudices and to develop more productive attitudes about their functions as supervisors, and to practice the kinds of new skills which they will need in implementing their new understanding.

These conclusions, when coupled with the earlier-discussed findings of Lawshe, Bolde, and Brune (1959) regarding "impact," provide some useful leads as to why many training programs are ineffectual for improving interpersonal and leadership skills. It appears that effective improvements in such skills require some intensive experiences to which trainees will be exposed over a considerable period of time. It is also apparent that many training programs do not provide either the intensive experiences or the time required to achieve genuine behavioral change.

From the studies cited in this section, it is evident that, under proper training conditions, interpersonal skills can be developed. Some of the required conditions include:

- (1) Provision to trainees of a clear, meaningful conceptual framework which they can use for understanding and analyzing the real-world leadership situations they are likely to encounter.
- (2) Opportunities for trainees to experience themselves functioning in a variety of realistic and relevant leadership situations over a considerable period of time.

- (3) Opportunities for trainees to observe the consequences of their actions in realistic and relevant leadership situations.
- (4) Opportunities for trainees to objectively and systematically analyze their own and others' performance in leadership situations.
- (5) Opportunities for trainees to experiment with and practice new ways of behaving under conditions in which mistakes will not have serious consequences and effective behavior will receive prompt positive reinforcement.

Although many programs stress the importance of effective interpersonal relations, few provide the conditions necessary to produce genuine improvement in the required skills. Consequently, a great deal of time, effort, and money is spent on programs which have low probabilities of significant returns, despite the fact that the knowledge and training methods to successfully develop the interpersonal skills are presently available.

IMPROVEMENT IN ON-THE-JOB PERFORMANCE

The ultimate purpose of training, whether stated or not, is to improve trainees' performance as leaders. Despite this obvious purpose, only a few studies in which on-the-job effectiveness was used as a criterion of training validity could be located. The scarcity of such studies can be attributed mainly to the ubiquitous "criterion problem" which has bedeviled industrial psychology since its inception. It is extremely difficult to develop valid measures of job performance, especially for individuals in leadership positions. Accordingly, most researchers have compromised by accepting criteria other than job performance. The few studies which have evaluated the effects of training upon job effectiveness have used a variety of approaches and criteria.

In the aforementioned study by Moon and Hariton (1958), supervisors in an engineering department of General Electric were given 30 hours of mixed instruction consisting apparently of lecture-discussion and role playing, with feedback and critique of role playing performance. The main evaluation procedure involved a questionnaire, administered to subordinates of two groups of supervisors, those who had received the training and those who had not. Questions pertained to 10 areas of supervision, and respondents were requested to compare post-training conditions with conditions 2 years earlier. The trained group showed a greater positive change in eight of the 10 areas than the control group. Moon and Hariton conclude that the course had a positive effect upon the performance of the trained supervisors.

In their study, also discussed earlier, Mayo and DuBois (1963) evaluated a 5-week leadership course for Navy petty officers in which lecture-discussion was the method of instruction. One of their criterion measures was supervising officers' ratings of the petty officers' performance on the job before training and 2 months after its completion. Mayo and DuBois found significant improvement in on-the-job ratings for the trained group, and they conclude that the training was effective in improving trainee performance.

The effects of T-Group and laboratory training upon job performance have been quite adequately covered in recent reviews (Campbell and Dunnette, 1968; Campbell, Dunnette, Lawler, and Weick, 1970; Cooper and Mangham, 1971). Studies of these types of training have used job performance as criteria much more often than studies of other methods. The results, however, have been mixed. There seems to be little doubt that T-Group and laboratory training produce some sorts of changes in many trainees. However, there has been a problem in connecting the changes to performance on the job. Results have been quite mixed. There is almost no evidence that T-Group and laboratory

training result directly in improved leader effectiveness, but neither is there evidence that such training does not result in improved performance. There simply has not been enough research to warrant solid conclusions one way or the other.

Studies of the effects of any kind of training upon on-the-job performance, are, in fact, in very short supply. Therefore, although there is reason to suspect that leader training improves job performance, solid evidence to support this suspicion remains to be developed.

SUMMARY

The studies reviewed here provide some additional knowledge on the pedagogy of management training. In summary, the literature indicates the following:

1. Lecture-discussion, conference method, and case analysis may all be effective ways to improve knowledge and increase awareness and sensitivity to the human element in work situations. There is considerable doubt, however, that programs which use only methods designed to disseminate knowledge or generate awareness and appreciation of the human element in work can be seriously expected to exert any lasting influence upon actual job performance.
2. The evidence suggests that changes in attitudes, as measured by written attitude tests, can be achieved through training. "Mixed" methods (i.e., programs that couple lectures with heavy group discussion, role playing, case analysis, etc.), have proved to be the most effective ways to achieve such changes. There is little evidence, however, that on-the-job behavior is modified by training designed to change attitudes.
3. Training can apparently produce improved problem-solving skills. The method used and the care with which the associated program and materials are designed, however, may be the principal determinants of whether such skills can be developed.
4. Under proper training conditions, it is possible to improve the interpersonal and leadership skills of trainees. Unfortunately, most training programs for such skills do not provide the necessary conditions and are, therefore ineffective. Effective training requires extensive effort on the part of trainees, much longer training time than is normally provided, and carefully structured training situations designed specifically to give trainees intensive practice in skills and systematic feedback.
5. The few studies that have examined the effects of training upon leader performance on the job have had mixed results. At present there is no consistent evidence on the impact of leadership training upon job performance.

The dearth of clear-cut findings can be blamed on many things—the complexity of human behavior, the difficulty of conducting controlled studies in the training field, the lack of adequate criteria and measures, or the problems besetting a training designer whose primary responsibility is development of trainees who are also his research subjects. This literature suggests one factor which seems to be even more important than these, however—the trainer's frequent lack of a coherent notion about precisely what he is trying to do. Only rarely did we encounter training programs in which goals were clearly conceived in operational terms, methods were developed or modified to best accomplish specific program objectives, and objectives-based evaluation devices were built into the training design. The scarcity of consistent results is therefore not surprising.

This review has made one other fact evident: If ever there was a crying need for systematic research, it exists in the field of leadership training.

Chapter 6

THE STATE OF THE ART

There is little disagreement about the desirability of leadership training. A few writers have argued that attempts to train leaders is a waste of time, for example, McNair (1957), who, years ago, damned the whole idea of human relations training as a ritualistic shibboleth; and Fiedler (1965, 1970), who contends that it is easier to change the job situation than to change a person's behavior or leadership style through training. With a few exceptions, however, most people who have been involved in the field concur that training leaders is a critical activity for sound organizational development.

A FIELD IN DISARRAY

Despite this near-consensus on the value of leadership training, the field seems to be in considerable disarray. Among the many programs, one can find a number which are well designed and excellently administered. All too many, however, show no discernible concern for sound training principles, they evidence few common assumptions and hypotheses regarding learning; and they vary widely in theoretical and methodological approaches. Even more tragic, many programs devoted to training managers, supervisors, and military leaders are astonishingly superficial. It is not unfair to say that many leadership training programs have distinguished themselves more by the number of students graduated than by demonstrated effectiveness.

There may be many reasons for this situation; however, two, in particular, appear to be major contributors. The first derives from some widely diverse orientations to leadership and, therefore, to leadership training. The second involves the misuse of training methods. They are closely related and are both important determinants of the present confused state in the field of leadership training.

Diverse Approaches to Leadership

In addition to the findings reported in Chapter 5, the literature survey conducted for this report revealed one additional factor, which has apparently had a significant impact upon the state of leadership training. This factor is the wide diversity of approaches to leadership exemplified by the training programs covered in the survey. When descriptions of these programs were carefully examined, it was possible to identify a number of different concepts of leadership, which have critical implications for training.

Within these different orientations, leadership appears to be variously conceived as concerned with: (1) the influence of human-social factors on work, (2) superior-subordinate relationships, (3) an ethic of leadership, or (4) all of the phenomena of human interaction within organizational contexts.

The "Human Relations" Approach. In business and industry, the rubric "human relations" has traditionally been applied to a movement devoted to sensitize managers to the necessity for being aware of the human element in organizational life. Based on the pioneering work of Mayo (1946) and his collaborators, Roethlisberger and Dickson (1949), the movement emphasizes the social system which evolves when a group of

people work together and the effects of that system on performance and attitudes. Under this approach, leadership is a matter of working effectively with others and building cooperative effort into the organization. It requires taking the human elements into account and integrating them with technical aspects.

The result of this movement has been a multitude of training efforts ranging from the early Training Within Industry programs of World War II to many of the elaborate in-company programs that exist today. Although vary in content, these programs have one thing in common. Most are "appreciation" courses, designed to help managers appreciate the human element in work by indoctrinating them on the importance of "good human relations." They most often use directed conference methods, although some case study is also used.

Most programs of this type are intended to make participants more conscious of human relations. They are designed on the assumption that a manager who is more consciously aware of the human element in work will perform his duties more effectively. The process by which this is supposed to occur appears to involve a cognitive reorientation. The free discussion of various facts and points of view is supposed to result in heightened awareness of human affairs, which will then be reflected in improved on-the-job performance.

Although making people more appreciative of the importance of human relationships at work has to be a commendable goal, the rationale of this approach raises some problems. For example, it is questionable whether awareness alone is sufficient to effect a change in behavior. When we consider that even extensive experience with physical facts does not necessarily lead to the correct perception of physical phenomena, it is not surprising that being told of the importance of human relations will not necessarily result in improved interpersonal behavior. Furthermore, even if the cognitive structure involving human relations can be modified by "appreciation" courses, there remains the need for skills in performing effectively within the new orientation. Normally, such courses make no attempt to develop skills.

A final, but most important, problem involves the level at which interpersonal relationships are treated in the typical human relations program. No less a person than Roethlisberger, one of the fathers of the human relations movement, frequently expressed concern over the superficial way many courses deal with human relationships (1951).

The Superior-Subordinate Approach. Human problems in organizations are most likely to be felt by people occupying leadership positions. The image of effective operations held by many leaders is characterized by numbers of hard-working subordinates, each performing efficiently at a high level of motivation, with eye on the goal and shoulder to the wheel. In reality, of course, very few subordinates fit this stereotype. Problems of handling subordinates therefore become a major preoccupation of many leaders.

Consequently, leadership is often viewed solely as a matter of superior-subordinate relationships. In this view, the goal of training is to educate leaders in ways of directing subordinates, motivating them, controlling their actions, and modifying their behavior to fit the needs of the organization.

Training programs based upon these requirements usually concentrate on equipping leaders with skills for coping with fairly specific problem areas, such as those noted above. Because this approach is highly pragmatic, training has tended to take the form of rules of conduct and specific "techniques" designed for application in prototype situations. Its goals stand in contrast to the goal of developing cognitive awareness, exemplified by the "human relations" approach. Specific "techniques" for coping with common situations also leave much to be desired, however. Human behavior is too complex to be

susceptible to solution by formula. The leader who is armed with a set of techniques is apt to find himself ill-equipped to handle the infinitely changing patterns of relationships with subordinates.

The Ethical Approach. A contrasting approach, with a somewhat different orientation, has arisen in recent years. It views the field as concerned with the democratic ethic, and it is characterized by a definite philosophy and a set of more or less specific methods for practicing leadership.

Democracy as it applies to human relations and leadership has little to do with democracy as a political system. In this ethical view, human relations involves the processes of working together, with the sharing of power, interests, and accomplishments. Accordingly, leaders should aim toward development of the individual and his realization of his constructive potential. Development and growth are fostered by giving every individual an opportunity to fully exercise his competencies and achieve mature self-direction.

From this standpoint, a democratic leader is one who stimulates or enables every individual to contribute whatever he can to the total group effort (Haiman, 1950). Democratic leading, therefore, involves coordination rather than compulsion. It is concerned with creating the conditions under which subordinates are able to realize their full potential (Gordon, 1955). In most organizations, when used, the emphasis usually takes the form of greater participation in decision making, goal setting, assigning tasks, and so forth.

Training to develop more democratic leaders usually requires more complex methods than either of the previously discussed approaches. Because values and attitudes give direction to interpersonal behavior, training in the democratic ethic is deemed to require a major reconstruction of the personality. In this orientation, the problem for leadership training is one of "rebuilding the personality by breaking down the barriers to change, introducing new ideas, values, and assumptions into the trainees personality, and thus altering the motivations that guide his activity as a leader" (Seashore, 1957).

This process can be exceedingly complex as well as difficult. Accordingly, a variety of training methods are usually brought to bear, ranging from group discussion, to role playing, to workshops on group-centered leadership, to T-Group and laboratory training. In each case, the objective is a basic change in attitude with, in some instances, concomitant development of action skills. Clear-cut evidence of permanent personality change resulting from these or any other training methods has yet to be produced.

Few people would oppose the democratic ethic as a desirable orientation to life. One can seriously question, however, the feasibility of attempting to indoctrinate leaders with the full democratic ethic if they are expected to function in essentially authoritarian organizations, such as prevail in industry, government, and the military services.

The necessity to reconstruct the value and attitude systems of trainees can also be questioned. Although total commitment to the democratic ethic might require some basic changes in value systems, it seems reasonable that a person could be skillful as a leader for pragmatic reasons, without espousing ethical democracy as a way of life.

The Reality-Based Approach. A way of thinking about organizations that has undeniable importance for leadership training has recently come to the fore. This approach has received its greatest emphasis from certain organizational psychologists and Organizational Development (OD) practitioners who embrace open systems theory, group dynamics concepts, and theories of social motivation. In this approach, leadership is conceived to be concerned with all the phenomena of human organizations. This means that leadership cannot be limited to one or a few highly specific areas such as the superior-subordinate relationship or the influence of social factors on work. Furthermore, leadership is not restricted to person-to-person interaction or even leader-group relationships. An

organization, in this approach, is viewed as an interactive system, a network of social-psychological relationships in which all the phenomena that arise from human intercourse may be encountered. Therefore, leaders must be concerned not only with two person, face-to-face relationships but also with within-group interaction, inter-group relations, and the hierarchical systems that go to make up large organizations. Leaders must be concerned with controlling and manipulating these various relationships in such a manner as to maximize the effectiveness of their organizations.

Therefore, a leader must be more than merely adept at influencing individual subordinates. In addition, he must have a knowledge of group and organizational characteristics and, more important, must be able to use this knowledge to achieve organizational objectives.

When the field is seen as concerning all the phenomena of interaction, leadership involves coping with the realities of human relationships however and wherever they may occur. Thus, a leader is viewed as one of the actively participating parties in a reciprocal interaction situation. Seen in this light, the nature of leadership problems changes continually, and to be effective, the individual must be able to recognize and cope with a wide variety of constantly shifting interpersonal situations as a participant in them. Thus, leadership cannot be put in terms of any one predetermined, correct way to behave. To maintain contact with things as they are requires adaptability, change, and flexibility of operation.

In this approach, the basic guiding concept for leaders is the "reality principle." According to Thelen (1954), this principle states,

There are facts which need to be taken into account: there is a prior reality—a set of existing conditions independent of the will of a person or group—within which one must operate. When a person tries to act as if these conditions do not exist, or as if they were different than they are, his action is aggravating to the problem-situation rather than constructive; it jeopardizes immediate goal achievement; and, through thwarting the potential for individual and group growth, it may curtail long range possibilities.

Argyris considers effective leadership to be "reality-centered." According to Argyris (1957),

Reality-centered leadership is not a predetermined set of "best ways to influence people." The only predisposition that is prescribed is that the leader ought to first diagnose what is reality and then use the appropriate pattern.

Argyris concludes that effective leadership requires effective diagnostic skills.

Following this position, we would expect a leader to be most effective when he can address the concrete needs of the situation confronting him. This would require the ability to evaluate realistically the specific events that are taking place, and also to recognize symptoms of what is happening and move from symptoms to causes and then to skillful actions intended to alleviate the causes. Therefore, a leader faces a variety of situations which demand a broad repertoire of behaviors if he is to be successful. Leaders must be concerned primarily with assessing events and devising actions appropriate to them.

Training that evolves from such a definite view of leadership would be expected to rest upon a fairly clear-cut rationale. Such is the case. The view that leadership does not involve any special set of specific actions suggests that a person cannot be taught what it takes to be a "good" leader or "how to lead people." Under this approach, training should: (1) teach a student about things to look for (phenomena of interaction), (2) train him how to look for them (diagnostic skills), and (3) help him to react appropriately to them (action skills).

Some similarity between this and the ethical approach may be apparent. Admittedly, similarities do exist at certain points. For example, some proponents of the democratic

ethic also stress the importance of diagnostic and action skills, and use high-involvement methods in training. However, despite similarities, several distinct differences have important implications.

The principal differences involve the concept of leadership and the processes involved in learning. The ethical approach views leadership as concerned with the democratic ethic and the distribution of power. Effective training is to be achieved through changing attitudes, revamping the personality, and developing diagnostic and action skills needed for implementing the ethical orientation. On the other hand, the reality-based approach considers leadership as dealing on a pragmatic basis with all of the phenomena of interaction. No value orientation is involved. Effective training is achieved through the conscious and systematic development of diagnostic and action skills. Revamping the personality is not required.

Consequences of Diverse Approaches. Approaches to the nature of leadership are of more than academic interest; they count heavily in both the design and the conduct of training programs. If the several approaches described above are scrutinized closely, it becomes apparent that they, in fact, make either tacit or explicit assumptions about the kinds of behavior necessary for effective leader performance. These assumptions are reflected, in turn, in the goals and methods selected for training leaders.

A trainer who believes that leadership involves considering the human-social factors at work and that effective behavior requires taking these factors into account in decisions and actions (human relations approach) will probably attempt to teach students to be more aware of the human element in work. On the other hand, a trainer who is convinced that leadership is a problem of superior-subordinate relationships (superior-subordinate approach), will view leader behavior as capable handling of subordinates; and training will involve teaching leaders techniques of manipulating subordinates toward better performance.

Commitment to the democratic ethic (ethical approach) leads to the conviction that the fundamental problem involves the equal distribution of power and the growth of individuals. Effective leader behavior, therefore, will require actions that more equally distribute power and thereby create conditions conducive to individual and group growth. With this orientation, a trainer will aim to inculcate the democratic ethic and will teach methods of participative leadership.

However, if a trainer embraces the proposition that leaders must deal with all of the phenomena that arise from the interaction of people within organized systems (reality-based approach), he is likely to view effective behavior as coping successfully with the realities of organizational life in all its forms. Training will be directed to developing the ability to actively understand and control a wide variety of constantly changing situations.

The kinds of assumptions made about the nature of leadership and the behavior through which it is manifested clearly determine in large degree the path a training program will take, with respect not only to content but also to methods. However, trainers frequently have formulated their concepts of leadership in relatively casual ad hoc ways; or they have uncritically adopted the ideas which prevail in their organizations or cultures and attempted to fit whatever training methods are currently in vogue to the ideas.

Misuse of Training Methods

A second important contributor to the present state of leadership training is the misuse of instructional methods. Traditionally, most leadership training has been approached from one of two directions. The first approach used conventional teaching methods carried over from the field of education. This approach generally involves an instructor who delivers classroom presentation of concepts, theory, and recommended ways of handling a job or problems related to it. In recent years, however, it has become

apparent that such methods are not very effective for training people for positions of leadership (see Chapter 5). Genuine improvement in leadership practices requires some fairly fundamental changes in the behavior of the individuals involved. People do not seem to learn leadership skills merely by studying theory or being told how they should behave.

The second traditional approach to training is of somewhat more recent vintage. It appears to be based on the proposition that improved leader performance can be achieved by exhortation or a few gimmicks designed to "involve" the students. Although most such programs appear to be harmless, they are also inadequate. Token programs simply are not very effective in generating behavioral change.

Even when some of the more sophisticated and effective methods are used, trainers are tempted to accept one method as correct for all purposes. This identification with one method is likely to obscure the fact that selecting a training device is ideally influenced by the character of the changes sought. Any worthwhile training program will ordinarily require different activities at different times for different purposes, and choices should be determined by evaluating a method against the specific objectives, conditions, and situations under which it will be used.

It would be easy to stop at this point and lay all the blame at the feet of inadequately qualified trainers. In fact, some trainers are inadequate. Because of the requirement to achieve fundamental changes in the behavior of trainees, serious training for leadership is one of the most difficult educational processes there is. Yet, in few other fields can there be found so many instructors who are expert neither (1) in their subject matter nor (2) in teaching.

To simply blame poorly qualified trainers for the present state of leadership training, however, would be a serious error. Instructors cannot be condemned for inadequate practices when good information is not available to them. The plain fact is that virtually no concrete guidance is readily available to program designers who wish to evaluate the variety of methods that can be used for training leaders and make intelligent choices between them.

Program designers and trainers need to know with some assurance how to relate variations in the training process to specifically desired outcomes. Ideally, a trainer should be able to stipulate the kinds of behavior he wants students to exhibit at the end of a program and, then, select the methods most likely to produce the desired behaviors.

In training for "hard" (i.e., technical), skills, the procedure is fairly straightforward and can be accomplished for most jobs with minimum difficulty. The program designer simply identifies the tasks performed on the job, decides how best to demonstrate the task activities, and develops sessions that permit practice until task mastery is achieved.

Training in "soft skills," such as leadership, however, presents any conscientious trainer with some extremely slippery problems. As he sets out to select methods, he encounters the question of the objectives toward which training should be directed. Indeed, as he goes about selecting objectives, he must resolve the deeper problem of the kinds of changes trainees must undergo if the objectives are to be achieved. Is the result of training to be a cognitive change based on the acquisition of information, an attitudinal change brought about by the additional information and experience gained through the program, a behavioral change—an improvement in certain specific skills accomplished through practice—or all of these? His answer should dictate the training methods he selects because each of the above alternatives may require use of a different method.

The currently accepted solution, of course, is to develop training by analyzing the specific jobs or roles of the persons to be trained. This "performance-based," "competency-based," "objectives-based" approach to training development offers the greatest potential

yet for producing training that is job-relevant and efficient. However, when it is applied to leadership training, achievement of effectiveness remains a very difficult problem.

In performance-based training, terminal objectives are supposed to reflect the skills required to perform a job effectively. Assuming that a valid set of leadership skills has been identified, the difficult question for training is, "How are these skills to be developed?"

Suppose that job or role analysis turns up the fact that an important leader function is to develop and maintain high levels of motivation in subordinates. Suppose further that a set of skills related to developing and maintaining motivation has been identified. If we ignore the exceedingly relevant problem of the nature of such motivation, a number of questions remain. Is it sufficient that trainees be made aware of and sensitive to the fact that other people have motives and needs which should be taken into account at work? Instead, should they be drilled in techniques of "motivating" subordinates? Or should they be taught the ethics of power distribution and techniques of participative leadership so they can "involve" subordinates and, thus, increase motivation to perform. Maybe they should be trained in diagnostic and action skills?

It is clear that, to answer questions like these, a trainer must know precisely what he is trying to do, that is, what kinds of changes he is attempting to achieve within trainees. This requires an explicitly clear concept of leadership and of effective leader behavior under that concept.

It is highly unlikely that any one concept of leadership will soon prevail. Leadership theory and research has a long way to go before a single integrated concept dominates the field (McCall and Lombardo, 1978). Irrespective of the particular concept he embraces, however, a trainer must think it through until he is entirely clear about the kinds of behavior he believes leaders need to be effective and the kinds of change required in order for trainees to learn the required behaviors. In addition, he needs to know what training methods will be most likely to accomplish the identified changes.

Unfortunately, there is very little concrete guidance concerning the specific purposes of leadership training or the potential uses and relative effectiveness of the various methods in relation to particular objectives. Despite the current proliferation of literature written by and for trainers, most publications do not address the really critical issues in leadership training, and few provide any useful information concerning the rationales underlying the various methods, or much solid evidence relative to their potential values and comparative effectiveness. The upshot is that an individual required to design programs for leader development is forced to resort to tradition, hunch, a few educated guesses, and, perhaps, his own concept of the learning processes involved.

REQUIREMENTS FOR IMPROVEMENT

Despite the existence of many superficial or ineffective programs, the evidence reviewed in Chapter 5 indicates that leadership skills can be effectively taught, when training is truly considered important by organizational managements and when it is thoughtfully designed and carefully implemented.

Although it is difficult when conducted properly, training leaders is feasible. The key rests with the systematic design of programs, careful matching of training methods with specific program objectives, and use of trainers who know precisely what they are supposed to do and how to do it. Under these conditions, successful leadership training can be accomplished.

What is needed is systematic guidance for trainers that will permit them to select methods appropriate for specific objectives and use them in accordance with instructions designed to get best results. This would provide trainers with assistance for building programs with greater probability of success than is presently possible.

A Technology of Leadership Training

Chapters 7 and 8 of this report are a first step in the development of guidance for trainers. More is required, however. The quality of instruction can best be improved by developing a technology of leadership training, a body of information based upon concrete data obtained through a comprehensive program of sound research. The technology would address leadership training methods and activities rather than the nature of leadership, interpersonal relations, or organizational dynamics. Information provided by this technology would enable trainers to select appropriate methods for specific training objectives and particular leadership content and to use the methods to achieve the best results.

Of course, such an approach places a larger burden upon trainers. The locus of responsibility for designing and conducting training would be placed where it properly belongs—in the hands of individual trainers. This is as it should be. The trainer is the only individual who can maintain effective quality control; in leadership training, it appears to be impossible to provide effective, high quality packaged programs that administer themselves. But trainers can be provided with authoritative assistance for building sensible courses that have a greater probability of success than is presently possible. A technology of leadership training is needed to provide this assistance.

A Systematic Program of Research

The purpose of a training technology is to provide practitioners with authoritative information, data, techniques, materials, and so forth that will permit them to better control and manipulate program input for predictable results. Ideally, a trainer should be able to stipulate the kinds of behaviors he wants students to exhibit at the end of a course. He would then select the methods most likely to develop the desired behaviors. This means that a technology of training cannot be oriented toward any particular job or content. Instead, it must focus upon devising methods, designating the kinds of behavior each will evoke, and specifying conditions under which each technique can be expected to be effective.

The fundamental requisite for any technology of training is a sound and comprehensive body of knowledge upon which the development of methods, techniques, and materials can be based. In the field of leadership training, such an authoritative body of knowledge does not exist at present. As could be seen in Chapter 5, much of the "research" in this field consists of evaluation studies—efforts usually limited to measurement of one program or method against one criterion.

Most studies have been more concerned with demonstrating the utility of a single, uniquely designed program than with comparing the relative merits of several methods or with studying the nature of learnings achieved. Such studies have a certain value to the trainer who conducts them. He knows what general kind of program will produce some results. He can demonstrate that the criterion variable has been altered in the desired direction. Furthermore, evaluation studies provide trainers with clues for modifying their methods.

But, however helpful to the trainer such studies may be, simple evaluation produces few guides for improving a program on making practical decisions, and little knowledge applicable to other programs. In short, we do not have any more understanding of the training process and general training implications than we did before.

The need for research is obvious. As McGehee and Thayer pointed out years ago (1961) with respect to training in general:

... Logical analysis and conviction are not enough; nor are skill and deftness in using a wide variety of techniques tailored to the specific training problem. There is too little concrete evidence to guide those responsible for

training in their selection of the best techniques or combination of techniques for each training situation. Role playing may be useful in training salesmen to tell their sales stories effectively. Are there other techniques which are superior? Is role playing an efficient method considering training costs, time, number of students, and results? Do we understand what basic principles underlie this technique so that new techniques can be derived from it?

In brief, there is a definite need for carefully controlled research:

1. To examine the relative effectiveness of various training techniques under a wide variety of conditions, with a wide variety of trainees, and in a wide variety of industries. Only in this way can we begin the construction of a training technology which will permit the trainer to use the most efficient techniques for the problems at hand. Just as the engineer is able to consult a handbook in selecting materials to solve a stress problem, the training director needs an analogous source of information to use in solving his training problems.

To examine the "whys" of each technique, we need to know what it is about each technique which is effective. What are the learning principles incorporated into the role-playing techniques? What features conflict with established learning principles? If we know the answers to these questions, we would improve the efficiency of the individual technique and derive new ones. We might even discover new learning principles in the process.

There can be little doubt that a comprehensive, systematic program of well-conceived, comparative research aimed directly at pedagogical improvement is needed. However, such an undertaking is not simple, because the field of leadership training is a morass of claims and counterclaims, conceptual confusions, and semantic bogs ready to trap the unwary.

Before a meaningful program of research on training methods is begun, a number of important issues must be faced and resolved. A later chapter of this report will address some of the important issues involved in conducting leadership training research.

SUMMARY

The field of leadership training appears to be in a state of considerable confusion. Although effective, well-designed programs can be found, many more programs are poorly designed, superficial, and, though not evaluated, probably ineffective.

There may be many reasons for this condition; of particular importance, however, are (1) the many diverse orientations to leadership and leader behavior which can critically affect training effectiveness when their implications for selection of training methods are not taken into account, and (2) the dearth of systematic guidance concerning training methods and their potential uses.

There is a critical need for a technology of leadership training—a systematic body of knowledge based upon concrete data concerning training methods, their relative effectiveness, and their recommended uses. Development of a valid technology requires, in turn, a sound, well-conceived program of comparative research on leadership training methodology.

The discussion in this chapter assumes that it is possible to conduct effective leadership training. The position taken here is that leadership can be effectively taught when training managements consider it sufficiently important to allocate the needed time and resources to it and when it is done well. Only propaganda or conversion can achieve the first condition. The second, however, can be significantly affected by sound research.

PART II

TOWARD IMPROVED LEADERSHIP TRAINING

Chapter 7

A RATIONALE FOR EFFECTIVE TRAINING

As concluded in Part I, the field of leadership training is in a state of relative chaos. Although some excellent training is conducted, many programs are inadequate and ineffective. Much of the problem appears to be due to an almost complete dearth of systematic, authoritative guidance for trainers and designers of training. There is a clear need for a technology of leadership training, an organized body of information about training concepts, methods, and procedures, which can be used by designers to make decisions about the best ways to develop high-quality programs. Such a technology must rest, in turn, upon a foundation of sound research.

Part II of this report presents a first step in the development of a technology of leadership training. This chapter presents a proposed rationale for effective training. Chapter 8 presents some guidelines for designing training programs and selecting training methods. Chapter 9 analyzes strategic considerations for conducting research on training methods and discusses some of the more pressing questions for which research-based answers are needed. Finally, Chapter 10 presents a perspective on the present and future of leadership training.

A PROPOSED RATIONALE

Although the literature on leadership training does not have much to say about conditions conducive to effective learning, literature from other related fields (e.g., human relations), contains numerous analyses of practical learning and training that appear to have considerable relevance and potential for application to leader development. This literature contains a number of common threads related to certain factors that affect practical learning and to necessary conditions for such learning. The following discussion is an attempt to weave into a single coherent formulation those related threads which, although they derive from a variety of sources, together form a reasonably integrated rationale for effective leadership training.

Fundamental Concept of Leadership

Regardless of whose leadership theory one embraces or which approach to leadership (Chapter 6) is most attractive to a trainer, one fact seems to apply universally. This fact is that, in any formal organization, a leader faces a variety of situations which demand a wide repertoire of behaviors if he is to be successful. Therefore, a leader must be able to assess the needs of constantly shifting situations and adapt his behavior so as to produce desired results. This view of leadership as an adaptive process has been proposed by numerous writers, all of whom recognize that a leader is most effective when he addresses the concrete needs of the immediate situation. To do this, a leader must be able to make realistic evaluations of specific events that are taking place and the relationships between his behavior and those events. The leader must be concerned with assessing events and finding appropriate courses of action; he must be able to recognize symptoms of what is happening and move from symptoms to causes and, then, to skillful actions intended to alleviate them. Thus, the effective individual can accurately identify the essential elements in a situation and, moreover, can address them in such a way as to control them. In effect, this is skill in behaving—in seeing and acting.

This appears to be an important distinction for training. As opposed to his having a solely intellectual understanding, the successful leader is effective in seeing and acting. Training designed in accordance with this proposition would require a participant to examine deeply the validity of the underlying assumptions on which he acts and would result in an individual who is consciously aware of the implications of his behavior for others and of their activities for him. The problem for trainers, then, is to determine the best way to help students modify their behavior—to become more proficient at seeing and acting and to become more aware of the implications of their behavior for other people and of others' actions for them.

Practical Learning.

Fundamental to this rationale is the premise that genuine learning involves a change in behavior (Cantor, 1958). In short, if a trainee does not behave differently after training than he did before, learning has not occurred. Following this pragmatic approach, the targets of training must be growth within the individual and change in his behavior. These are deeper and broader goals than mere transmission of knowledge.

The acquisition of knowledge through solely cognitive processes is one important aspect of individual growth. However, knowledge that remains merely cognitive cannot much influence an individual's ability to function effectively (Bradford, 1961). This knowledge must be translated so it becomes genuinely significant in the learner's experience.

For this discussion, knowledge is important to the learner only as it contributes to modification of attitudes or skills (Gibb, Platts, and Miller, 1951). According to this view, effective learning is insightful and meaningful; and isolated information and principles (not tied to problems perceived by the learner as related to his life and needs) contribute little to this insight. Such information and principles are not really "understood." If retained at all, they are "pigeonholed" or converted to abstractions which possess no real significance for performance.

Useful learning is not a matter of simply filling a void with information. It is a process of reorganizing complex thought patterns, perceptions, assumptions, attitudes, feelings, and skills, and relating these reorganized concepts to the external world and the problems faced in it. Thus, the learning process is effective only when something dynamic takes place within the learner (Gragg, 1960).

Such learning must be active, participative, and involving. It is best accomplished by experimenting, continually attempting to adjust concepts and skills, and continually checking one's ideas, interpretations, and learned behavior against reality.

Motivation to Learn

Most theories of instruction accept the premise that there must be a readiness for learning before it can occur. In practice, this means that the individual must perceive some need for change, must be capable of changing, and must perceive the learning situation as one which can facilitate such change in a direction acceptable to him. In short, learning will not occur unless the individual is motivated and ready to learn.

Fundamental to this rationale for leadership training is the concept that the motivation to learn new leadership behavior is a matter of attitudes and, what is more, that successful instruction must not only stimulate positive attitudes toward learning but, more important, must overcome attitudes that make the potential learner resistant to change (Bradford, 1961; Cantor, 1958; Gibb, Platts, and Miller, 1951; Schein, 1962).

Attitudes are generally organized and integrated around the person's image of himself, and they result in stabilized, characteristic ways of viewing the world, one's work, and

other people (Schein, 1962). This stable way of viewing the world is comfortable for the individual, and people sometimes go to great lengths to preserve stability even in the face of facts and information which appear to warrant a change in viewpoint. To suggest the need for change not only implies some criticism of the person, but also threatens the stability of his relationships with the world.

Such threats are especially common in leadership training situations. Because leadership involves an individual's characteristic ways of behaving and relating to other people, to suggest the need for learning implies the existence of deficiencies in some very personal areas. The suggestion of a deficiency, or need for change, is likely to be perceived as a threat to the individual's sense of identity and status position in relation to other people (Schein, 1962). Therefore, information too threatening for him to accept, because it attacks his self-image, is blocked out or interpreted in such a way as to pose less threat. The result is that learning does not really occur; that is, behavior is never changed.

Furthermore, learning raises images of potential discomfort or even failure. Learning new things means leaving the tried, sure, and comfortable ways of thinking and behaving, unsatisfactory as they may be. It means setting out along unknown paths and possibly encountering unanticipated obstacles, which may prove difficult or impossible to overcome. Accordingly, each trainee inevitably enters a potential change-situation with at least some apprehension, either conscious or subconscious, and at most some severe anxiety.

Thus, both learning and the maintenance of change once it has occurred are assumed to have emotional as well as cognitive aspects (Bradford, 1961). Stimulating a motivation to change thoughts, attitudes, and behavior and to maintain these changes is mainly a matter of overcoming both resistance within the trainee and forces in his environment that push against change. Much of leadership training methodology must be devoted to creating conditions that minimize resistance and stimulate motivation to learn.

Conditions for Learning

Lasting changes in behavior do not come easily, either for trainees or for instructors. On the other hand, instruction which is not genuinely intended to achieve change is a waste of time, effort, and money. Accordingly, one of the most critical tasks facing every leadership instructor is to create conditions that are conducive to change.

Since learning to improve leader performance is not solely an intellectual process, the development of conditions conducive to maximum learning should take into account both cognitive and emotional aspects. To achieve learning, training must minimize resistance, expose trainees to new ideas, and develop an active functioning frame of reference that encompasses both an awareness of the need to change and recognition of the real-life benefits to be derived from new ways of thinking and acting. Instructional methodology which will accomplish these purposes must meet several requirements (Bradford, 1961; Goetz and Bennis, 1962).

A Supportive Climate. Probably the most critical requirement is a supportive climate that reduces resistance to learning (Bradford, 1961). Changing one's patterns of thought and action is difficult, and a climate that reduces individual defensiveness and anxiety about exposure of inadequacy is paramount in overcoming resistance to learning.

The purpose of a supportive climate is not to protect trainees from exposure of inadequacies but, rather, to create an atmosphere that will encourage them to undertake the tasks of learning, to cope with anxieties and concerns, and to experiment with new ways of thinking and behaving. Development of a supportive climate requires at least two essential conditions within the learning situation (Bradford, 1961). First, threat must be minimized. The climate must reduce defensiveness and provide emotional support while

the learner is undergoing changes in thinking and actions. Second, the learning situation must provide reinforcement for new ways of thinking and behaving. As the trainee tries and tests different ideas and skills, "correct" responses must be reinforced positively and "incorrect" responses must be reinforced negatively so that they will disappear.

Opportunity to Acquire Workable Frame of Reference. Most of the problems of leadership are complex. Yet, effectiveness as a leader is contro' over such problems, and control requires understanding. An effective leader is one who understands his organization, his personnel, and the forces by which they are moved; the ineffective leader is subject to arbitrary and capricious powers that act beyond the range of his limited understanding.

Thus, understanding appears to be one vital key to leader effectiveness, and anyone who attempts to cope with the complex problems of leadership without bringing to bear an organized way of thinking about them runs considerable risk of failure. Similarly, training can be quite threatening to students who do not possess a workable framework for approaching and understanding the problems and challenges to which they are exposed.

For this discussion, the specific content of the framework is immaterial. What is important is that, in order for learning to occur, trainees must be provided with some systematic way of thinking about the problems of leadership and the factors that contribute to them. Moreover, the concepts with which they are provided must be practical, and relevant to the after-training context within which they will be used.

Therefore, a second requirement for learning is the opportunity for trainees to acquire a workable frame of reference for thinking about and coping with leadership problems.

Opportunity for Controlled Observation. Much that is presented in the conventional classroom setting is never sufficiently explicit or clear to be useful. For this reason, developing the skill to apply the learnings achieved in conventional programs is extremely difficult and usually takes years of on-the-job trial-and-error experience. However, the process can be speeded dramatically if trainees have an opportunity to experience learning situations where a range of thinking and of approaches to problems can be made open to observation and analysis (Goetz and Bennis, 1962).

Passively listening to discussion of a problem or watching a demonstration is not enough. What is needed are calculated and purposive observations made under controlled conditions so that the learner becomes actively involved in developing an analytic attitude. Therefore, a third requirement is for learning situations in which conditions can be so controlled as to maximize the opportunity for practicing directed observation and analysis.

Opportunity for Realistic and Varied Experiences. The extent to which a trainee becomes ego-involved in the learning process appears to be a major determinant of its effectiveness. Involvement is greatest when the learning situation can be structured so that trainees actively participate, rather than remaining passive. Although students may be taught about effective leadership, the skills of leading can become a part of their repertoires of behavior only when they live through and learn from a stream of events we call "experience" (Argyris, 1956). Accordingly, a fourth requirement for learning is the opportunity for trainees to actually experience themselves performing in situations which are as challenging, as realistic, and as job-relevant as possible (Goetz and Bennis, 1962).

The effective leader possesses the ability to identify the essential elements in a situation while stripping away and disregarding the many irrelevant factors that are usually present. Furthermore, in real life, conditions are constantly changing, and the effective leader must be able to identify the unique characteristics of each situation encountered. Skill in coping effectively with unique situations is best developed by exposing trainees to numerous problems which are sufficiently different to require a wide variety of responses. Accordingly, this fourth requirement includes the opportunity for trainees to experience not only realistic and relevant situations, but a variety of them.

Opportunity for Experimentation. Observing the performance of others does not, by itself, lead to individual growth, even when good conditions for controlled observation in realistic and relevant situations are provided. Such observations help trainees develop an analytical attitude but do not require them to examine their own orientations to leadership or enable them to see themselves in action.

Learning new ways of thinking and acting is difficult. Improved learning in these areas usually comes in a series of small steps in which the learner tries out a variety of ideas or actions, discarding those that are inappropriate and reinforcing those that are successful. This can occur only when there is freedom to make mistakes. Accordingly, a fifth requirement is the opportunity to experiment with new concepts, new approaches to problems, and new ways of behaving, under conditions where mistakes will not have serious consequences for the learner (Goetz and Bennis, 1962).

Opportunity for Objective Analysis of Own Performance. Although the opportunity to experience new and varied situations is critical for learning, experience alone rarely benefits anyone. The critical factor is the use an individual makes of personal experience (Argyris, 1956). Thus, while the opportunity to experiment is essential, it should be provided under conditions that give the trainee accurate information about the effectiveness of his attempts at new behavior.

Learning is best when trainees can consciously test their ideas and new skills in action, obtain knowledge of the results, and analyze this information in terms of consequences for future behavior in actual work situations. Accordingly, a sixth requirement is the opportunity for trainees to obtain feedback on the quality of their learned concepts and skills and to analyze their learning in terms of consequences for the future (Goetz and Bennis, 1962).

IMPLICATIONS FOR TRAINING

The rationale above stresses cognitive reorientation, conditions conducive to change, and continued experience and practice as the essential requirements for learning effective leadership. Several general implications for training follow from the rationale.

Systematic Formal Instruction

The first implication is that extensive formal instruction in leadership concepts is needed for constructive change to occur. Knowledge of leadership and the human and organizational factors associated with it has advanced to the stage where its fundamentals can be analyzed, can be organized systematically, and can be learned by most individuals with normal abilities. Since trainees need explicit frames of reference from which to approach the complex problems of leadership, it is important to provide intensive instruction in some coherent, integrated set of concepts that are directly applicable to anticipated work contexts.

The needed frames of reference are best acquired through direct analysis of the concepts and problems involved in real-life leadership. Training should therefore provide extensive, in-depth instruction aimed directly at inculcating understanding of both leadership and the human and organizational factors that affect it.

Realistic Leadership Laboratories

A second implication is that effective training requires realistic leadership laboratories. Trainees must be given opportunities to experience themselves actually functioning in leadership situations, to try out new skills, and to obtain feedback on the effectiveness of their experimental behaviors. Such opportunities can best be provided in carefully

designed laboratory situations which are intentionally structured to focus on leadership problems. These laboratory situations enable trainees to observe and try new behaviors under controlled conditions where mistakes do not have serious consequences.

Experiential training methods are the vehicles of choice for use in leadership laboratories. Ideally, training should progress from concentrated practice in mini-simulations, such as role playing, which focus upon specific leadership skills, to performance in full man-ascendant simulations, which provide experience in handling human complex problems that require integration of skills. Finally, experience should be provided in simulations designed to generate problems that are predominantly technical (e.g., financial decision making, military tactical operations, etc). Technical simulations permit trainees to exercise learned leadership skills under conditions similar to those in the real world.

Although opportunities to practice leadership while conducting everyday technical activities are important, such practice should be preceded by participation in the less complex laboratory exercises described above. In this way, it is possible to provide trainees with progressively complex experience.

Intensive Training Programs

To be genuinely effective, leadership training must be a process of reorientation and acquisition of new concepts, attitudes, and skills. Trainees must be given the opportunity to discard old ideas and acquire new ones, to discard old prejudices and develop new, more constructive attitudes about their roles as leaders, and to learn and practice the kinds of skills they will need to implement their new understanding. Changes such as these can be accomplished only when students become deeply involved in the training process.

To achieve genuine and lasting change, training should provide experiences which will demand and result in total commitment of trainees to the development of leadership skills. Accordingly, training for leadership should be highly intensive. Training will be most effective when conducted in concentrated programs, under conditions where trainees are free from distracting influences, and of sufficient duration to permit trainees to become totally immersed in program activities. Furthermore, periodic reinforcement sessions, also conducted intensively, appear warranted.

SUMMARY

According to the rationale presented in this chapter, leadership is an adaptive process requiring the ability to assess events within an infinite range of constantly shifting situations and provide effective actions. The problem for trainers is to determine the best means for helping trainees become proficient at seeing and acting in ways that will enable them to cope effectively with leadership problems.

Learning to become proficient involves changes in behavior. In turn, behavioral change requires knowledge obtained through cognitive processes be translated so that it becomes significant in the experience of learners. Such learning must be active, participative, and involving, and it is best accomplished by experimenting, adjusting concepts and skills, and continually checking one's ideas, interpretations, and learned behavior against reality.

It is an accepted premise that learning is unlikely to occur unless an individual is motivated and ready to learn. The motivation to learn leadership behavior is a matter of attitudes, and successful instruction must both stimulate positive attitudes toward learning and overcome attitudes that make the potential learner resistant to change. Much of leadership training methodology must be designed to create conditions that will minimize resistance and stimulate motivation to learn, as well as provide opportunity for required cognitive and behavioral development.

Conditions conducive to learning include: (1) a supportive climate, (2) opportunity to acquire a workable frame of reference, (3) opportunity for controlled observation, (4) opportunity for experimentation, and (5) opportunity for objective analysis of one's performance. A principal task of leadership instructors is to create conditions that are conducive to learning.

The rationale set forth in this chapter states that cognitive reorientation, conditions conducive to change, and controlled experience and practice are the essential requirements for learning effective leadership. This rationale calls for training that includes (1) extensive, in-depth instruction aimed directly at inculcating understanding of both leadership and the human and organizational factors that impact upon it; (2) realistic leadership laboratories that provide trainees with progressively complex and realistic experiences; and (3) highly intensive programs of sufficient duration to permit trainees to become immersed in learning about leadership and effective leader behavior.

Leadership training is complex, but programs that are properly designed and conducted can be successful. The rationale and conditions set forth in this chapter provide one basis for such programs.

Chapter 8

GUIDELINES FOR DESIGNING AND IMPLEMENTING TRAINING

A central theme of this report has been that leadership training is not always conducted in the best possible ways. One reason may be the flexibility of the more commonly used training methods and their apparent ease of administration. This can lead naive trainers to believe that the methods are foolproof. Of course, that is not the case. In fact, although most leadership training techniques are intrinsically more interesting and motivating than many methods used in other areas of instruction, it is very easy to conduct extensive programs in leadership that have only minimal positive effects upon trainees.

The potential effects of the better leadership training methods do not come automatically, and any technique can fail if it is not used properly and within the context of conducive learning conditions. Two examples will illustrate. Role playing can be a highly effective technique for improving interpersonal skills and understanding of interpersonal relations, when it is used properly. It is not enough, however, for trainees merely to participate in role-playing scenarios or passively watch role players in action. Genuine learning requires: (1) feedback for role players, coupled with opportunities to replay scenes and thus to practice new behavior based on information received through feedback; and (2) for trainees who do not role play, opportunities for directed observation and testing of observations against those of other observers and the role players. Leadership concepts and skills cannot be learned by osmosis. If conditions are not conducive to active learning, role playing becomes an amusing exercise, usually pleasant, which produces only a minimum of genuine understanding and skill.

A second example involves simulations. A common practice among trainers, especially in certain of the military services, is to expose personnel to participation in simulations without well-defined training objectives or the provision of systematic feedback and the opportunity for guided analysis of events that occur during participation. There seems to be an assumption that mere exposure to a simulation will provide an experience from which each participant will profit, according to his own needs and inclinations.

The point of this discussion is crucial. Like all training, instruction in leadership can be effective only to the extent that it is carefully designed. The most capable instructors and the most sophisticated training vehicles will be ineffectual unless they are used in accordance with a clearly conceived strategy developed and implemented to accomplish specific objectives.

The preceding chapter set forth a rationale and learning conditions deemed essential for effective leadership training. This chapter presents more specific guidance for designing training programs and selecting methods. It should be clearly recognized that the guidance presented in this chapter assumes use of methods under the learning conditions advocated in Chapter 7.

INSTRUCTIONAL OBJECTIVES

Probably the strongest conclusion that can be drawn from the analysis presented so far in this report is that, perhaps even more than for other types of education or training,

clear and explicit instructional objectives are a critical requirement for the use of leadership training methods. These methods differ in outcomes, requisite instructor skills, and expected student reactions. Accordingly, instructors must know precisely what they are trying to accomplish in order to use the methods effectively.

Terminal Objectives

The most important requisite for intelligent selection of methods is knowledge of ultimate objectives of the training program. Objectives should be explicitly understood in terms both of levels and kinds of learnings to be achieved by end of program and of kinds of behavior to be exhibited after course completion. Any instructor who is given responsibility for designing a course is faced at once with the necessity for resolving these problems. As he goes about selecting terminal learning objectives, a deeper question must be resolved—what kinds of behavior should students exhibit after completing the program? His resolution of these questions has important implications for the decisions that must be made relative to content, methods, and other instructional strategies.

Identification of both performance and learning, or enabling, objectives is probably more critical in "soft" skill areas, such as leadership, than it is in "hard" skill areas. In hard-skill training, it is usually possible to identify easily a set of performances closely analogous, if not identical, to tasks performed on the job. These performances can be tested at end of program to determine whether the training has been effective. If the student can perform the criterion tasks satisfactorily, effectiveness has been achieved.

In soft-skill training, the problem is not as simple. It is important for trainers to know and specify behaviors that should be displayed upon completion of the program. Furthermore, these behaviors should be as task-relevant as possible. However, leadership behavior is much broader than performance of specific tasks. For this reason, it is probably necessary to develop terminal performance objectives in terms of nonspecific leader behaviors rather than specific job-task performance.

Although establishing terminal performance objectives for leadership training is difficult, it is important. Probably the greatest contributors to the present uncontrolled state of leadership training are the tendencies of trainers either to use no objectives at all or to design programs according to what, in conventional instructional development, are enabling objectives.

Almost equally important are achievable objectives. There is a tendency in much of leadership training to specify rather high-flown goals stated in terms of broad levels of on-the-job leader performance. Such objectives may be useful for "selling" programs to potential consumers, e.g., managements, military commanders, etc.; however, they stand little chance of actually being achieved with the training methods currently available, and, certainly, there is little possibility of measuring performance on them in any valid fashion. It seems much more reasonable to specify achievable objectives that can be measured accurately for evaluation.

Thus explicit conceptualization of achievable instructional objectives is essential. The trainer who has clear objectives and has also carefully analyzed available instructional methods is better prepared to design a course with sufficient precision to achieve genuine learning.

SELECTING TRAINING METHODS

Once objectives have been identified, the instructor must decide which methods to use in achieving them. Selection should be based principally on the identified objectives,

although choices between equally desirable methods may be based on considerations such as numbers and capabilities of available instructors, caliber of trainees, space limitations, facilities requirements, and so forth.

It is recognized that many instructional situations include peculiar conditions which may limit the possibility of using a given method in the most effective way. As one example, time constraints for training might preclude use of certain methods, or the ratio of available trainers to projected number of students might prevent use of methods that require small instructor/student ratios. However, accomplishing instructional objectives should always be the primary consideration. Any compromise in this regard will reduce the probability of achieving training goals.

Considerations in Selecting Methods

Any worthwhile instructional program may require different activities at different times for different purposes. Therefore, the importance of a method lies not in itself but in how well it accomplishes the purpose of the instruction. Whether a method will accomplish the purpose of instruction depends upon a number of considerations, some of which are generally relevant to the problem of program design and some of which may be highly specific to particular methods.

General Considerations

It will be productive to view the discussion of specific attributes of training methods against a background of several, more general considerations which should be taken into account in assessing the capabilities of any method. These general considerations are also discussed in Chapter 9.

Content Versus Methodology. Particularly relevant to the problem of course design is the question of whether the thrust of the program is to teach along content or methodological lines (Benne, Bennis, and Chin, 1961). In the one case (content), instruction focuses upon acquaintance with certain stimuli, and, in the other (methodological), it is concerned with methods by which stimuli of value can be received or transmitted. If information is introduced describing the various leadership styles, this is content. On the other hand, the instructor who attempts to teach students how to diagnose leadership situations or how to perform the several leadership styles is operating from a methodological orientation.

Resolution of this issue depends largely on the kinds of terminal instructional objectives chosen. Usually, the nature of the objectives will dictate the proportion of content to methodology to be included in the program. For most programs, content and methodological approaches cannot be segregated completely. The distinction between content and methodological training is useful, however, for assessing the probable contribution of training methods.

Student Involvement. One way to view training methods is in terms of the amount of student involvement they evoke. Involvement is related to motivation to learn, and the extent to which trainees become involved in the teaching-learning process may be a critical determinant of success. Instructional methods can be placed along a scale of involvement ranging from those which evoke only relatively passive participation, such as lectures, to certain high-involvement techniques, for example, T-Groups, where trainees find it extremely difficult to remain uncommitted.

Although, in practice, generating involvement is mainly a question of the mechanics for reaching training objectives, it is also closely related to questions about the kinds of learning process necessary for changing behavior, namely cognition versus experience.

Cognitive Learning Versus Experience. Much of the problem in the selection of leadership training methods boils down to a question of cognition versus experience. The question is whether cognitive learning alone is sufficient to produce changed behavior or whether experience alone will enable a trainee to perform effectively after completing instruction. Will knowledge of appropriate or recommended actions equip a student to function adequately in real situations, or will experience in practice situations alone enable him to be successful? Currently, most informed opinion leans toward some balance between cognition and experience, with relative weights depending upon instructional objectives.

Specific Considerations. Following are a number of specific attributes of training methods that program designers should evaluate to determine suitability of a procedure for achieving required goals.

Potential for Achieving Instructional Objectives. The single most important consideration for selecting a training method is its potential for helping trainees achieve mastery of a program's instructional objectives. A method's potential is best determined by (1) meticulous analysis and understanding of the method's rationale and procedures (Chapters 3 and 4), (2) familiarity with evaluation studies of the method, and (3) comparison of conclusions from all this information with the program's instructional objectives.

Figure 1 is presented to help identification of leadership training methods that will accomplish a number of general training goals. Placing specific instructional objectives in the appropriate general goal categories will make it possible to identify those methods with greatest potential for achieving the objectives. Descriptions of the methods appear in Chapters 3 and 4.

In Figure 1, goals each method is most likely to achieve are indicated. Where several methods are shown for a goal, the trainer should examine each method in detail to determine which will be most likely to satisfy his instructional requirements. After resolving this issue, attention should be given to other considerations covered in the following paragraphs.

Instructor Requirements. It is axiomatic that no instructional method is better than the person who uses it. This statement is especially applicable to leadership training methods. Training, experience, and skills, of available instructors, both as teachers and as content experts, are important considerations in choice of method. Some of the most effective methods can only be used by highly skilled trainers; other only slightly less effective methods may be used by instructors who have a minimum of training. For example, to use the Conference Method, it is not essential that conference leaders be content experts; although they should have some preparation in the content, and expertise will certainly contribute to the quality of learning. Since students are responsible for most of the learning in the Conference Method and since experts can prepare guides for discussion leaders, complete mastery of content is not an essential requirement for instructors. On the other hand, solid grounding in the rationale and procedures of a method is usually essential for maximum effectiveness.

It is also necessary for a trainer to be clear concerning precisely what he is attempting to accomplish in the area of learning, (i.e., impart knowledge, change attitudes, develop skills, etc.). This is important because the way the trainer manipulates the instructional process will depend on his understanding of both the general training goals and specific instructional objectives.

Finally, it is important for an instructor to understand, accept, and be comfortable with the premises that underlie the rationale for the particular method under consideration, as well as those common to the rationales for most leadership training methods. Principal among these common premises are (1) a group of reasonably capable adults can learn if the instructor will let it, (2) it is not essential for a trainer to control every input into a

Instructional Goal	Method										
	Lecture	Conference	Harvard Case Method	Incident Process Case Method	Abbreviated Printed Case Method	Dramatized Case Method	T-Group	Role Playing	Games and Simulations	Laboratory Method	Behavior Modeling
1. Cognitive learning of course content	X										
2. Increased knowledge about specific topics or problems	X									X	X
3. Cognitive understanding of issues and problems	X		X	X	X	X	X	X	X	X	
4. Increased awareness and sensitivity to issues and problems	X	X	X	X	X	X	X	X	X	X	X
5. Increased insight into possible problem solutions		X	X	X	X	X	X	X	X	X	X
6. Changed Attitudes							X	X		X	
7. Improved self-insight							X	X		X	
8. Increased ability in problem diagnosis			X	X	X	X	X	X	X	X	
9. Improved problem-solving skills									X		
10. Increased skill in fact finding									X		
11. Skill in diagnosing interpersonal situations			X	X	X	X	X	X	X	X	
12. Skill in acting effectively in interpersonal situations							X	X	X	X	X
13. Increased skill in group decision making									X	X	
14. Increased skill in team or group performance							X		X	X	
15. Increased skill in performing job role								X	X		X

Figure 1. General Instructional Goals Accomplished by Training Methods

training session for it to be an effective learning experience, and (3) maximum learning probably occurs when a group breaks its dependence upon its instructor and assumes responsibility for its learning.

Another trainer-related consideration is the required instructor/student ratio. Some methods are suitable only for small numbers of students, and some are most effective when conducted by teams of trainers. If a small training staff must train large numbers of students, however, certain methods are impracticable.

Student Ability and Experience. Some methods are maximally effective only with more able students; others (e.g., the Conference Method) are especially designed to accommodate inexperienced or less educated students. A related question involves the difference in ability between students within one learning group: Are all students of approximately

the same level of ability, or is there wide variability among them? Generally, trainees learn about leadership better when they are more or less similar in their abilities. The more participative methods can be inhibiting to students who find themselves in groups with people who have greater abilities.

Student Background. Because of attitudes generated by their socio-economic and occupational cultures, people differ with respect to susceptibility to learning under various conditions of formality. This is especially true for adults. Are trainees likely to be overly insecure if highly informal training methods, such as role playing, are used? On the other hand, will they feel excessively stifled by more formal training methods, such as lectures. Trainers should assess the backgrounds of students to determine whether methods may inhibit learning.

Differences in Student Status. Wide differences in authority or status among students in the same class can strongly inhibit performance and learning when the more participative methods are used. Differences in age, military rank, experience, level of expertise, and so forth may be especially inhibiting under the more informal methods of instruction.

Time Required. The time available for instruction must be matched against the time required to reach a particular instructional objective by a particular method. Some methods may require more time but produce better results than others.

Facilities Required. Some methods e.g., games and simulations, may require large spaces or several rooms, whereas others may require only ordinary classrooms. Similarly, games or simulations may require such items as telephones, inbaskets, desks, chairs, and so forth. Before selecting a method, trainers must determine what facilities will be required and whether they will be available.

PLANNING

After instructional objectives have been identified and methods have been tentatively chosen, it is useful to assemble all the principal elements involved into a master instructional plan. Here, a "master plan" is a broad outline of the activities that must occur, the sequence in which they must occur, and other required variables, such as instructors, facilities, and so forth.

Methods for assembling a master plan are infinite, and, accordingly, no specifics will be provided here. The important thing is that, at this point, the plan should be tentative. Often three or four alternative plans may be outlined before a final one is produced.

Once a tentative plan is determined, it is useful to test the plan against the following criteria:

- (1) **Relevance to Student Needs.** The proposed instruction should be aimed at meeting genuine needs of students and should be demonstrably relevant to those needs. If relevance cannot be demonstrated, consideration should be given to modifying or discarding the plan.
- (2) **Helpfulness in Relating Instruction to Real World.** The proposed activities should help students link events in the training situation to "real-world" requirements, and vice versa. Links between training events and on-the-job problems should be explicit. Further, the proposed activities should encourage and support the use of new learnings on the job. Preplanning, dry runs, and so forth are helpful here.
- (3) **Location Within the Instructor's Range of Competence.** Instructors should not try methods in which they lack the required proficiency. On the other hand, some insecurity is natural, and much skill can be developed rapidly through practice.

- (4) Maximal Motivational Impact. The instructional procedures should stimulate active interest and participation.
- (5) Multiple Learning. The proposed activity should provide for intellectual, attitudinal, or skill types of learning—or combinations of these. Furthermore, an entire program (a series of sessions) should provide for all types. A single session should focus rather narrowly; a full sequence of training activities, however, should round out a larger picture and assist the student in many different aspects of his learning endeavors.
- (6) Self-Correction. A good instructional activity should contain provision for continuing evaluation and self-correction. Evaluation of every session by both instructors and students permits rapid identification of instructional problems and prompt correction of defects.

Unless the master instructional plan measures favorably on all six criteria, it should be modified until it meets each criterion to the planner's satisfaction.

The design that is finally chosen should be planned in sufficient detail so that everyone who has responsibility for its operation knows what he is to do. The critical danger here is that plans will become so rigid that modifications cannot easily be accomplished as instruction progresses. No plan can ever anticipate all possible events or precisely predict the atmosphere that will develop in any particular learning group. Therefore, some modification, however slight, is almost inevitable. The most effective training designs have enough built-in flexibility that adjustments can be made easily without serious trauma to either the plan or the personnel.

SUMMARY

There can be no question that, in the final analysis, the responsibility for learning must rest with the individual student. Learning can occur only within the individual and he must be the final determinant of whether, in fact, change will take place. Thus, the old trainers' axiom, "if the learner hasn't learned, the teacher hasn't taught," can never be altogether true. However, the fundamental responsibility of every instructor is to create around the student those conditions that will be most conducive to learning. This is the role of the teacher.

The implications for program design are crucial. The purpose of leadership training is to achieve change. If change is not genuinely desired, any training program is a waste of time, effort, and money. To achieve change, a trainer must be able to control and manipulate his inputs into the program very precisely.

The principal task of program designers is to devise suitable strategies for trainers to use in creating conditions conducive to learning and eliciting, controlling, and channeling student behavior. An instructor who has objectives clearly in mind, has thoroughly analyzed the available training methods, and follows a carefully devised strategy is well prepared to conduct a program with sufficient precision to achieve genuine change.

Thus, it is essential that objectives be carefully derived and that methods be selected and used with the objectives clearly in mind. The time, effort, and thought expended to define objectives accurately, to select proper methods, and to use the methods appropriately for the objectives will usually be well repaid by the quality of learning that is achieved.

Chapter 9

ISSUES IN LEADERSHIP TRAINING RESEARCH

A major difficulty facing researchers who study the processes involved in leadership training is devising suitable strategies for controlling, describing, and measuring the phenomena with which they are concerned. Leadership training most frequently deals with complex real-life situations, and the variety of responses available to participants makes training processes exceedingly difficult to analyze. Because leadership situations are interpersonal relationships in which multiple variables are usually operant, simple cause and effect relationships are almost impossible to establish. For this reason, the strategies adopted by researchers take on even more importance than they do in other types of research.

For the most part, research objectives should determine the kind of strategy that is adopted. There are distinguishably different purposes in conducting research and these purposes affect design, the factors studied, the kinds of conclusions drawn, and the contributions made (Chin, 1961). Thus the fact that a study is concerned with investigating training methods for the purpose of contributing to training technology will have a decided effect upon the way problems should be attacked.

The purpose of a training technology is to provide practitioners with information, data, techniques, materials, and so forth, which will permit them to better control and manipulate program input so that results will be predictable. Thus, technology development must focus upon devising methods, designating the kinds of behavior each will elicit, and specifying the conditions under which each technique can be expected to be effective. To contribute to these purposes, research must have a strategy different from strategies designed to achieve other objectives.

This distinction can be illustrated by comparing research on leadership, evaluation of leadership training, and the study of leadership training methodology. Figure 2 summarizes the differences between these research approaches.

In general, the purpose of research on leadership is to identify behavior that results in leader effectiveness. Specifically, the objective is to determine the relationship between certain behaviors and effective leader performance on the job. Accomplishing the objective may involve measuring one or more behaviors hypothesized to be relevant to leader effectiveness, measuring the effectiveness of leaders in some manner, and determining the degree of relationship between results of the two measurements. An alternative is to identify more and less effective leaders based on some criterion measurement, measure hypothesized relevant behaviors within the two groups, and determine whether differences exist between the groups. In either case, the required operation is to measure behavior on the one hand and job effectiveness on the other, and determine the degree of relationship between the two indicators.

Training evaluation is concerned with determining whether a course or program has achieved the goals which have been set for it. Its purpose is to establish or demonstrate the relationship between the course and certain predetermined criteria. Operationally, this involves administering the course, measuring the criterion variable, and determining whether any change that can be attributed to the training has occurred—whether a relationship exists between the treatment and the measured criterion.

<u>Approach</u>	<u>Purpose</u>	<u>Independent Variable</u>	<u>Dependent Variable</u>
Research on Leadership	To identify behaviors resulting in leader effectiveness	Behavior	Job Effectiveness
		Measure	Measure
		Relationship	
Evaluation of Leadership Training	To establish or demonstrate a relationship between course and either behavior or job effectiveness	Course	Behavior, or Job Effectiveness (Predetermined criterion, usually global)
		Treatment	Change in Measure
		Relationship	
Study of Leadership Training Methods	To identify behaviors resulting from training methods	Methods (each independent of others)	Behaviors (specific hypothesized response categories)
		Treatments	Changes in multiple measures
		Relationship	

Figure 2. A Comparison of Three Research Strategies

The term critierion variable refers here to the selected dependent variables which are considered to indicate success or failure. That is, criterion variables are deliberately selected from all available dependent variables on the basis of some practical interest.

A major problem in evaluating leadership training is selecting the criterion variable. Two approaches are possible. The first approach involves measuring trainees' on-the-job performance. Here, the criterion is job effectiveness, which falls under the rubric of "external criteria" discussed by Campbell, Dunnette, Lawler, and Weick (1970).

When on-the-job effectiveness is the criterion, evaluation must demonstrate a relationship between some measure of job performance and treatment received in the training. Of course, job effectiveness should be the ultimate criterion; training should increase leader proficiency on the job. However, on-the-job proficiency as a leader is an exceedingly difficult criterion to measure (Jacobs, 1973).

In addition to the difficulty of determining effectiveness, there is an even more critical problem in using performance on the job as a criterion for leadership training. Almost all such training occurs away from the job. The training attempts to teach certain behavior that is expected to transfer to the job. If a high positive relationship is found between training and job effectiveness (i.e., if an increase in effectiveness occurs, and the research

design is such that the increase can be attributed to the training), the course is usually judged to be a success. However, what can be concluded if the relationship is found to be negative or low? When performance on the job is the criterion, it is impossible to determine whether (1) the training failed to develop the desired behavior or (2) merely that there is no relationship between the behavior learned through training and job performance.

The second approach to evaluation involves using specific behaviors as the criterion variable and measuring their relationship to training. For example, development of diagnostic skill might be selected as a program objective. It would then become necessary to develop a measure of this skill and administer it to students either following training, as a mastery test, or both before and after training to evaluate change in skill level. If a relationship could be established, the course would be judged successful for the intended purpose.

The task of establishing a connection between diagnostic skill and leader effectiveness would remain. In fact, this task is properly accomplished prior to designing the program intended to develop the skill. The question of the relationship between behavior and leader job effectiveness is really a matter for leadership research and not training evaluation. It only compounds the difficulty to attempt in one operation, to establish the linkage between course, behavior, and job performance.

In leadership training, it would seem that using job effectiveness as an evaluation criterion does more to justify training programs to management than to actually pinpoint their instructional efficiency. Justifying programs to managements is a pragmatic and legitimate reason for collecting data on job effectiveness. It should be recognized, however, that such evaluations reveal very little about the quality of instruction. Evaluation based upon behavioral objectives is preferred.

Evaluation differs from research on training methodology in that it tests whether a course produces predetermined desired result, it is usually global, and it is not differentiated in isolating its techniques or treatments (Chin, 1961). It can only tell whether a program is effective in changing a particular criterion, although it may offer some hints as to reasons for the observed outcome.

For a technology of training, however, it is important to know precisely what a method will do. The changes to be measured must be clearly understood. Therefore, studies of methodology must be designed to tell specifically how a treatment or technique works. Here the question is not, "Was the method effective?" but, rather, "What does the method accomplish, if anything?"

The purpose of research on leadership training methodology is to determine what kinds of behaviors a method will evoke, to identify the behavior that results from exposure to a particular training technique. More specifically, the objective is to determine the relationships between each one of a number of training methods, considered independently, and a variety of leader behaviors. Operationally, this may involve using a number of instruments, each designed to measure one or a few skills or behaviors, to measure changes that result from administration of one method at a time.

This distinction between strategies is not intended to suggest that one kind of problem is more significant than the others. A well-conceived leadership training effort must depend upon all three research areas. From research findings about leader effectiveness, a trainer would determine the kinds of behaviors he needs to develop. He would then select the training method most likely to elicit the desired behavior. Method selection would be governed by findings from the study of methodology.

After fitting a method(s) to the objective, the trainer would conduct the program. During the program or upon its completion he would evaluate it to determine whether

it achieved the desired behavioral changes. Furthermore, evaluation would be repeated at the end of each subsequent administration of the course, to determine the effectiveness of that particular administration. Used this way, evaluation becomes a quality control tool for the trainer.

A major and significant distinction between leadership research and both evaluation and the study of methods is the presumption of change in the latter problems. Applied leadership research is usually empirical; it is concerned with determining relationships between already existing conditions. On the other hand, training involves changing behavior. Both evaluation and the study of methods are concerned with measuring changes in behavior.

The implication for research on training methodology is crucial. Research on methods investigates which treatments will achieve what changes. To achieve and understand change, the researcher must be able to control and manipulate his variables with greater precision than might be otherwise necessary. He must also be especially careful in selecting dependent variables. This requirement accounts for the emphasis in earlier chapters upon the necessity for conceptual clarity with respect to approaches to leadership and the behavior characteristic of effective leaders. Regardless of the kind of training undertaken, developing valid dependent variables is always a knotty problem. In leadership training, where cause and effect relationships are difficult to establish, the problem can be devastating.

The nature of the variables is also critical. The variables must reflect what the researcher believes will happen; but they also have to be measurable, and they have to be empirically possible to obtain without damaging the instructional goals of the program.

In reality, the choice of any criterion is based on a theory about the relation of the measured process to the criterion situation or behaviors. The researcher has an hypothesis about the kind of behavior he expects to result from a given treatment; and he proceeds to test it, to manipulate his variables in accordance with the theory.

Thus, we see the importance of a carefully developed research strategy, as well as clear concepts of the nature of leadership, the kinds of behavior required for effective leader performance, and the changes in trainees that will produce required behaviors. An investigator who has these issues clearly worked out and has also carefully analyzed the training methods to be used will be in a much better position to manipulate his variables with sufficient precision to achieve measurable change.

RELATED RESEARCH ISSUES

Any serious leadership training program is an attempt to change the behavior of trainees. Similarly, each training method represents a fundamental approach to changing behavior. As discussed throughout this report, research is needed to determine the capabilities and limitations of each method with respect to production of change.

There are also a number of researchable issues which cut across methodological lines. These issues involve the change processes which underlie the various methods and ways for maximizing learning within the training situation. In each case, research data are not presently available.

The Nature of Change

A major contributor to much of the inadequate training that occurs appears to be trainers disregard of or lack of clarity about just what change processes are involved in their training efforts. Effective training is supposed to produce changes in behavior. A trainee is expected to behave differently after exposure to a program than he did before

the experience. It appears to be important for training designers to understand the processes that are supposed to produce changes in behavior. Is training supposed to produce a cognitive change based on the acquisition of information; an attitudinal change brought about by the additional information and experience gained through the training; a behavioral change, an improvement in specified skills; or all of these? An even more significant question is, which methods will produce what types of changes?

If a trainer disregards or is unclear about the change processes involved in his program, his ability to select the appropriate training methods will be considerably reduced, and the likelihood of his producing an effective program will be limited. The consequences for research are even more severe. If a researcher is confused about the specific nature of the change processes generated by the various training methods, it becomes virtually impossible for him to hypothesize intelligently a valid link between method and dependent variable. If the change processes associated with the methods are not taken into account, the researcher is forced either to select dependent variables on the basis of blind guess or to use a "shotgun" approach with a multiplicity of criteria, some of which he hopes may prove fruitful.

It is possible to put together a training program, evaluate it with fairly good results, and put it to use without ever really understanding the change processes involved. This is what happens frequently at present. However, such a procedure precludes any except accidental progress. On the other hand, with better knowledge of the change processes that underlie leadership training, we may be able to evolve principles that will be useful both as bases for training design and for future research efforts.

Several of the issues discussed below are closely related to the problem of change processes and how they are produced.

Training in Content Versus Method

One important issue is concerned with where emphasis should be placed in training. Bennis, Benne, and Chin (1961) have posed the question in terms of whether the approach should be to train along content or methodological lines. As these authors make clear, in one case training focuses on providing acquaintances with certain stimuli (content) and in the other case training is concerned with methods by which stimuli of value can be received. If information is introduced relative to research on the characteristic behavior of effective leaders, this is content. On the other hand, the trainer who attempts to teach students how to diagnose leadership situations is operating from a methodological orientation. Of course, this issue is related to the trainer's view of leadership and the behavior necessary to be effective. Although complete separation in actual training is virtually impossible, the distinction between content and method is useful for evaluating and selecting training techniques. What is needed is research which tells us whether training which is predominantly content oriented is more or less effective than that which is mainly methodological.

A closely related researchable question is whether supporting content should be used systematically to supplement the basic training methods. Conference methods, case study, and role playing are problem-centered. The T-Group, games, and simulations may also be used alone. In each instance, should supporting conceptual material be presented, through either lecture or discussion? An example is the classical case method in which the learning objective is to improve problem analysis. The Harvard rationale expressly forbids the introduction of conceptual content. Would the nature of learnings be changed if case study were supplemented by lectures on principles of leadership or administrative practices? What would be the differential effects of content versus no-content, for each training method, on both degree and quality of learning?

Role playing has been used with content and without it; but, again, we have no evidence on the difference in learning that results. One writer, Maier, has at different times described and advocated two training programs centered around role playing. At one point, Maier (1952) described a program which included both lecture and role playing. Yet, later, Maier, Solem, and Maier (1957) published what is virtually a manual for a course in human relations, using their combined case study and role-playing procedure. The method outlined there makes no provision for the introduction of supplemental content. It would be useful to know whether, during the intervening years, Maier discovered that using content material does not affect the learning achieved.

The issue of content versus no-content remains open and appears to be a question that can be investigated. It is also important for development of a technology of leadership training.

A somewhat related issue is the nature of any content to be used, if any. For example, if lecture is the method of choice for introduction of content, should material be devoted to general principles of leader behavior, describe social-psychological phenomena that appear relevant, or prescribe specific actions necessary to fill a particular role? Instructional objectives and the trainer's approach to leadership will determine the answer, of course. If the trainer espouses the highly pragmatic superior-subordinate approach, his goal is likely to involve communicating techniques for handling subordinates, and he will probably concentrate on the specific actions students will need to fill their role.

However, if the trainer is wedded to the reality-based view of leadership, his goal will probably be teaching students to cope with a variety of changing interpersonal and organizational situations. In this case, he would lecture on the social-psychological phenomena most likely to be encountered by his students in their particular work environments.

Again, existing studies do not offer solutions to the problem.

Cognition Versus Experience

Closely related to the content-methodology question is the issue of cognition versus experience. Here, the question is whether cognitive learning alone or experience alone produce improved leader behavior. On the one hand, will knowledge of proper leader behavior equip a student to function adequately? On the other hand, will practice in leadership situations alone enable him to be successful; Currently, most opinion leans toward some balance between cognition and experience; however, once again, there is no valid evidence to guide informed decisions.

Degree of Student Involvement

For a number of years, it has been accepted that training which "involves" the students is good. One way of viewing training methods is in terms of involvement required of participants. It appears that methods can be placed along a continuum of involvement ranging from the lecture, with relatively passive student participation, to such high-involvement techniques as T-Groups, where participants find it exceedingly difficult to remain uncommitted. It would be most useful to know how much involvement is needed for learning to occur; whether involvement has differential impacts upon cognitive, attitudinal, and behavioral change; and whether degree of involvement is related to the strength and permanence of learning in leadership training.

It would be useful to know the relationship between involvement and learning under the complex, real-life conditions of leadership training. Is trainee involvement valuable

merely because it motivates students to learn and maintains interest in a training program, or does involvement contribute in other ways to learning?

As described in Chapter 4, Lawshe, Bolde, and Brune (1959) identified "impact" as a necessary condition for effectiveness in leadership and human relations training. Research is needed to provide further understanding of "impact" and of the contribution trainee involvement makes to it.

Time Requirements

Another problem that applies to all methods is the hours required for training. Maier, Hoffman, and Lansky (1960) concluded that managements which are seriously interested in training personnel to be effective in human relations must invest considerably more training time than is customarily provided at present. How many hours are required for trainees to reach acceptable levels of leadership skills? Do time requirements differ to method and combinations of methods?

Several factors probably interact to determine ideal training time, e.g., objectives, method, caliber of trainees, and quality of instructors, and training times should be tailored to the requirements of individual programs. However, comparative research should be capable of establishing optimum lengths for programs that have standard sets of conditions.

Distribution of Training Sessions

A related problem is whether training sessions should be massed or spaced. That is, is it preferable to conduct a program as a continuous, full-time block of instruction until it is completed, or to divide it into shorter segments with some periods of time between sessions.

Logical arguments can be made on either side of this issue. When trainees give their full time and total attention to studying the problems and practices of leadership, there can be little doubt that they become more deeply involved than they do when other instructional topics or work activities intervene. On the other hand, it appears that more lasting changes result when trainees have the opportunity to think about and work on leadership problems over prolonged periods, such as several months, while also practicing in actual work situations the things they have learned.

Solutions to the question will probably be somewhat different for each of the various training methods. At present, there is no direct evidence on the relative merits of massed versus spaced training in leadership programs.

SUMMARY

In certain respects, the strategy required for studying leadership training methods differs from that suitable for other kinds of research. Although the basic precepts of sound research methodology must prevail, research for systematic development of a training technology differs in orientation from either research on leadership or training evaluation. This orientation involves, (1) a more conceptual and explicit statement of the nature of leadership and the behavior required for leader effectiveness, (2) deliberate choice of training methods and content suitable as independent variables, (3) selection of criterion variables according to the conceptual scheme concerning leadership and leader behavior, (4) explicit recognition of value questions inherent in attempts to change attitudes

and behavior, (5) analysis of the practical judgments called for in using real training situations for experimental purposes, and (6) as much empirical research as possible on all of this.

Leadership training consists of systematic procedures designed to change the behavior of participants. Effective application of training procedures requires explicit understanding of the change processes associated with the several leadership training methods discussed in earlier chapters.

Research to determine the capabilities and limitations of leadership training methods for producing changed trainee behavior is needed. Some issues which need resolution include: (1) What change processes underlie leadership training; (2) whether training that is predominantly content-oriented is more or less effective than that which is mainly methodological in approach; (3) how much supporting content should be used with problem-centered methods; (4) what type of content should be used; (5) whether cognitive learning alone or experiential learning alone will enable a leader to perform more effectively; (6) how much trainee involvement is needed for learning to occur, whether involvement has differential impacts upon cognitive, attitudinal, and behavioral change, and whether degree of involvement is related to the strength and permanence of learning in leadership training; (7) how much training time is required for trainees to reach acceptable levels of leadership skills with the various training methods; and (8) what are the relative effects of massed versus spaced training.

Chapter 10

PERSPECTIVE ON LEADERSHIP TRAINING

The purpose of this report has been to describe the present state of the art of leadership training. Such an analysis is timely because concern about the quality of present and future leadership has made effective training for leaders an increasingly important requirement in many organizations. High-quality leaders result from high-quality training. Accordingly, state of the field of leadership training should be a matter of more than passing interest to trainers, training designers, and researchers.

FUTURE LEADERSHIP REQUIREMENTS

It is probably inevitable that the future will place even greater demands upon organizational leaders than the present. Leadership requirements are based on the kinds of performance demanded of organizations. The kinds of performance required of most organizations appear to be changing, and, with these shifting demands, leadership will become both more complex and more important.

Leadership of the responsive organizations required for the future will embody a major responsibility for creative action. For such organizations to be effective, leading cannot be just passive reaction to problems as they occur; it must go beyond merely "fighting fires" that may arise. Instead, it will be necessary for leaders to actively strive to shape their organizations and constantly push back the limitations which both human fallibility and system rigidity tend to place upon an organization's capabilities for performing responsively.

Effectiveness under such conditions will require well-trained individuals who are knowledgeable about the fundamentals of leadership, thoroughly schooled concerning human factors that influence organizational performance, and skilled in applying this knowledge to the problems involved in guiding complex and, in some cases, highly ambiguous activities. As stated in Chapter 1, leadership can no longer be a matter of hunch or native ability, backed by a few elementary concepts and reinforced through the trial and error of experience. Instead, it must rest upon systematic knowledge and a rational and conscious application of sound principles and practices.

THE STATE OF LEADERSHIP TRAINING

The development of leaders who are equipped to satisfy the more sophisticated demands of the future will require (1) a systematic base of knowledge about leadership and human organizations and (2) a workable technology for transmitting such knowledge and inculcating the skills needed to use it effectively. Both requirements must be met before systematic, fully effective leader development will be possible.

At present, we are closer to meeting the first requirement than the second one. Knowledge about leadership has advanced to the stage where it can be organized

systematically and its fundamentals can be identified. Furthermore, this knowledge can be transmitted to individuals who need to use it to perform their duties. In contrast, however, there is no organized technology for converting knowledge into the attitudes and skills required for effective leader performance. Consequently, much leadership training is remarkably primitive.

The fundamental problems in leadership training are not the organization and transmission of knowledge. Rather, the difficult problems are to assist trainees to translate that knowledge so that it becomes meaningful in their conscious experience, to make the knowledge an integral part of the frames of reference used to approach leadership problems, and to equip trainees with skills for coping effectively with such problems. All of these requirements involve the production of changes—cognitive, attitudinal, and behavioral—trainees, and the fundamental problems are all concerned with ways to accomplish such changes.

Many leadership training programs do not seriously attempt to cope with these problems. Accordingly, the products of such programs are individuals who either reject the concepts presented during training, or who emerge only partially equipped to handle the problems they will face in the real world.

Inept trainers may be part of the problem. As stated in earlier chapters, leadership training is one of the most difficult instructional processes there is. Yet, in no other field do we find so many trainers who are neither (1) experts in the subject taught, nor (2) expert trainers.

However, a far greater villain than inept trainers appears to be poor training design. All too often in program design, the wrong training methods are selected, a single method is expected to serve too many purposes, the methods chosen are expected to accomplish too much, or the correct methods are chosen but used improperly.

These inadequacies in training design appear to be due to (1) unclear concepts about what the program is supposed to accomplish (2) poor understanding of the capabilities and weaknesses of the various training methods, and (3) in some cases, submission to the urge to make a program appealing to trainees, regardless of the amount of learning it produces. As this report discusses, the first and second inadequacies can be overcome through careful identification of training requirements and considerable thought about objectives and the methods that will accomplish them. The third can be overcome simply by a reordering of priorities and recognition that learning in the field of leadership may be difficult and, even, painful. To be sure, programs should be stimulating and appealing to trainees, because such attributes enhance the motivation to learn. However, genuine learning about leadership and changes in leader behavior do not come easily. To expect otherwise is a mistake which can only lead to superficial and ineffective programs.

Finally, many of the inadequacies in leadership training programs can be traced to attitudes organizational managements have about training in general and leadership training in particular. In short, when managements do not support and insist upon high-quality programs, inadequate programs are likely to be produced.

If asked, most managements would contend that they desire high-quality, effective programs. However, it appears that most do not have serious commitments to such programs, to the extent that they are willing to allocate the money and trainee time necessary to achieve genuinely productive results. In part, this reluctance is due to a lack of understanding by most managements of what is required to produce genuinely effective leadership training. It is also due in part to the low priority given to leadership training in relation to other activities.

In closing this summary discussion of the state of leadership instruction, it should be reiterated that, although training programs for leaders are burgeoning in a variety of

contexts, many are ineffectual. This is particularly unfortunate, because the considerable potential of leadership training is not being realized at a time of increasing concern over the quality of leadership exhibited in many organizations.

IMPLICATIONS

It is clear that leadership training is widespread. It is also clear that the considerable potential of this training is not being realized. This conclusion and the discussions in earlier chapters suggest certain implications for trainers, training technologists, and researchers.

Training

The most important implication for trainers is that they should become aware of exactly what they are dealing with when they undertake leadership training. This kind of training attempts to achieve fundamental changes in the thinking, attitudes, and behavior of trainees. These changes are difficult to achieve, and attempts to accomplish them should be systematically planned, and implemented with care.

Accordingly, leadership training programs should be based upon clearly-defined objectives derived from explicit concepts of the behavior required by leaders to be effective. Training methods should be selected in accordance with the best available information concerning the types of objectives each method will achieve. Furthermore, methods should be implemented according to their rationales, by trainers who have the training and skills to use them properly. Only such systematically designed and implemented programs can produce leaders capable of handling the complex problems of the present and future.

Training Technology

We are far from achieving a complete technology of leadership training. As discussed in preceding chapters, development of such a technology will require extensive research on the pedagogy of leadership training. On the other hand, a considerable amount of unorganized information about training methods and their potential uses is presently available.

What appears to be needed is codification of current knowledge into guidance that can easily be used by trainers in selecting methods and designing programs. In this report, an effort has been made to systematize available information and contribute to the beginning of a genuine technology of leadership training. However, there is a crying need for a formal document, a handbook, which would present systematic guidance for trainers based upon what is currently known about leadership training. Such guidance should provide trainers with a rationale for all leadership instruction, the rationales for the several training methods, procedures for developing meaningful instructional objectives, and as much information as possible, in easily understood formats, about each method and what it can and cannot accomplish.

The development of such guidance would be a large step toward a technology of leadership training. It might also contribute to correcting many of the inadequacies discussed earlier in this chapter.

Research on Training Methodology

To develop a genuine technology of leadership training will require a comprehensive base of knowledge about training methods and their potential uses. Such a knowledge base does not now exist. Accordingly, a systematic program of research on the pedagogy of leadership training is needed, perhaps supplemented by broader studies of training management issues that are discussed in the next section of this chapter.

One of the most striking revelations of the literature reviews conducted for this report has been the almost total absence of studies designed specifically to produce valid data on the pedagogy of leadership training. Virtually all of the findings and conclusions cited in this report were derived from evaluation studies or data collected more or less incidentally to some other purpose. It appears that, to date, no one has attempted to attack the issues directly. Such an approach is badly needed.

Research can contribute to the needed technology most efficiently through a coordinated program of directed studies. Such a program would not be inexpensive, but it would offer the greatest probability of success and would begin to contribute to the required knowledge base in the shortest possible time.

Research on Training Management Issues

The complex and changing character of many of our organizations, their personnel, and their environments raise a number of issues which, although not directly concerned with the pedagogy of training, impact upon it in numerous ways. Certain of these issues relate to leadership research, and others are concerned with training management.

Military organizations face some especially complex leadership problems which give rise to a number of training issues. A most critical issue is the differences in leadership requirements between peacetime, or garrison, conditions and those of combat. Obviously, the problems with which leaders must cope are different. However, the central questions are whether effective leadership methods and styles are different, and, if so, how leaders can be trained to behave differently within the very short time frame anticipated for future transitions from garrison to combat conditions.

A continuing military leadership issue, which has yet to be satisfactorily resolved, arises from the increasing numbers of women and ethnic minorities in the armed forces. How can these personnel be most effectively led? How can leaders cope best with problems arising from these sources? Training concepts that will maximize leader performance in these areas have yet to be perfected. Similar problems face trainers in many civilian organizations.

Frequently, the armed services conduct training for leaders at varying lengths of time prior to their assumption of the positions for which they have been trained. In some instances, the time preceding job assumption may be quite lengthy. An important question concerns the effect upon performance of the interval between leadership training and actual use on the job of the developed skills. Very little is known about how long leadership skills remain viable for transfer to the job. More significantly, little is known about whether some training methods are better than others for developing skills capable of retention over considerable periods of time.

An important question that applies to both military and civilian organizations is, "What is the appropriate role of the leader in attempting to cope with rapid change and increasing technological complexity?" For training, the issue is how to determine the relative emphases to place upon leadership training and technical training, especially when cost and other considerations limit the availability of training time and resources. There are related unresolved questions regarding the kinds of the leadership skill needed to cope

with the effects of rapid change and complex technology and, equally important, the most effective methods for developing such skills.

A somewhat related question is whether equal emphasis should be placed upon leadership training when preparing personnel to different types of jobs. In the military services, should leadership receive the same emphasis in training for combat, technical, and administrative jobs? In civilian organizations, should training be the same for leaders in administrative and production jobs? Should a single training methodology be used for all types of positions? Similar questions can be asked with respect to training for different ranks or organizational levels. Should training methods be different for high- and low-level leaders?

Finally, an especially intriguing and most relevant question concerns the proper role of leadership training in the burgeoning Organizational Development efforts currently popular in both military and civilian organizations. Where does OD leave off and leadership training begin? What is the proper role of the leadership trainer in relation to OD practitioners?

CONCLUSION

Without a doubt, the quality of available leadership at all levels determines the character of an organization and the effectiveness with which it accomplishes its objectives. Accordingly, the development of individuals who occupy leadership positions is one of the most critical functions in any organization.

Although difficult when conducted properly, effective training for leadership is feasible. Despite the fact that the field is in a state of disarray and many programs are not very effective, there is sufficient evidence to conclude that leadership can be taught when training is sincerely deemed important by managements and when it is thoughtfully designed and carefully implemented.

REFERENCES

REFERENCES

- Adlinger, G.R. "Business Games-Play One," *Harvard Business Review*, March, April, 1958.
- Andrews, K.R. (ed.), *The Case Method of Teaching Human Relations and Administration*. Harvard University Press, Cambridge, Mass., 1960.
- Argyris, C. "Some Unresolved Problems of Executive Development Programs," *Journal of Educational Sociology*, 30 (1956), 20-30.
- Argyris, C. *Personality and Organization: The Conflict Between System and the Individual*. New York: Harper and Bros. 1957.
- Barthol, R.P., and Zeigler, M. "Evaluation of a Supervisory Training Program with "How Supervise?" *Journal of Applied Psychology*, 1956, 40, 403-405.
- Barton, R.F. *A Primer on Simulation and Gaming*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.
- Benne, K.D. "Case Methods in the Training of Administrators," in Bennis, W.G., Benne, K.D., and Chin, R. (eds). *The Planning of Change: Readings in the Behavioral Sciences*. New York: Holt, Rinehart, and Winston, 1961, 631-636.
- Bennett, W.E. "The Lecture as a Management Training Technique," *Personnel*, 1956, 32, 497-503.
- Bennis, W.G., Benne, K.D., and Chin, R. (eds). *The Planning of Change: Readings in the Behavioral Sciences*. New York: Holt, Rinehart, and Winston, 1961.
- Belch, J. *Contemporary Games: A Directory and Bibliography Covering Games and Play Situations or Simulations Used for Instruction and Training by Schools, Colleges and Universities, Government, Business and Management*, Vols. I and II, Detroit, Michigan: Gale Research Company, 1974.
- Biggs, D.A., Huneryager, S.G., and DeLaney, J.J. "Leadership Behavior: Interpersonal Needs and Effective Supervisory Training," *Personnel Psychology*, 1966, 19, 311-320.
- Blake, R.R. "Group Training vs. Group Therapy," *Group Psychotherapy*, 1957, 10, 271-276.
- Blake, R.R., and Mouton, J.S. *The Managerial Grid*, Houston: Gulf Publishing Co. 1964.
- Blake, R.R. and Mouton, J.S. "The Instrumental Training Laboratory," in I.R. Weschler and E.G. Schein (eds), *Classes in Human Relations Training*, NTL Selected Readings Series, 1962, No. 5.

Bradford, L.P. "The Teaching-Learning Transaction," in *Human Forces in Teaching and Learning*. L.P. Bradford (ed), National Training Laboratories, National Education Association, Washington: 1961, pp. 5-15.

Bradford, L.P., Gibb, J.R., and Benne, K.D. *T-Group Theory and Laboratory Method*, New York: Wiley, 1964.

Buchanan, P.C. "Evaluating the Effectiveness of Laboratory Training In Industry," in *Explorations in Human Relations Training and Research*, No. 1, Washington, D.C.: National Training Laboratories, National Education Association, 1965.

Bunker, D.R. "Individual Applications of Laboratory Training," *Journal of Applied Behavioral Sciences*, 1965, 1, 131-148.

Byham, W. and Robinson, J. "Interaction Modeling: A New Concept in Supervisory Training," *Training and Development Journal*, 1976 (Feb.), Vol. 30(2) 20-33.

Campbell, J.P., and Dunnette, M.D. "Effectiveness of T-Group Experiences in Managerial Training and Development," *Psychol. Bulletin*, 1968, 70, 73-194.

Campbell, J.P., Dunnette, M.D., Lawler, E.R., and Welck, K.E. *Managerial Behavior, Performance, and Effectiveness*, New York: McGraw-Hill, 1970.

Canter, R.R. "An Experimental Study of a Human Relations Training Program," *J. Applied Psychology*, 1951, 35, 1, 38-45.

Cantor, Nathaniel. *The Learning Process for Managers*, Harper and Row, New York: 1958.

Carron, T.J. "Human Relations Training and Attitude Change: A Vector Analysis," *Personnel Psychology*, Vol. 17, 1964, 403-415.

Chin, R. "Problems and Prospects of Applied Research," in *The Planning of Change: Readings in the Applied Behavioral Sciences*, W.G. Bennis, K.D. Benne and R. Chin (eds), New York: Holt, Rinehart and Winston, 1961, pp. 667-668.

Coch, L., and French, J.R.P. "Overcoming Resistance to Change," *Human Relations*, Vol. 1, 1948, pp. 512-532.

Cooper, C.L. and Mangham, I.L. (eds). *T. Groups: A Survey of Research*, London: Wiley Interscience, 1971.

Corsini, R.J., Shaw, M.E., and Blake, R.R. *Roleplaying in Business and Industry*, Glencoe: Free Press, 1961.

Di Vesta, F.J. "Instructor-Centered and Student-Centered Approaches to Teaching a Human Relations Course," *Journal of Applied Psychology*, 1954, 38, 5, 329-335.

Fiedler, F.E. *On the Death and Transfiguration of Leadership Training*, Dec. 1970, Technical Report 70-16, Seattle: Dept. of Psychology, University of Washington.

Fiedler, F.E. "Engineering the Job to Fit the Manager," *Harvard Business Review*, 1965, 43, 115-122.

- Fleishman, E.A. "Leadership Climate, Human Relations Training, and Supervisory Behavior," *Personnel Psychology*, 1953, 6, 205-222.
- Gibb, J.R., Platts, G.N., and Miller, L.F. *Dynamics of Participative Groups*, John S. Swift Co., St. Louis: 1951.
- Goetz, B.E., and Bennis, W.G. "What We Know About Learning and Training," *Personnel Administration*, March-April 1962, Vol. 25, 20-29.
- Goldstein, A.P., and Sorcher, M. *Changing Supervisor Behavior*, New York: Pergomon Press, 1974, 90 pp.
- Golembiewski, R.T., and Blumberg, A. *Sensitivity Training and the Laboratory Approach: Reading About Concepts and Applications*. Itasca, Ill.: Peacock, 1970.
- Gordon, T. *Group-Centered Leadership*. Boston: Houston Mifflin, 1955.
- Gragg, C.I., "Because Wisdom Can't Be Told," in *The Case Method of Teaching Human Relations and Administration*, K.R. Andrews (ed), Harvard University Press, Cambridge, Mass.: 1960, pp. 3-12.
- Greenblatt, S.C. "Gaming Simulations for Teaching and Training: An Overview," in S.C. Greenblatt and R.D. Duke (eds), *Gaming Simulation Rationale, Design, and Application*, New York: Sage Publications, 1975.
- Haiman, F.S. *Group Leadership and Democratic Action*, Boston: Houghton Mifflin Co. 1950.
- Hand, H.H. and Slocum, J.W. "A Longitudinal Study of the Effects of a Human Relations Training Program on Managerial Effectiveness," *Journal of Applied Psychology*, 1972 (Oct.), Vol. 56(5), 412-417.
- Handyside, J.D. "The Effectiveness of Supervisory Training—A Survey of Recent Experimental Studies," *Personnel Management*, 1956, 30, 96-107.
- Harris, E., and Fleishman, E.A. "Human Relations Training and the Stability of Leadership Patterns," *Journal of Applied Psychology*, 1955, 39, 20-25.
- Harrison, R. "Cognitive Change and Participation in a Sensitivity-Training Laboratory," *Journal of Applied Psychology*, 1966, 30, 517-520.
- Harwood, R.F. *In-Service Training Programs for Supervisory Personnel*, Jackson, Miss.: University of Mississippi School of Business Administration, (ERIC No. ED 151 509).
- Hazeltine, B.P., and Berra, R.L. "Supervisory Development—The Research Approach," *Personnel*, 1953, 30, 60-67.
- House, R.J. "Group Education and Leadership Effectiveness: A Review of the Empiric Literature and a Critical Evaluation," *Personnel Psychology*, 1967, 20, 1-32.

Jacobs, T.O. *The Evaluation of Soft Skills*, Alexandria, Va.: Human Resources Research Organization, Professional Paper 11-73, 1973.

Jacobs, T.O. *A Program of Leadership Instruction for Junior Officers*, Technical Report 84, Human Resources Research Organization, Alexandria, Va.: June 1963.

Katzell, R.A. "Testing a Training Program in Human Relations," *Personnel Psychology*, 1948, Vol. . . 319-329.

Klein, A.F. *Role Playing in Leadership Training and Group Problem Solving*, New York: The Association Press, 1950.

Lange, C.J., Rittenhouse, C.H., and Atkinson, R.C. *Films and Group Discussion as a Means of Training Leaders*, Technical Report 27, Human Resources Research Organization, Alexandria, Va.: March 1956.

Lawrence, P.R. "The Preparation of Case Material," in *The Case Method of Teaching Human Relations and Administration*, K.R. Andrews (ed), Harvard University Press, Cambridge, Mass.: 1960, pp. 215-224.

Lawshe, C.H., Bolda, R.A., and Brune, R.L. "Studies in Management Training Evaluation: II," The Effects of Exposure to Role Playing, *Journal Applied Psychology*, 1959, 43, 287-293.

"Leadership and Training." *Campus Magazine*, Vol. IX, No. 9, 1980, 6-7.

Lefkowitz, Joel. "Evaluation of a Supervisory Training Program for Police Sergeants," *Personnel Psychology*, 1972, (Spr.), Vol. 25(1), 95-106.

Lewin, K. "Frontiers in Group Dynamics," *Human Relations*, Vol. 1, 1947, pp. 5-42.

Likert, R. *New Pattern of Management*. New York: McGraw-Hill, 1961.

McClelland, D.C. "Testing for Competence Rather Than For 'Intelligence'." *American Psychologist*, 1973, p. 28.

McGehee, W., and Thayer, P.W. *Training in Business and Industry*. New York: John Wiley and Sons, 1961.

McNair, M.P. "Thinking Ahead: What Price Human Relations," *Harvard Business Review*, 1957, 35, 2, 15-39.

Mahoney, T.A., Jerdee, T.H., and Korman, A. "An Experimental Evaluation of Management Development," *Personnel Psychology*, 1960, 13, 81-98.

Maier, N.R.F. "An Experimental Test of the Effects of Training on Discussion Leadership," *Human Relations*, 1953, Vol. 6, 161-173.

Maier, N.R.F. *Principles of Human Relations*, New York: John Wiley and Sons, Inc., 1952.

Maier, N.R.F., Solem, A.R., and Maier, A. *Supervisory and Executive Development: A Manual for Role Playing*, New York: John Wiley and Sons, Inc., 1957.

- Maier, N.R.F., Hoffman, L.R., and Lansky, L.M. "Human Relations Training as Manifested in an Interview Situation," *Personnel Psychology*, 1960, 13, 11-30.
- Marshall, D.L. "The Incident Process of Supervisory Training: Case Study of Experience in a Small Plant," *Personnel*, September 1954, Vol. 31, No. 2, 134-140.
- Mayo, E. *The Human Problems of an Industrial Civilization*, Boston: Division of Research, Harvard Business School, 1946.
- Mayo, G.D., and DuBois, P.H. "Measurement of Gain in Leadership Training," *Educational and Psychological Measurement*, Vol. 23, 1963, 23-31.
- Miles, M.B. "Changes During and Following Laboratory Training: A Clinical Experimental Study," *Journal of Applied Behavioral Science*, 1965, 1(3), 215-242.
- Miner, J.B. *Studies in Management Education*, Springer, New York: 1965.
- Miner, John B. "The Effects of a Course in Psychology on the Attitudes of Research and Development Supervisors," *Journal of Applied Psychology*, 1960, Vol. 44, 224-232.
- Moffie, D.J., Calhoun, R., and O'Brien, J.K. "Evaluation of a Management Development Program," *Personnel Psychology*, 1964, 17, 431-440.
- Moon, C.G., and Hariton, Theodore, "Evaluating an Appraisal and Feedback Training Program," *Personnel*, 1958, Vol. 35, No. 3, 36-41.
- Mosel, J.H., and Tsacnaris, H.J. "Evaluating the Supervisory Training Program," *Journal of Personnel Administration and Industrial Relations*, 1954, 1, 99-104.
- Mosvick, R.K. "Human Relations Training for Scientists, Technicians and Engineers: A Review of the Relevant Experimental Evaluations of Human Relations Training," *Personnel Psychology*, 1971, 24, 275-292.
- Nicholson, S. "Training Managers by the Case Method," *Management Record*, Vol. 18, 1956, 18-120 and 147-150.
- Olmstead, J.A., and Elder, B.L. *The Use of Management Games for Developing Officers in Administrative and Staff Jobs*. Alexandria, Va.: Army Research Institute and Human Resources Research Organization. ARI Technical Report TR-78-A2, February 1978.
- Pigors, P., and Pigors, F. "The Incident Process - Learning by Doing," in *The Planning of Change: Readings in the Behavioral Sciences*, W.G. Bennis, K.D. Benne, and R. Chin (eds), Holt, Rinehart, and Winston, New York: 1961, pp. 710-715.
- Pigors, P., and Pigors, F. "Case Methods on the Spot," *Adult Leadership*, Vol. 6, 1954, pp. 7-8 and 28-29.
- Radke, M., and Klisurich, D. "Experiments in Changing Food Habits," *Journal of Business*, 1966, 39, 339-352.

- Raia, A.P. "A Study of the Educational Value of Management Games," *Journal of Business*, 1966, 39, 339-352.
- Roethlisberger, F.J. "Training Supervisors in Human Relations," *Harvard Business Review*, 1951, 29, 5, 47-57.
- Roethlisberger, F.J., and Dickson, W.J. *Management and the Worker*, Cambridge: Harvard University Press, 1949.
- Scanlund, W. and Pepper, D. *The Rationale and Methodology for Development of a Competency Based Leadership Education and Training Program in the Navy*. Paper presented at Annual Meeting of the American Educational Research Association, Toronto, Canada, 28 March 1978.
- Schein, E.H. "Management Development, Human Relations Training and the Process of Influence," in I.R. Weschier and E.H. Schein (eds) *Issues in Human Relations Training*. National Training Laboratories, National Education Association, Washington: 1962, 47-60.
- Schein, E.H., and Bennis, W.G. *Personal and Organizational Change Through Group Methods: The Laboratory Approach*. New York: Wiley, 1965.
- Schriesheim, C.A. "Business Simulation Games: A Review of the Evidence and A Suggested Course of Action," *Proceedings of the Midwest AIDS Conference*. East Lansing, Michigan: American Institute for Decision Sciences, 1973.
- Seashore, S.E. *The Training of Leaders for Effective Human Relations*, Basle: UNESCO, 1957.
- Shaw, E., and Rutledge, P. "Assertiveness Training for Managers," *Training and Development Journal*, 1976 (Sept.) Vol. 30(9), 8-14.
- Showel, M., Taylor, E., and Hood, P.D. *Automation of a Portion of NCO Leadership Preparation Training*, Washington, D.C.: Human Resources Research Organization, 1966.
- Spector, A.J. "Changes in Human Relations Attitudes," *Journal of Applied Psychology*, 1958, 42, 154-157.
- Stephenson, H.B. "The Effects of a Management Training Program on Leadership Attitude and On-the-Job Behavior," *Dissertation Abst.*, 1966, 27(6A), 1512.
- Stock, D. "A Survey of Research on T-Groups," in L.P. Bradford, J.R. Gibb, and K.D. Benne, *T-Group Theory and Laboratory Method*, New York: Wiley, 1964.
- Tannenbaum, R., Wechsler, I.R., Massarik, F. *Leadership and Organization*, New York: McGraw-Hill, 1961.
- Thelen, H.A. *Dynamics of Groups at Work*, Chicago: University of Chicago Press, 1954.
- Tracey, W.R. *Managing Training and Development Systems*, New York: AMACOM, American Management Association, 1974.

Twelker, P.A. "Designing Simulation Systems," *Educational Technology*, Octo.

Twelker, P.A., and Layden, K. *Educational Simulation/Gaming*. Stanford, California: ERIC Clearinghouse on Media and Technology, 1972.

U.S. Army Administration Center. *A Progressive Model for Leadership Development*, Fort Benjamin Harrison, Indiana: U.S. Army Administration Center, Monograph No. 7, Leadership Monograph Series, June 1975.

Valiquet, M.I. "Individual Change in Management Development Programs," *Journal of Applied Behavioral Science*, 1968, 4, 313-325.

Young, J.P. *A Survey of Historical Developments in War Games*. Bethesda, Maryland: Operations Research Office, The John Hopkins University, Staff Paper ORO-SP-98, March 1959.

Zelditch, M., and Evan, W.M. "Simulated Bureaucracies: A Methodological Analysis," in H. Guetzkow (ed), *Simulation in Social Science: Readings*, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1962, pp. 48-60.

Zuckerman, D., and Horn, R. (eds.), *The Guide to Simulation/Games for Education and Training*, 2nd Edition. Lexington, Mass.: Information Resources, Inc., 1973.

DISTRIBUTION LIST

Defense Documentation Center (12)
ATTN: DDC-TC
Accessions Division
Cameron Station
Alexandria, VA 22314

Library of Congress
Science and Technology Division
Washington, DC 20540

Chief of Naval Research (3)
Office of Naval Research
Code 452
800 N. Quincy Street
Arlington, VA 22217

Commanding Officer (6)
Naval Research Laboratory
Code 2627
Washington, DC 20375

Commanding Officer
ONR Branch Office
1030 E. Green Street
Pasadena, CA 91106

Psychologist
ONR Branch Office
1030 E. Green Street
Pasadena, CA 91106

Commanding Officer
ONR Branch Office
536 S. Clark Street
Chicago, IL 60605

Psychologist
ONR Branch Office
536 S. Clark Street
Chicago, IL 60605

Commanding Officer
ONR Branch Office
Bldg. 114, Section D
666 Summer Street
Boston, MA 02210

Psychologist
ONR Branch Office
Bldg. 114, Section D
666 Summer Street
Boston, MA 02210

Office of Naval Research
Director, Technology Programs
Code 200
800 N. Quincy Street
Arlington, VA 22217

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Scientific Advisor to DCNO (Op-01T)
2705 Arlington Annex
Washington, DC 20350

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Director, Human Resource Management
Division (Op-15)
Department of the Navy
Washington, DC 20350

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Head, Research, Development, and
Studies Branch (Op-102)
1812 Arlington Annex
Washington, DC 20350

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Director, Human Resource Management
Plans and Policy Branch (Op-150)
Department of the Navy
Washington, DC 20350

Chief of Naval Operations
Head, Manpower, Personnel, Training and
Reserves Team (Op-964D)
The Pentagon, 4A578
Washington, DC 20350

Chief of Naval Operations
Assistant, Personnel Logistics
Planning (Op-987P10)
The Pentagon, 5D772
Washington, DC 20350

Program Administrator for Manpower,
Personnel, and Training
HQ Naval Material Command
(Code 08D22)
678 Crystal Plaza #5
Washington, DC 20370

Naval Material Command
Management Training Center
NMAT 09M32
Jefferson Plaza, Bldg. #2, Rm. 150
1421 Jefferson Davis Highway
Arlington, VA 20360

Commanding Officer (5)
Naval Personnel R&D Center
San Diego, CA 92152

Navy Personnel R&D Center
Washington Liaison Office
Building 200, 2N
Washington Navy Yard
Washington, DC 20374

Naval Postgraduate School
ATTN: Dr. Richard S. Elster
Department of Administrative Sciences
Monterey, CA 93940

Naval Postgraduate School
ATTN: Professor John Senger
Operations Research and
Administrative Science
Monterey, CA 93940

Superintendent
Naval Postgraduate School
Code 1424
Monterey, CA 93940

Officer in Charge
Human Resource Management Detachment
Naval Air Station
Alameda, CA 94591

Officer in Charge
Human Resource Management Detachment
Naval Submarine Base New London
P.O. Box 81
Groton, CT 06340

Officer in Charge
Human Resource Management Division
Naval Air Station
Mayport, FL 32228

Commanding Officer
Human Resource Management Center
Pearl Harbor, HI 96860

Commander in Chief
Human Resource Management Division
U.S. Pacific Fleet
Pearl Harbor, HI 96860

Officer in Charge
Human Resource Management Detachment
Naval Base
Charleston, SC 29408

Commanding Officer
Human Resource Management School
Naval Air Station Memphis
Millington, TN 38054

Human Resource Management School
Naval Air Station Memphis (96)
Millington, TN 38054

Commanding Officer
Human Resource Management Center
1300 Wilson Boulevard
Arlington, VA 22209

Commanding Officer
Human Resource Management Center
5621-23 Tidewater Drive
Norfolk, VA 23511

Commander in Chief
Human Resource Management Division
U.S. Atlantic Fleet
Norfolk, VA 23511

Officer in Charge
Human Resource Management Detachment
Naval Air Station Ehidbey Island
Oak Harbor, WA 98278

Commanding Officer
Human Resource Management Center
Box 23
FPO New York 09510

Commander in Chief
Human Resource Management Division
U.S. Naval Force Europe
FPO New York 09510

Officer in Charge
Human Resource Management Detachment
Box 60
FPO San Francisco 96651

Officer in Charge
Human Resource Management Detachment
COMNAVFORJAPAN
FPO Seattle 98762

Naval Military Personnel Command (2)
HRM Department (NMPC-6)
Washington, DC 20350

Naval Training Analysis
and Evaluation Group
Orlando, FL 32813

Commanding Officer
Naval Training Equipment Center
Orlando, FL 32813

Chief of Naval Education
and Training (N-5)
ACOS Research and Program
Development
Naval Air Station
Pensacola, FL 32508

Naval War College
Management Department
Newport, RI 02940

LCDR Hardy L. Merritt
Naval Reserve Readiness Command
Region 7 Naval Base
Charleston, SC 29408

Chief of Naval Technical Training
ATTN: Dr. Norman Kerr, Code 0161
NAS Memphis (75)
Millington, TN 38054

Navy Recruiting Command
Head, Research and Analysis Branch
Code 434, Room 8001
801 North Randolph Street
Arlington, VA 22203

CAPT Richard L. Martin, U.S.N.
Prospective Commanding Officer
USS Carl Vinson (CVN-70)
Newport News Shipbuilding &
Drydock Company
Newport News, VA 23607

Commandant of the Marine Corps
Headquarters, U.S. Marine Corps
Code MPI-20
Washington, DC 20380

Headquarters, U.S. Marine Corps
ATTN: Dr. A.L. Slafkosky,
Code RD-1
Washington, DC 20380

Army Research Institute
Field Unit - Monterey
P.O. Box 5787
Monterey, CA 93940

Deputy Chief of Staff for
Personnel, Research Office
ATTN: DAPE-PBR
Washington, DC 20310

Headquarters, FORSCOM
ATTN: AFPR-HR
Ft. McPherson, GA 30330

Army Research Institute
Field Unit - Leavenworth
P.O. Box 3122
Fort Leavenworth, KS 66027

Technical Director (2)
Army Research Institute
5001 Eisenhower Avenue
Alexandria, VA 22333

Air University Library/LSE 76-443
Maxwell AFB, AL 36112

Department of the Air Force
Air War College/EDRL
ATTN: Lt Col James D. Young
Maxwell AFB, AL 36112

AFOSR/NL (Dr. Fregly)
Building 410
Bolling AFB
Washington, DC 20332

Air Force Institute of Technology
AFIT/LSGR (Lt. Col. Umstot)
Wright-Patterson AFB
Dayton, OH 45433

Technical Director
AFHRL/ORS
Brooks AFB
San Antonio, TX 78235

AFMPC/DPMYP
(Research and Measurement Division)
Randolph AFB
Universal City, TX 78148

Dr. Edwin A. Fleishman
Advanced Research Resources
Organization
Suite 900
433 East West Highway
Washington, DC 20014

Australian Embassy
Office of the Air Attache (S3B)
1601 Massachusetts Avenue, N.W.
Washington, DC 20036

British Embassy
Scientific Information Officer
Room 509
3100 Massachusetts Avenue, N.W.
Washington, DC 20008

Canadian Defense Liaison Staff,
Washington
ATTN: CDRD
2450 Massachusetts Avenue, N.W.
Washington, DC 20008

Mr. Mark T. Munger
McBer and Company
137 Newbury Street
Boston, MA 02116

Mr. B.F. Clark
RR #2, Box 647-B
Graham, North Carolina 27253

HumRRO
ATTN: Library
300 North Washington Street
Alexandria, VA 22314

Commandant, Royal Military
College of Canada
ATTN: Department of Military
Leadership and Management
Kingston, Ontario K7L 2W3

National Defence Headquarters
ATTN: DPAR
Ottawa, Ontario K1A 0K2

Mr. Luigi Petruzzo
2431 North Edgewood Street
Arlington, VA 22207